Court of Appeal File No. COA-24-CV-0846

COURT OF APPEAL FOR ONTARIO

BETWEEN:

TERRY LONGAIR PROFESSIONAL CORPORATION

Plaintiff
(Respondent)

- and -

AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP

Defendants
(Appellants)

Proceeding under the *Class Proceedings Act, 1992*

RESPONDENT'S COMPENDIUM

Date: May 1, 2025

KALLOGHLIAN MYERS LLP
35 Prince Arthur Avenue
Toronto, Ontario M5R 1B2

Paul Guy (LSO# 49794K)
paul@kalloghlianmyers.com

Garth Myers (LSO# 62307G)
garth@kalloghlianmyers.com

Lawyers for the Plaintiff (Respondent), Terry Longair Professional Corporation

TO: **STIKEMAN ELLIOT LLP**
5300 Commerce Court West
199 Bay Street
Toronto, ON, M5L 1B9

Eliot Kolers
ekolers@stikeman.com

Daniel Murdoch
dmurdoch@stikeman.com

Lawyers for the Defendants (Appellants), Akumin Inc., Riadh Zine-El-Abidine, Mohammad Saleem, Stan Dunford, Murray Lee, Thomas Davies and James Webb

AND TO: **TORYS LLP**
79 Wellington St. W., 30th Floor, Box 270
TD South Tower
Toronto, Ontario M5K 1N2

John Fabello
jfabello@torys.com

Colette Koopman
ckoopman@torys.com

Lawyers for the Defendant, Ernst & Young LLP

TABLE OF CONTENTS

TAB	DOCUMENT		PAGE NO.
Orders & Endorsements			
1.	Endorsement of the Divisional Court dated October 25, 2024 (Granting Leave to Appeal)		6
2.	Order of Justice Akbarali dated June 26, 2024 (Leave to Proceed)		9
3.	Order of Justice Akbarali dated June 26, 2024 (Certification)		12
4.	Endorsement of Justice Akbarali dated June 26, 2024		30
Pleadings			
5.	Second Amended Statement of Claim dated February 12, 2024		70
Examples of Akumin's Misrepresentations			
6.	Annual Financial Statements and MD&A for the year ended December 31, 2020		118
Public Corrections			
7.	1st Public Correction:	August 15, 2021 Press Release	126
8.	2nd Public Correction:	October 12, 2021 Press Release	129
9.	3rd Public Correction:	November 8, 2021 News Release	133
10.	4th Public Correction:	November 15 News Release and Restated Financial Statements and MD&A for the year ended December 31, 2020	136
Material Change Report			
11.	Material Change Report dated August 24, 2021		151
Analyst Reports			
12.	National Bank of Canada, August 16, 2021 "Akumin Delays Filing of Q2/2021 Financial Statements"		154
13.	Cormark Securities Inc., October 13, 2021 "Reporting Delays Continue"		157

14.	National Bank of Canada, November 8, 2021 "Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization"	162
15.	National Bank of Canada, November 15, 2021 "Filing of Delayed Q2/2021 Financials Provides Some Clarity"	168
16.	Canaccord Genuity Capital Markets, November 18, 2021 "Q2/21: Restatements impact pricing and margin"	175
Expert Reports		
17.	Expert Report of Dr. Sunita Surana, dated February 17, 2023	185
18.	Responding Expert Report of Robert Patton, dated September 19, 2023	327
19.	Reply Expert Report of Dr. Sunita Surana, dated November 20, 2023	431
Evidence of Materiality to Akumin Notes		
20.	Akumin 7.00% and 7.50% Note Price Chart	533
21.	Moody's Akumin Reports	541
Akumin's Negligent Misrepresentation Argument on the Motion Below		
22.	Akumin's Responding Factum (Motions for Certification and Leave to Proceed)	568
Evidence of Canadian Note Class		
23.	Akumin Offering Memorandum for 7.00% Senior Notes	574

Tab 1

CITATION: Akumin Inc. v. Terry Longair Professional Corporation, 2024 ONSC 5810
DIVISIONAL COURT FILE NO.: 408/24 ML
DATE: 20241025

SUPERIOR COURT OF JUSTICE – ONTARIO
DIVISIONAL COURT

RE: AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP, Moving Parties (Defendants)

AND:

TERRY LONGAIR PROFESSIONAL CORPORATION, Responding Party (Plaintiff)

BEFORE: D.L. Corbett, Lococo, Kurke JJ.

COUNSEL: *Eliot N. Kolers and Daniel S. Murdoch* for the Moving Parties

Dimitri Lascaris, Serge Kalloghlian, Garth Myers and Paul Guy, for the Responding Party

HEARD: In-writing

ENDORSEMENT

[1] The motion for leave to appeal the decision of Akbarali J. dated June 26, 2024 (2024 ONSC 3675), granting leave to commence an action under s. 138.8 of the *Securities Act*, is granted, with costs fixed at $20,000, inclusive, payable in the discretion of the appeal panel, in respect to the following questions:

(a) did the motions judge err, in para. 64 of the impugned decision, in holding that the Court of Appeal erred in *Badesha* v. *Cronos Group Inc.*, 2022 ONCA 663?

(b) if the answer to (a) is yes, does this error render the decision unsafe to grant leave to commence an action under s. 138.8 of the *Securities Act*?

(c) if the answer to (a) and (b) are yes, what is the appropriate remedy?

[2] The parties shall schedule a case management conference with D.L. Corbett J. to address scheduling issues respecting this appeal by November 22, 2024.

D.L. Corbett J.

Lococo J.

Kurke J.

Released: October 25, 2024

Tab 2

Court File No. CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

THE HONOURABLE JUSTICE AKBARALI	)	JUNE 26, 2024

B E T W E E N:

TERRY LONGAIR PROFESSIONAL CORPORATION

Plaintiff

and

AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP

Defendants

Proceedings under the *Class Proceedings Act, 1992*

ORDER
(Leave to Proceed)

THIS MOTION, made by the Plaintiff, for leave to proceed under section 138.8 of the Ontario *Securities Act*, R.S.O. 1990, c. S.5 (the "***OSA***"), was heard before me on June 5, 6 and 7, 2024 in Toronto, Ontario.

ON READING the Motion Record, Supplemental Motion Record, Second Supplemental Motion Record, Reply Motion Record, Transcripts Brief, Factum, Reply Factum and Books of Authorities filed by the Plaintiff; the Responding Motion Record, Supplemental Responding Motion Record, Brief of Cross-Examination Transcripts, Responding Factum and Responding Book of Authorities filed by Defendants Akumin Inc., Riadh Zine-El-Abidine, Mohammad Saleem, Thomas Davies, Stan Dunford, Murray Lee and James Webb; and the Responding Motion Record, Factum and Book of

Authorities filed by the Defendant Ernst & Young LLP, and on hearing submissions of counsel for the Plaintiff and the Defendants:

1. **THIS COURT ORDERS** that the Plaintiff's motion for leave to proceed as against Akumin Inc., Riadh Zine-El-Abidine, Mohammad Saleem, Thomas Davies, Stan Dunford, Murray Lee and James Webb in accordance with the Fresh as Amended Statement of Claim attached hereto as **Schedule "A"** is granted.

2. **THIS COURT ORDERS** that the Plaintiff's motion for leave to proceed as against Ernst & Young LLP shall be and is hereby dismissed.

3. **THIS COURT ORDERS** that if the parties are unable to reach an agreement on costs, the parties shall write to me to propose a consent schedule for the exchange of brief costs submissions for my approval.



J.T. Akbarali J.

Tab 3

Court File No. CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

THE HONOURABLE JUSTICE AKBARALI	)	JUNE 26, 2024

B E T W E E N:

TERRY LONGAIR PROFESSIONAL CORPORATION

Plaintiff

and

AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP

Defendants

Proceeding under the *Class Proceedings Act, 1992*

ORDER
(Certification)

THIS MOTION, made by the Plaintiff, to certify this action as a class proceeding pursuant to the *Class Proceedings Act, 1992,* S.O. 1992, c. 6 as amended was heard before me on June 5, 6 and 7, 2024 in Toronto, Ontario.

ON READING the Motion Record, Supplemental Motion Record, Second Supplemental Motion Record, Reply Motion Record, Transcripts Brief, Factum, Reply Factum and Books of Authorities filed by the Plaintiff; the Responding Motion Record, Supplemental Responding Motion Record, Brief of Cross-Examination Transcripts, Responding Factum and Responding Book of Authorities filed by Defendants Akumin Inc., Riadh Zine-El-Abidine, Mohammad Saleem, Thomas Davies, Stan Dunford, Murray Lee and James Webb; and the Responding Motion Record, Factum and Book of

Authorities filed by the Defendant Ernst & Young LLP, and on hearing submissions of counsel for the Plaintiff and the Defendants:

1. **THIS COURT ORDERS** that the motion for certification pursuant to the *Class Proceedings Act, 1992,* S.O. 2992, c. 6 be and is hereby granted as against Riadh Zine-El-Abidine, Mohammad Saleem, Thomas Davies, Stan Dunford, Murray Lee and James Webb (the "**Individual Defendants**") and Akumin Inc. ("**Akumin**") (together with the Individual Defendants, the "**Defendants**");

2. **THIS COURT ORDERS** that the motion for certification pursuant to the *Class Proceedings Act, 1992,* S.O. 2992, c. 6 is hereby dismissed as against Ernst & Young LLP and the claim against Ernst & Young LLP shall be and is hereby dismissed.

3. **THIS COURT ORDERS** that the Class is defined as:

   All persons or entities, other than the Excluded Persons, that acquired Akumin's securities during the period from May 15, 2019 at 7:46 a.m. ET to November 15, 2021 at 7:04 a.m. ET.

   "Excluded Persons" means:

   (a) Akumin and its subsidiaries, affiliates, officers, directors, senior employees, legal representatives, heirs, predecessors, successors and assigns, the Individual Defendants and any member of their families and any entity for which any of them has or had during the Class Period any legal or de facto controlling interest;

   (b) all persons and entities who acquired their Akumin notes in the primary market in a distribution outside of Canada; and

   (b) all persons and entities that sold all of their Akumin securities before August 15, 2021.

4. **THIS COURT ORDERS** that Terry Longair Professional Corporation is hereby appointed as the representative Plaintiff of the Class.

5. **THIS COURT ORDERS** that Kalloghlian Myers LLP is appointed as Class counsel.

6. **THIS COURT ORDERS** that the claims asserted on behalf of the Class are:

(a) under Ontario *Securities Act* ("***OSA***") section 130.1 or, if necessary, the corresponding provisions of the *Securities Act*, RSA 2000, c S-4, as amended; the *Securities Act*, RSBC 1996, c 418, as amended; the *Securities Act*, CCSM c S50, as amended; the *Securities Act*, SNB 2004, c S-5.5, as amended; the *Securities Act*, RSNL 1990, c S-13, as amended; the *Securities Act*, SNWT 2008, c 10, as amended; the *Securities Act*, RSNS 1989, c 418, as amended; the *Securities Act*, S Nu 2008, c 12, as amended; the *Securities Act*, RSPEI 1988, c S-3.1, as amended; the *Securities Act*, RSQ c V-1.1, as amended; the *Securities Act*, *1988*, SS 1988-89, c S-42.2, as amended; and the *Securities Act*, SY 2007, c 16, as amended (the "**Securities Legislation**");

(b) under *OSA* section 138.3 or, if necessary, the corresponding provisions of the Securities Legislation; and

(c) negligent misrepresentation.

7. **THIS COURT ORDERS** that the certified common issues are:

1. Did the Misleading Documents contain misrepresentations within the meaning of the ***OSA*** and the Securities Legislation? If so, who made these representations, when, and how?

2. Do the misrepresentations in the Misleading Documents that are Offering Memoranda give rise to liability against Akumin on behalf of purchasers who purchased securities by the Offering Memoranda pursuant to section 130.1 of Part XXIII of the *OSA* and the Securities Legislation?

3. What is the method of calculating the damages payable to the Class Members in respect of Part XXIII of the *OSA* and the Securities Legislation?

4. Do the misrepresentations in the Misleading Documents give rise to liability on behalf of the Class for damages against the Defendants pursuant to section 138.3 of Part XXIII.1 of the *OSA* and the Securities Legislation? If so, for which Defendants?

5. What is the method of calculating the damages payable to the Class Members in respect of Part XXIII.1 of the *OSA* and the Securities Legislation?

6. Did the Defendants owe a duty of care to the Class Members?

7. Did the Defendants make representations in the Misleading Documents that were untrue, inaccurate or misleading?

8. Did the Defendants act negligently in making those representations?

9. Did the Class reasonably rely on those representations?

10. What is the method of calculating damages payable to the Class for negligent misrepresentation?

8. **THIS COURT ORDERS** the approval of the parties' litigation plan, which is attached hereto as Schedule "A".

9. **THIS COURT ORDERS** that any other proceeding based on the facts giving rise to this proposed class proceeding is hereby stayed.

10. **THIS COURT ORDERS** that no other proceeding based upon the facts giving rise to this proceeding may be commenced without leave of the Court.

11. **THIS COURT ORDERS** that the manner in which members of the Class may opt out of this proceeding and the form and content of the opt out notice shall be dealt with by further order of this Court.

12. **THIS COURT ORDERS** that if the parties are unable to reach an agreement on costs, the parties shall write to me to propose a consent schedule for the exchange of brief costs submissions for my approval.



J.T. Akbarali J.

Schedule "A"

Longair v. Akumin Inc. Litigation Plan

A. Defined Terms

1. Capitalized terms that are not defined in this litigation plan (the "**Plan**") have the meanings attributed to them in the Statement of Claim filed on December 20, 2021.

B. Reporting and Communication

2. Kalloghlian Myers LLP ("**Class Counsel**") has posted information about the nature and status of this action on its website (the "**Website**"). That information will be updated regularly. Copies of important, publicly available court documents, court decisions, notices, documentation, and other information relating to the action are or will be accessible on the Website.

3. The Website also contains a feature that permits putative Class Members to submit inquiries to Class Counsel, which are sent directly to a designated member of the Class Counsel team, who will promptly respond.

C. Document Management

4. Class Counsel will use data management systems to organize, code, and manage the documents produced by the Defendants and all relevant documents in the Plaintiff's possession. The agreement of the Defendants' counsel will be sought to facilitate the electronic exchange of documents. Once the volume of documents to be produced in this action is determined, Class Counsel may retain the services of a third-party document management firm for assistance.

D. Motion Record for Certification and Leave to Assert the Part XXIII.1 *OSA* Claims

5. The Plaintiffs have brought motions seeking certification of the action as a class proceeding pursuant to the *CPA* and seeking leave to pursue the right of action under Part XXIII.1 of the *OSA*, and, if necessary, the equivalent provisions of the other Securities Legislation.

6. For the motions for certification and leave, the Plaintiff expects to file:

   (a) an affidavit from Terry Longair;

   (b) expert reports from:

      (a) Dr. Ramy Elitzur;

      (b) Dr. Sunita Surana; and

      (c) D. Paul Regan.

   (c) a solicitor affidavit providing background information and evidence; and

(d) this litigation plan.

E. Mediation

7. The Plaintiff will participate in a mediation if the Defendants are prepared to do so. If the parties reach a proposed settlement of the action and the Court approves the proposed settlement, this Plan will require amendment.

F. Notice Pursuant to the Securities Legislation

8. Pursuant to section 138.8(4) of the *OSA*, the Plaintiff will provide to the Ontario Securities Commission (the "**OSC**") a copy of the motion record in support of the leave motion, and will provide to the OSC a copy of the factum in support of such motion following the service of such factum upon the Defendants' counsel.

9. Following the scheduling of the hearing of the leave motion, the Plaintiff will provide the OSC with notice in writing of the date on which the leave motion is scheduled to proceed, in accordance with section 138.8(5) of the *OSA*.

10. In the event that the leave motion is granted, then, pursuant to section 138.9 of the *OSA*, the Plaintiff will:

    (a) issue a news release disclosing that leave has been granted to commence an action under Part XXIII.1 (the "***OSA* Notice**");

    (b) send a written notice to the OSC within seven days, together with a copy of the news release;

    (c) send a copy of any amended statement of claim, as filed, to the OSC; and

    (d) provide the OSC with notice in writing of the date on which the common issues trial of the action is scheduled to proceed.

G. Notice of Certification and Opt Out Procedure

11. If this action is certified as a class proceeding, the Plaintiff proposes that a notice of certification (the "**Certification Notice**") be circulated to advise Class Members, among other things, that:

    (a) the Court certified the action as a class proceeding;

    (b) a person may only opt out of the class proceeding by sending a written election to opt out to the recipient designated by the Court, before a date and time fixed by the Court;

    (c) a person may not opt out of the class proceeding after the date fixed by the Court; and

(d) if the common issues are resolved in favour of the Class, claimants may be required to register, file a claim and submit documentation to a designated person in order to be entitled to any compensation.

12. The Plaintiff proposes to appoint an independent person to receive the opt-out notices and report to the Court the names and addresses of the persons who opt out by the date fixed by the Court.

H. Refinement and Trial of the Common Issues

13. Prior to any motion for summary judgment or the common issues trial, the parties may seek to amend or refine the common issues, including by varying the certification order (if necessary).

14. The Plaintiff will ask the Court to hold the common issues trial no later than 1 year after the completion of the examinations for discovery and the production of information required by any undertakings given during examinations for discovery and any related motions.

I. Notice of Resolution of the Common Issues

15. Following the trial of the common issues, the Court will be asked to:

(a) settle the form and content of the notice of resolution of the common issues;

(b) order that the notice of the resolution of the common issues be distributed to those Class Members who did not validly opt out;

(c) assuming that the Plaintiff has been successful on some or all of the common issues, prescribe the information required from Class Members in order to make a claim for compensation; and

(d) set a date by which each Class Member will be required to file a claim.

16. If the common issues, or some of them, are resolved in favour of the Plaintiff, the Plaintiff will propose that the notice of resolution of the common issues advise Class Members, among other things:

(a) that the Plaintiff was successful on the common issues, or some of them, and describe the causes of action to which those common issues relate;

(b) that no Class Member will be entitled to any remedy or compensation unless a claim is filed in a prescribed manner by a fixed date;

(c) of the procedure to file a claim and how to obtain assistance in doing so;

(d) the method by which the compensation for each Class Member will be calculated;

(e) if necessary, that each Class Member will have the opportunity to come forward and establish their damages by proving any facts as may be prescribed by the Court; and

(f) that their rights against the Defendant in relation to the matters set out in the Claim will be deemed to have been finally adjudicated whether they submit a claim or not.

17. The Plaintiff will ask the Court to order that the notice of resolution of the common issues be distributed substantially in accordance with the procedure set out in paragraph 12 above.

J. Monetary Relief

18. The Plaintiff seeks the following monetary relief, plus pre-judgment and post-judgment.

I. Aggregate Assessment of Monetary Relief – Parts XXIII and XXIII.1 of the *OSA*

19. The Plaintiff will ask the Court to determine as a common issue the formula by which monetary relief for Class Members' claims under Part XXIII and XXIII.1 are to be calculated.

20. The Plaintiff may ask the Court for an aggregate assessment of monetary relief pursuant to section 24 of the *CPA*. If an aggregate assessment of monetary relief is not available, then the Plaintiff will argue that once the Court has established the formulas for monetary relief, Class Members are only required to furnish the particulars of their trades (and for Part XXIII claims, their election for damages or rescission) to finally determine their individual monetary relief. The Plaintiff will ask the Court to prescribe the information required from Class Members in order to make a claim for monetary relief.

II. Negligence and Negligent Misrepresentation

21. The Plaintiff will argue that for negligent misrepresentation, the Class Members are entitled to be made whole in respect of their investment in securities as well as their lost investment opportunity.

22. In the alternative, for the negligent misrepresentation claim, the Plaintiff will argue that but-for the misrepresentations, the Class Members would have acquired their securities at a price that reflects their true value. The Plaintiff will argue that the misrepresentations caused the price of securities to be artificially inflated during the Class Period, and that the extent of such inflation on each day during the Class Period can be determined as a common issue. The Plaintiff will ask the Court to determine the amount of inflation on each day during the Class Period.

23. The Plaintiff will also ask the Court to prescribe the information required for Class Members to prove the remaining individual issues regarding reliance and damages for negligent misrepresentation.

K. Individual Class Member Participation After the Trial of the Common Issues

24. If the Plaintiff obtains judgment on some or all of the common issues, then the Plaintiff will ask the Court to appoint a claims administrator (the "**Administrator**") and a referee (the "**Referee**"), with such rights, powers, and duties as the Court directs, to receive and evaluate claims (including submissions and evidence) with respect to any outstanding individual issues and the assessment of monetary relief pursuant to section 25 of the CPA ("**Claims Process**").

25. Class Members will be required to complete and submit a Claim Form to the Administrator to participate in the Claims Process. The structure and content of the Claim Form will depend upon the findings of the judge(s) on any summary judgment motion or the common issues trial.

26. In order to simplify the claims process, the Administrator and Referee, will, wherever practical, utilize:

    (a) a paperless, electronic state-of-the-art web-based technology system that will include a secure database incorporated into the Website;

    (b) standardized claims forms and filing procedures for evidence and submissions; and

    (c) summary methods of introducing documentary evidence.

27. Each claimant will be required to provide, with the completed Claim Form, (i) full particulars of each trade in shares during and (if applicable) after the Class Period and, (ii) information relating to any individual issues (as necessary or required). For purchasers of securities on the primary market, claimants will be asked to elect either a right of rescission or damages. The types of information or records which shall constitute sufficient proof of a claim shall be specified in a protocol to be approved by the Court.

28. The Plaintiff will seek an order pursuant to s. 25(2) and (3) of the *CPA* that the completed and timely submitted Claim Form, with supporting documents, be treated as prima facie evidence of each claimant's eligibility and damages or right to rescission if accepted by the Administrator. The Claim Form must be signed by each claimant as if under oath.

29. The Claim Form will contain an authorization to permit the Administrator to obtain information from each claimant's broker(s). This will permit the Administrator to carry out an audit function.

30. The Court will be asked to set a deadline (the "**Claims Deadline**") by which Class Members must file their claims with the Administrator.

31. Any person who does not file a claim with the Administrator before the Claims Deadline will not be eligible to participate in the Claims Process without leave of the Court.

L. The Claims Process

32. The structure of the claims process will depend on the findings of the judge at any summary judgment motion or the common issues trial.

33. With respect to any claims for which an aggregate assessment of monetary relief is made, the Plaintiff will argue that the Claims Process need only deal with the calculation of the claimant's distribution from the aggregate recovery.

34. If the court finds some or all of the Defendants are liable to the Class Members based on Part XXIII and/or Part XXIII.1, but does not award an aggregate assessment of monetary relief, the Plaintiff will argue that the Claims Process need only deal with Class membership (*i.e.*, whether the claimant is a Class Member) and the calculation of the claimant's quantum of individual monetary relief.

35. It may be necessary to deal with individual issues regarding reliance, causation, or other matters to establish liability on the negligence and/or negligent misrepresentation claims. In such an instance, the Class Members will be given the opportunity to come forward to prove the individual issues and monetary relief.

I. Process if there has been an aggregate assessment of monetary relief

36. This part of the Plan presupposes that some or all of the Defendants are found to be liable to the Class Members after judgment on the common issues and the Court awards an aggregate assessment of monetary relief on one or more claims. Hereinafter the term Defendants refers only to those found liable. The Plaintiff will argue that the Defendants are not entitled to participate in the Claims Process if an aggregate assessment of monetary relief has been made.

37. The Administrator's role will be to determine whether (i) each claimant is a Class Member; and (ii) to calculate the claimant's individual distribution in accordance with the protocol approved by the Court.

38. After reviewing the Claim Form, the Administrator shall make a decision and promptly notify the claimant of (i) whether the person is a Class Member and entitled to participate in the recovery; and (ii) the amount of the person's distribution.

39. The Administrator shall communicate its decision electronically or in writing by mail or by fax to the persons affected in accordance with a protocol to be approved by the Court.

40. The claimant may advise the Administrator, within a time period fixed by the Court, of any disagreement with its decision. After being advised of a disagreement, the Administrator shall consider any additional information provided and determine whether to revise its decision on eligibility and/or the calculation for monetary relief.

41. If any claimant disagrees with the Administrator's final decision, they may elect to have the Administrator's decision reviewed by the Referee.

42. The Referee will carry out the review of the Administrator's decision in the least expensive, most summary manner possible in accordance with a protocol to be approved by the Court and shall give all necessary procedural directions.

43. The Referee will deliver a written decision. There shall be no right of appeal from the Referee's decision.

44. A claimant seeking the review of a decision of the Administrator shall be required to make a deposit of $150, which shall be refunded only if the appeal is determined in the claimant's favor.

II. Process if Class Members are not required to prove facts other than Class Membership and amount of monetary relief

45. This part of the Plan presupposes that some or all the Defendants are found to be liable to the Class Members after judgment on the common issues and issues other than Class membership and monetary relief need not be addressed on an individual basis. Hereinafter the term Defendants refers only to those found liable.

46. The Administrator's role will be to determine whether (i) each claimant is a Class Member; and (ii) to calculate the claimant's entitlement to monetary relief in accordance with the formula fixed by the Court.

47. Each Defendant will be given an opportunity to review the Claim Forms and to advise the Administrator in writing whether it disputes a claim and the basis for the dispute. The claimant will be entitled to respond in writing to any dispute by a Defendant.

48. After reviewing the Claim Form, the Administrator shall make a decision and promptly notify the claimant of (i) whether the person is a Class Member and entitled to participate in the process; and (ii) the amount of the person's entitlement to monetary relief.

49. The Administrator shall communicate its decision electronically or in writing by mail or by fax to the persons affected in accordance with a protocol to be approved by the Court.

50. After the claimant and each Defendant have reviewed the Administrator's decision concerning eligibility and the monetary relief calculation, the claimant or the Defendants can advise the Administrator, within a time period fixed by the Court, of any disagreement.

51. After being advised of a disagreement by the claimant or a Defendant within the period fixed by the Court, the Administrator shall consider any information provided and determine whether to revise its decision on eligibility and/or the monetary relief calculation.

52. If any claimant or a Defendant disagrees with the Administrator's decision, they may elect to have the Administrator's decision reviewed by the Referee in accordance with paragraphs 42-44. The Referee, in its discretion, may order the Defendants to pay the claimants' costs of the references.

53. Class Counsel may assist claimants with the procedures set out herein, if requested. The Class Member will pay Class Counsel for these services in addition to the fees, disbursements and taxes approved by the Court for the resolution of the common issues.

III. Process if Class Members are required to prove facts other than Class membership and amount of monetary relief

54. If the Court's determination of the common issues does not determine all elements of liability of a particular right of action (e.g., negligence of negligent misrepresentation) then claimants must individually prove the remaining issues regarding liability (in addition to Class membership and amount of monetary relief).

55. The Administrator's role will be to determine whether (i) each claimant is a Class Member; (ii) the claimant has proven the remaining individual facts to establish liability on any particular right of action; and (iii) to calculate the claimant's quantum of monetary relief in accordance with the formula fixed by the Court.

56. The Claim Form will require claimants to particularize the facts and evidence on which they rely to prove the remaining individual issues. The Claim Form and supporting documents will be treated as affidavit evidence and the Defendants may elect to challenge the assertions in writing. The claimant will be entitled to respond in writing to any dispute by a Defendant.

57. The Administrator will evaluate the Claim Form, the supporting evidence, and any submissions by the Defendant and promptly notify the claimant and Defendants of (i) whether the claimant is a Class Member; (ii) whether the claimant has proven the remaining individual facts to establish liability; and (iii) the calculations of the claimant's entitlement to monetary relief in accordance with the formula fixed by the Court.

58. The Administrator shall communicate its decision electronically or in writing by mail or by fax to the persons affected in accordance with a protocol to be approved by the Court.

59. If a claimant or Defendant disagrees with the Administrator's decision relating only to Class membership and/or calculation of monetary relief, they may ask the Administrator to review its decision. If any claimant or Defendant disagrees with the Administrator's final decision regarding Class membership and/or calculation of monetary relief, they may elect to have decision reviewed by the Referee in the manner set out in paragraphs 42-42.

60. If a claimant and/or a Defendant disagrees with the Administrator's decision regarding whether the claimant has established liability (and, if applicable, Class membership and/or monetary relief) they may elect to have a reference before the Referee.

61. The reference shall be held in the least expensive, most efficient manner. The procedure at the reference will be established by the Referee subject to the following paragraphs.

Small Claims (under $25,000)

62. The Referee's determination of claims of less than $25,000 requiring individual determination shall proceed in writing. Class Members with claims of less than $25,000 wishing to proceed with such claims will be required to file affidavit evidence setting out their evidence with respect to the individual issues remaining to be proven. Affidavits may be sworn and commissioned virtually and compiled and served electronically. The Defendants may cross-examine affiants on their affidavit by written interrogatories (in accordance with Rule 35 of the *Rules of Civil Procedure* (the "***Rules***" or "**Rule**")) or by way of video-conference should the Defendants wish to challenge the evidence. The Referee will then issue a written decision with respect to the Class Member's claim on the basis of the affidavit evidence and the answers to the written interrogatories or cross examination.

Simplified Procedure Claims ($25,000 - $100,000)

63. Class Members with claims worth between $25,000 and $100,000 wishing to proceed with such claims shall proceed by analogy with the simplified procedure set out in Rule 76. Such Class Members will be required to file:

    (a) an affidavit of documents prepared in accordance with Rule 76.03; and

    (b) affidavit evidence relating to the individual issues remaining to be proven.

64. Affidavits may be sworn and commissioned virtually and compiled and served electronically.

65. Each party will be permitted to engage in up to two hours of oral examination for discovery by way of teleconference or videoconference.

66. The Referee may make decisions on the claims of the Class Member on the basis of the record or may, in his or her discretion, conduct a summary trial of such claims in accordance with Rule 76.12 by way of teleconference or videoconference. The Referee shall deliver a written decision.

Full Claims (over $100,000)

67. Class Members with claims in excess of $100,000 wishing to proceed with such claims will be required to:

    (a) serve on the Defendants an affidavit of documents prepared in accordance with Rule 30.03; and

    (b) attend for oral examination for discovery (in accordance with Rule 34), or provide answers to written interrogatories (in accordance with Rule 35), as any Defendant wishing to examine them may elect.

68. Affidavits may be sworn and commissioned virtually and compiled and served electronically.

69. The Referee may, in his or her discretion, make a decision on the individual issues based on the documentary and discovery evidence, or conduct a trial of such claims.

70. The Referee shall deliver a written decision.

Costs and Appeals

71. The Referee, in his or her discretion, may order the Defendants to pay the claimants' costs of the references, regardless of the amount at issue. There shall be no costs payable by claimants under any circumstances.

72. If any claimant disagrees with the Referee's decision relating to the determination of issues of liability and the claim is for an amount exceeding $100,000, they may appeal to the Ontario Superior Court of Justice in respect of such liability issues only within a time period fixed by the Court.

73. Except as provided in paragraph 72, the Referee's decisions will be final and there shall be no right of appeal from such decisions.

M. The Administrator's Report to the Court

74. The Administrator shall deliver reports to the Court as required. The subject matter of the reports will depend on the findings of the common issues trial judge.

75. Copies of the Administrator's reports shall be served on the Defendants and Class Counsel. The Administrator shall also report on a regular basis on the accumulating cost of administration.

76. After the claims procedure is completed, the Court will decide the amount the Defendants must pay to the Administrator.

77. The Administrator shall hold all amounts received from the Defendants in trust, in a manner to be approved by the Court, until an order of the court authorizes distribution in whole or in part.

N. Distribution to Eligible Class Members

78. As soon as practicable after the completion of the Claims Process, the Administrator will, by motion, report to the Court the name and address of each Class Member entitled to receive a distribution, the amount of their share of the monies on hand, including their share of prejudgment interest (the "**Distribution List**").

79. The Distribution List shall be distributed and/or made accessible in accordance with the Court's direction.

80. Each Class Member whose name appears on the Distribution List shall comply with any condition precedent to distribution that the Court may impose.

81. The Court will authorize payments to those Class Members whose names are on the Distribution List. The Court may authorize interim distributions.

82. If the total compensation available for distribution to Class Members is not fully disbursed within a period of time fixed by the Court, the unpaid amount shall be distributed *pro rata* to all Class Members that have filed claims with the Administrator or distributed to designated *cy pres* recipients in such manner and on such terms as the Court may direct.

O. Administrator's Final Report to the Court

83. After the Administrator makes its final distribution, it shall report to the Court and be discharged as the Administrator.

P. Motion for Directions

84. Class Counsel, the Defendants and the Administrator may apply at any time to the Court for directions.

Q. Class Counsel's Fees and the Costs of Administration

85. After any summary judgment motion or the trial of the common issues, Class Counsel will ask the Court to approve an agreement respecting fees and disbursements between the Plaintiff and Class Counsel. To the extent that the approved Class Counsel's fees, disbursements and applicable taxes are not completely paid by the costs recovered from the Defendants, Class Counsel will ask the Court to order that the unpaid balance be a first charge on any recovery either by way of aggregate or individual assessment.

86. If the Court awards monetary relief in the aggregate, Class Counsel will ask the Court to order payment of its fees, disbursements and applicable taxes as a first charge on the aggregate amount.

87. If the Court does not award monetary relief in the aggregate and requires the Class Members to prove their monetary relief through individual assessments, Class Counsel will ask the Court to order payment of its fees, disbursements and applicable taxes as a first charge on the awards made at individual assessments.

88. The Plaintiff will ask the Court to order that the Defendants pay all administration costs, including the costs of all notices associated with the process and the fees and disbursements of the Administrator and the Referee as those costs are incurred.

R. Further Orders Concerning this Plan

89. This Plan may be amended from time to time by directions given at case conferences or by further order of the Court.

S. Effect of this Plan

90. This Plan shall be binding on all Class Members who do not opt out in accordance with the procedure directed by the Court whether or not they make a claim under the Plan.

TERRY LONGAIR PROFESSIONAL CORPORATION Plaintiff	-and-	**AKUMIN INC., et al.** Defendants

Court File No. CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

Proceeding Commenced at Toronto

ORDER
(CERTIFICATION)

STIKEMAN ELLIOTT LLP
Barristers & Solicitors
5300 Commerce Court West, 199 Bay Street
Toronto, ON M5L 1B9

Eliot N. Kolers LSO #38304R
ekolers@stikeman.com
Tel: (416) 869-5637

Daniel S. Murdoch LSO #53123L
dmurdoch@stikeman.com
Tel: (416) 869-5529

Lawyers for the Defendants,
Akumin Inc., Riadh Zine-El-Abidine, Mohammad Saleem,
Thomas Davies, Stan Dunford, Murray Lee and James Webb

Tab 4

CITATION: Longair v. Akumin Inc. et al., 2024 ONSC 3675
COURT FILE NO.: CV-21-00674081-00CP
DATE: 20240626

SUPERIOR COURT OF JUSTICE - ONTARIO

RE: Terry Longair

AND:

Akumin Inc., Riadh Zine-El-Abidine, Mohammad Saleem, Thomas Davies, Stan Dunford, Murray Lee, James Webb and Ernst & Young LLP

BEFORE: J.T. Akbarali J.

COUNSEL: *Paul Guy and Garth Myers*, for the plaintiff

Daniel Murdoch and Brittany Davis, for the defendants Akumin Inc., Riadh Zine-El-Abidine, Mohammad Saleem, Thomas Davies, Stan Dunford, Murray Lee, and James Webb

John Fabello and Colette Koopman, for the defendant Ernst & Young LLP

HEARD: June 5, 6, and 7, 2024

Proceeding under the *Class Proceedings Act, 1992*

ENDORSEMENT

Overview

[1] The plaintiff brings this motion pursuant to Part XXIII.1 of the *Securities Act*, R.S.O. 1990, c. S.5 ("*OSA*"). He seeks leave to commence a global class action against the defendant Akumin Inc. ("Akumin"), certain of its directors and officers (collectively, the "Akumin defendants"), and its auditor, Ernst & Young LLP ("EY"). The plaintiff alleges that there were material misrepresentations in Akumin's public disclosure documents and financial statements.

[2] In addition to the secondary market claim he makes against the defendants, he also makes a primary market misrepresentation claim and a common law negligence claim against the Akumin defendants, for which leave is not required. The plaintiff seeks certification of all his claims.

Brief Background

[3] Akumin is an Ontario corporation that operates outpatient medical imaging clinics in the United States.

2024 ONSC 3675 (CanLII)

[4] Up to Q3 2020, Akumin traded exclusively on the TSX and prepared its financial statements under International Financial Reporting Standards ("IFRS"). On September 4, 2020, Akumin was also listed on the NASDAQ, and beginning in Q4 2020, Akumin adopted U.S. Generally Accepted Accounting Principles ("US GAAP").

[5] On June 25, 2021, Akumin announced an agreement to acquire Alliance HealthCare Services Inc. ("Alliance"), a leading provider of radiology and oncology solutions in the United States. The transaction was significant, valued at $820 million USD. It would transform Akumin's business, expanding its scope and diversity, and roughly tripling its size. The deal was expected to close in Q3 2021, and in fact closed on September 1, 2021.

[6] About six weeks after announcing the Alliance transaction, on August 15, 2021, Akumin announced that it would be late in filing its Q2 2021 financial results that were expected on August 16, 2021, because management, and Akumin's auditor EY, "agreed that additional information and analysis [was] necessary to complete the interim financial report…". The press release disclosed that the additional information and analysis related to "potential additional credit losses with respect to prior years." Akumin indicated that it expected to be able to file the financial report, related management's discussion and analysis ("MD&A") and CEO and CFO certificates within 60 days of the original filing deadline, and that it had applied to the Ontario Securities Commission ("OSC"), as Akumin's principal regulator, for the imposition of Management Cease Trade Orders ("MCTO").

[7] On August 23, 2021, Akumin filed a material change report ("MCR") setting out the information that was contained in its August 15, 2021 press release.

[8] The MCTO was issued by the OSC, and as a condition thereof, Akumin released bi-weekly updates on the MCTO.

[9] One of those bi-weekly updates was released on October 12, 2021, a few days before Akumin had expected to be able to release its (late) Q2 2021 financial results. In the October 12, 2021 disclosure, Akumin advised that in performing the additional review of historical collection rates using Akumin's enhanced reporting and analytics tools, it had identified issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods. Akumin had noted that estimates of historical implicit price concessions and expected collection rates were not reflective of actual cash collections. Akumin had determined that a material change to historical implicit price concessions for certain prior periods was required. The change was "considered an error for accounting purposes" and thus required a restatement of Akumin's annual financial statements for the periods ended December 31, 2019 and December 31, 2020, and Akumin's interim financial statements for Q1 2021. Akumin announced that the quantum was being finalized, but it was then expected that the changes would result in a negative adjustment of around $25 million - $30 million to accounts receivable.

[10] In the same disclosure, Akumin announced that, following the closing of the Alliance transaction, while integrating the accounting policies and procedures of the two organizations, Akumin identified differences in recording the capitalization, as opposed to the repair and

2024 ONSC 3675 (CanLII)

maintenance expense, of components that are replaced when equipment is repaired. Akumin disclosed its intention to reflect in the restatements the adjustments resulting from the review of the accounting treatment of these components. While cautioning that its review of the impact of these changes remained preliminary, it indicated that the adjustments were expected to be reflected as an adjustment to the net book value of property and equipment ("PPE"), and additional repairs and maintenance costs which are included in operating expenses.

[11] To put it more simply, by October 12, 2021, Akumin had announced two accounting errors that it intended to adjust in restatements for fiscal years ("FY") 2019 and 2020, and for Q1 2021. These were:

a. An error in the calculation of credit losses, or write-offs, which would be expected to reduce accounts receivable, and therefore would have an impact on revenue and shareholder's equity. I refer to this as the "AR error"; and

b. An error in the capitalization of expenses relating to the replacements of some components of equipment which should properly have been captured as maintenance expenses. This error was expected to reduce the value of Akumin's property and equipment, and increase its expenses for the restatement periods. As such, it could have an impact on shareholder's equity. I refer to this as the "PPE error."

[12] The restatements were expected to correct these errors, which everyone agrees were material for accounting purposes. In addition, while the restatements were being finalized, the interim financial results for Q2 2021 continued to be delayed.

[13] On November 8, 2021, in another bi-weekly status update, Akumin advised that, while the quantum of the PPE error was still being finalized, it expected that the restatements would reflect a net book value of property and equipment that was about $19 million less than previously reported.

[14] A week later, on November 15, 2021, Akumin made a press release announcing its Q2 2021 financial results as well as the filing of the restatements.

The Plaintiff's Claim

[15] The plaintiff commenced this action by way of statement of claim dated December 20, 2021. It has been amended twice since then. The plaintiff also made certain concessions during the hearing of this motion that limited the scope of his claim.

[16] The proposed class is now defined as:

> All persons and entities, other than the Excluded Persons, that acquired Akumin Inc. ("Akumin")'s securities during the period from May 15, 2019 at 7.46 a.m. ET to November 15, 2021 at 7:04 a.m. ET.

2024 ONSC 3675 (CanLII)

"Excluded Persons" means:

(a) Akumin and its subsidiaries, affiliates, officers, directors, senior employees, legal representatives, heirs, predecessors, successors and assigns, the Individual Defendants and any member of their families and any entity in which any of them has or had during the Class Period any legal or de facto controlling interest; and

(b) All persons and entities that sold all of their Akumin securities before August 15, 2021.

[17] The claims can be categorized as follows:

Against the Akumin Defendants:

a. Under Part XXIII of the *OSA*, liability for misrepresentation in offering memoranda, on behalf of those who acquired Akumin notes in the primary market except those noteholders who acquired their notes in the primary market in a distribution outside Canada. The offerings are:

i. An offering of $400 million of 7% senior secured notes due on November 1, 2025 that was completed on November 2, 2020;

ii. A private offering of $75 million of 7% notes due November 1, 2025 that was completed on February 11, 2021; and

iii. An offering of $375 million of aggregate principal amount of 7.5% senior notes due August 1, 2028, completed on August 9, 2021.

b. Common law misrepresentation claims on behalf of primary and secondary market purchasers of Akumin securities, except those noteholders who acquired their notes in the primary market in a distribution outside Canada;

Against All Defendants:

c. Under Part XXIII.1 *OSA*, liability for misrepresentation in secondary market disclosure, on behalf of those who purchased Akumin securities, whether notes or shares, in the secondary market.

[18] The plaintiff alleges that the Akumin defendants made six misrepresentations, which I refer to herein collectively as the "Akumin misrepresentations":

a. Overstated accounts receivable;

b. Overstated revenue;

c. Overstated PPE;

2024 ONSC 3675 (CanLII)

d. Overstated shareholders' equity;

e. Failure to comply with accounting standards, that is, the plaintiff claims that Akumin misrepresented that its financial statements complied with IFRS for Q1 2019 to Q3 2020 and with US GAAP for FY 2020 and Q1 2021;

f. Ineffectiveness of its internal controls, that is, the plaintiff claims that Akumin, its CEO, and CFO misrepresented the effectiveness of the company's internal control over financial reporting ("ICFR") and its disclosure controls and procedures ("DC&P"), being the systems of checks and balances within a company to reasonably ensure the integrity of its financial disclosure (collectively, the "Internal Controls").

[19] As against EY, the plaintiff proceeds on the following two alleged misrepresentations, which I refer to collectively as the EY misrepresentations:

a. EY had no reasonable basis for its unqualified audit opinion that Akumin's impugned financial statements fairly presented its financial situation in accordance with applicable accounting standards (the "no reasonable basis" misrepresentation); and

b. EY falsely represented that its audits complied with generally accepted auditing standards in Canada ("Canadian GAAS"), the United States ("US GAAS") and in accordance with the standards promulgated by the Public Company Accounting Oversight Board ("PCAOB Standards") (the "accounting standards" misrepresentation).

[20] The plaintiff acknowledges that the class period in his proposed definition is inappropriate as to EY, as on his theory, the first misrepresentation made by EY was on March 31, 2020. As a result, the plaintiff seeks a class period that begins on March 31, 2020 with respect to his claims against EY.

[21] There are four public corrections alleged, all of which I have already described. They are:

a. The August 15, 2021 disclosure that Akumin's Q2 2021 financial statements would be delayed due to additional information and analysis related to potential additional credit losses with respect to prior years, and an MCTO would be sought.

b. The October 12, 2021 disclosure advising that the potential credit losses were expected to negatively impact AR by about $25-30 million, and advising of the PPE error which had not yet been quantified.

c. The November 8, 2021 disclosure that estimated a downwards adjustment to PPE of about $19 million.

2024 ONSC 3675 (CanLII)

d. The November 15, 2021 disclosure of Akumin's restated financial statements for FY 2019, FY 2020 and Q1 2021.

Issues

[22] The issues that I must determine on this motion are:

a. Should the plaintiff be granted leave to commence a claim under Part XXIII.1 of the *OSA*? This requires me to consider whether the plaintiff has established a reasonable possibility that:

i. The Akumin defendants made untrue statements that were material and that were publicly corrected; and/or

ii. EY made untrue statements that were material and that were publicly corrected.

b. Should the plaintiff's claims be certified? In particular,

i. If leave is not granted with respect to the secondary market claim, should the primary market and common law claims be certified?

ii. Should the primary market claims be certified in any event?

iii. Should the class be limited to Canadian purchasers?

iv. What is the appropriate class period?

Preliminary Issue: Expert Evidence

[23] The parties have all put forward affidavits from proposed expert witnesses. No one has objected to the admission of evidence from any other party's expert. However, the court retains a gatekeeping role, and so I must consider the admissibility of the expert evidence before me.

[24] Determining whether to admit expert evidence is a two-stage analysis. In the first stage, there are four threshold requirements that must be established (*White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23, at paras. 19 and 23, citing *R. v. Mohan*, [1994] 2 S.C.R. 9, at pp. 20-25; see also *R. v. Abbey*, 2017 ONCA 640, at para. 48):

a. Relevance, which at this stage means logical relevance;

b. Necessity in assisting the trier of fact;

c. Absence of an exclusionary rule; and

2024 ONSC 3675 (CanLII)

d. A properly qualified expert, which includes the requirement that the expert be willing and able to fulfil the expert's duty to the court to provide evidence that is impartial, independent and unbiased.

[25] If the threshold requirements are met, the court moves on to the second stage of the analysis. There, the judge, as gatekeeper, determines whether the benefits of admitting the evidence outweigh its potential risks, considering factors such as legal relevance, necessity, reliability, and absence of bias.

[26] In this case, the plaintiff puts forward the following experts:

a. Dr. Sunita Surana is a Vice President and Senior Economist at Forensic Economics, Inc., an economic consulting firm that specializes in the application of economics and finance to legal issues. Dr. Surana opines on whether Akumin's alleged misrepresentations would be expected to have an effect on the market price of its common stock. She also performed event studies with respect to the periods after each alleged public correction, and opined on whether the alleged public correction corresponded to the alleged misrepresentations.

b. Dr. Ramy Elitzur is a Professor of Accounting in the Rotman School of Management at the University of Toronto. Dr. Elitzur opines on whether Akumin's financial statements contained errors that were material as that is defined under the applicable accounting standards.

c. D. Paul Regan is a Certified Public Accountant since 1970 who is also certified in Financial Forensics since 2008. Mr. Regan gave his opinion on whether, based on publicly available documents, there is a reasonable possibility that EY did not comply with US GAAS or PCAOB Standards during its 2019 and 2020 audits of Akumin.

d. Adam C. Pritchard is the Frances and George Skestos Professor of Law at the University of Michigan Law School in Ann Arbor. Mr. Pritchard's research focuses on securities law, including comparative securities law, securities class actions, and Securities and Exchange Commission ("SEC") enforcement. Mr. Pritchard opines on whether a securities class action has been commenced against Akumin in the United States in relation to the same matters raised in this claim, and whether any applicable limitation period under US law which would apply to such a claim has expired.

[27] Akumin offers expert evidence from the following experts:

a. Steven F. Stanton is a Certified Public Accountant who is also certified in Financial Forensics and is a Certified Fraud Examiner. Mr. Stanton has over 40 years of experience in auditing and forensic accounting. Mr. Stanton opines on Dr. Elitzur's report and Akumin's accounting, financial reporting and internal controls with a focus on the alleged misrepresentations in Akumin's financial statements.

2024 ONSC 3675 (CanLII)

b. Robert Patton is a Managing Director within the Securities and Finance and International Arbitration practice groups of NERA Economic Consulting. He has an MSc in Economics and Economic History, and is a Chartered Financial Analyst. Mr. Patton opines on Dr. Surana's report, and in particular, addresses whether Akumin's alleged misrepresentations would be expected to affect its share price, the impact of a disclosure on September 1, 2021 (relating to the closing of the Alliance transaction) on Akumin's share price, whether Akumin's share price reacted in a statistically significant manner to the alleged public corrective statements, and what can be understood from the analyst commentary about the increase in Akumin's share price on November 15, 2021. Mr. Patton completes his own event studies in his report.

c. Mark A. Nebrig is a lawyer with Moore & Van Allen PLLC in North Carolina who serves as co-head of the firm's litigation group and as a member of the Securities Committee and Governance Committee. He specializes in complex class actions and securities litigation. Mr. Nebrig opines on whether an American court would apply US federal securities laws to claims on behalf of any of the investors in the putative class based on the alleged misstatements in Akumin's filings, while declining to exercise jurisdiction over any claims that may be alleged under Canadian laws or the laws of another foreign jurisdiction. He also opines on whether the allegations in the Amended Statement of Claim state a plausible claim for relief under US securities laws.

[28] EY offers expert evidence from J. Duross O'Bryan, who has been a Certified Public Accountant for over 40 years, and who has significant experience in financial statement audit engagements as the lead engagement partner. His experience includes working within the health care sector. Mr. O'Bryan's report explains in what ways he agrees or disagrees with Mr. Regan's conclusions, and the reasons for Mr. O'Bryan's opinion.

[29] I am satisfied that each of these experts offers evidence that is both necessary and relevant, and each is properly qualified to give evidence on the topics I have laid out above. I have no difficulty in qualifying all of these experts and admitting their evidence on this motion.

Leave under the *OSA*

[30] The secondary market misrepresentation claim arises under s. 138.3(1) of the *OSA* which provides, in part:

> Where a responsible issuer or a person or company with actual, implied or apparent authority to act on behalf of the responsible issuer releases a document that contains a misrepresentation, a person or company who acquires or disposes of the issuer's security during the period between the time when the document was released and the time when the misrepresentation contained in the document was publicly corrected has, without regard to whether the person or company relied on the misrepresentation, a right of action for damages against,

2024 ONSC 3675 (CanLII)

(a) the responsible issuer;

(b) each director of the responsible issuer at the time the document was released;

(c) each officer of the responsible issuer who authorized, permitted or acquiesced in the release of the document;

…

(e) each expert where,

(i) the misrepresentation is also contained in a report, statement or opinion made by the expert,

(ii) the document includes, summarizes or quotes from the report, statement or opinion of the expert, and

(iii) if the document was released by a person or company other than the expert, the expert consented in writing to the use of the report, statement or opinion in the document.

[31] The *OSA* in s. 1(1) defines "misrepresentation" to be "(a) an untrue statement of material fact, or (b) an omission to state a material fact that is required to be stated or that is necessary to make a statement not misleading in the light of the circumstances in which it was made".

[32] "Material fact", when used in relation to securities issued, is defined as "a fact that would reasonably be expected to have a significant effect on the market price or value of the securities".

[33] Under s. 138.8(1), leave is required to commence a claim under s. 138.3(1). Section 138.8(1) provides that the court shall grant leave only where it is satisfied that (a) the action is being brought in good faith, and (b) there is a reasonable possibility that the action will be resolved at trial in favour of the plaintiff. This second criterion requires an analysis of: (i) whether there is an untrue statement; (ii) the materiality of the impugned statement; and (iii) whether the statement has been publicly corrected.

[34] In this case, the defendants do not contest the good faith requirement. They join issue on whether there is a reasonable possibility that the action will be resolved at trial in favour of the plaintiff.

General Principles Applicable to Leave Motions

Approach to the Leave Test

[35] In *Baldwin v. Imperials Metals Corporation*, 2021 ONCA 838, 159 O.R. (3d) 241, at para. 16, the Court of Appeal described the purpose of Part XXIII.1 of the *Securities Act* as being "aimed at deterring corporate nondisclosure, protecting investors, and incentivizing accurate and timely disclosure by public issuers, while avoiding the American experience of predatory 'strike suits'".

2024 ONSC 3675 (CanLII)

[36] In *Theratechnologies Inc. v. 121851 Canada Inc.*, 2015 SCC 18, [2015] 2 S.C.R. 106, at paras. 36-38, the Supreme Court of Canada held that the leave requirement gives courts "an important gatekeeping role" in determining whether an action could be said to have a reasonable possibility of success. The Court found that the threshold should be more than a "speed bump", and the courts must "undertake a reasoned consideration of the evidence to ensure that the action has some merit." The Court described the legislative objective of the leave requirement as creating "a robust deterrent screening mechanism so that cases without merit are prevented from proceeding". In *Bradley v. Eastern Platinum Ltd*., 2016 ONSC 1903, at para. 51, Rady J. held that the leave test "is not a low bar".

[37] Recently in *Drywall Acoustic Lathing and Insulation (Pension Fund, Local 675) v. Barrick Gold Corporation*, 2024 ONCA 105 ("*Barrick CA #2*") at para. 28, the Court of Appeal reiterated that s. 138.8 calls for a qualitative evaluation of the proposed action; it is not enough to show a triable issue.

[38] To establish a reasonable possibility of success, the claimant must "offer both a plausible analysis of the applicable legislative provisions, and some credible evidence in support of the claim." The threshold requires that there be a "reasonable or realistic chance that the action will succeed." However, the leave stage should not be treated as a mini-trial: *Theratechnologies*, at paras. 38-39.

[39] In *Barrick CA #2*, the court held that s. 138.8 does not call for a review in isolation of only the evidence that supports the plaintiff's theory. Rather, the analysis must include some weighing of the evidence that the parties proffer and scrutiny of the entire body of evidence, including an assessment of the credibility and reliability of the evidence: *Barrick CA #2*, at paras. 29, 31-32.

[40] To obtain leave, a plaintiff must thus demonstrate a plausible legal foundation, credible and reliable evidence in support of the plaintiff's claim, and the record must demonstrate that there is a realistic or reasonable chance the action will succeed: *Barrick CA #2*, at paras. 29, 32.

[41] The qualitative analysis as to whether there is a reasonable possibility that the claim will be resolved at trial in favour of the plaintiff must be undertaken for each alleged misrepresentation: *Paniccia v. MDC Partners Inc.*, 2018 ONSC 3470, 142 O.R. (3d) 421, at para. 86; *Kauf v. Colt Resources, Inc.*, 2019 ONSC 2179, at paras. 70-72.

[42] In *Paniccia*, at paras. 89-91, Perell J. held that a judge on a leave motion must be cognizant of the fact that full production has not been made. While the court is entitled to weigh the evidence of both parties having regard to the affidavits and cross-examinations, the court must also take into account that the leave motion "involves merely a paper record and that the statutory leave test sets a low evidentiary threshold."

[43] In *Rahimi v. SouthGobi Resources*, 2017 ONCA 719, 137 O.R. (3d) 241, at para. 48, the Court of Appeal held that the motion judge "is also obligated to consider what evidence is *not* before her." Moreover, where there are contentious issues of credibility that impact on the decision whether to grant leave, "the motion judge must ask herself whether they can be resolved on the existing record": *SouthGobi*, at para. 49.

2024 ONSC 3675 (CanLII)

[44] In *Barrick CA #2*, at paras. 36 – 40, the Court of Appeal described three clear limitations that arise from the prohibition on conducting mini-trials:

a. The motion judge must keep in mind the relatively low merits-based threshold of a realistic or reasonable chance of success;

b. Attempts to resolve realistic and contentious issues arising from conflicting credible evidence will lead a judge to lapse into an impermissible mini-trial; and

c. As I have just noted, the judge must consider the evidence that is not before them. The completeness of the record should affect how a motion judge proceeds.

Untrue Statement

[45] When considering whether there is a reasonable possibility that the plaintiff will establish an untrue statement at trial, each alleged misrepresentation is a discrete misrepresentation claim: *Cappelli v. Nobilis Health Corp.*, 2019 ONSC 2266, at paras. 145-146.

Materiality

[46] Leave will not be granted in respect of a misrepresentation if the materiality of the misrepresentation is not established: *Nobilis*, at paras. 145-146.

[47] Determining materiality is an objective, contextual, and fact-specific inquiry, considered from the perspective of a what a reasonable investor would consider important in deciding to invest, and at what price. If there is a substantial likelihood that a reasonable investor would consider a fact important in deciding whether to invest, and at what price, that fact may be considered material. Determining materiality requires applying a legal standard to specific facts in light of all of the relevant circumstances and the total mix of information: *Nobilis*, at para. 147.

[48] In *Tietz v. Cryptobloc Technologies Corp.*, 2021 BCSC 2275, at para. 27, aff'd 2022 BCCA 307, at paras. 147-148, 150, the court noted that specific evidence on the question of materiality is not always necessary. In appropriate cases, the objective importance of the facts or omissions for the investment decision can be inferred as a matter of common sense. See also *Cornish v. Ontario Securities Commission*, 2013 ONSC 1310, at para. 99.

[49] In *Cornish*, the court held that materiality (there, in the context of material change) is highly contextual, and there is no bright line test. It found that a single factor such as share price movement will not conclusively determine the question of materiality: para. 53.

[50] In *Sharbern Holding Inc. v. Vancouver Airport Centre Ltd.*, 2011 SCC 23, at para. 59, Rothstein J. held that, when considering materiality, the predominant focus must be on a contextual consideration of what information was disclosed, and what facts or information were omitted from the disclosure documents provided by the issuer.

2024 ONSC 3675 (CanLII)

[51] The parties agree that a restatement of financial results indicates that the errors in the original financial statements were material for accounting purposes. However, a restatement does not, on its own, establish materiality for *OSA* purposes: *Nobilis*, at para. 176, *Badesha v. Cronos Group Inc.*, 2022 ONCA 663, at para. 66.

Public Correction

[52] With respect to public correction, in *Baldwin*, at para. 47, the Court of Appeal described the overarching question as being: "whether the alleged public correction was reasonably capable of being understood in the secondary market as correcting what was misleading in the impugned statement."

[53] In *Baldwin*, the Court of Appeal held that focusing on the market's understanding of the alleged public correction is consistent with one of the core purposes of the statutory framework, that is, to incentive fair and accurate disclosure by public issuers. Strathy C.J.O. cautioned that:

> [p]ermitting an issuer to escape liability by making vague or general disclosures ("something has happened and we are looking into it") is inconsistent with that core purpose. It would undermine confidence in the securities market and deprive shareholders of compensation.

[54] In *Drywall Acoustic Lathing and Insulation, Local 675 Pension Fund v. Barrick Gold Corporation*, 2021 ONCA 104 ("*Barrick CA #1"*), at para. 48, the court held that a motion judge is obliged to engage in a reasoned consideration of evidence of the context in which the alleged public correction was made and how it would be understood in the secondary market if it does not, on its face, reveal the existence of the alleged misrepresentation.

[55] In *Barrick CA #1*, at para. 50, the court adopted the approach to public correction described by Perell J. in *Drywall Acoustic Lathing and Insulation, Local 675 Pension Fund (Trustees of) v. SNC-Lavalin*, 2016 ONSC 5784, at para. 45:

> [T]he determination of whether a corrective disclosure is corrective depends not only on a semantic analysis of what the public correction means but also on an analysis of how the words would be understood in an efficient market and also a statistical analysis of the effect of those words on the market's evaluation of the value of the securities that had been misrepresented to the marketplace. Put somewhat differently, a semantic analysis of whether a corrective disclosure was made is necessary, but it is not sufficient to determine the existence or non-existence of a corrective disclosure. What is required is an analysis of the literal meaning of the words, which is in any event not a purely mechanical exercise but one that involves evidence, opinion, and argument, and also an analysis of the perceived or effective meaning of the words in the secondary market, which once again is not a mechanical exercise, but rather one that involves evidence.

[56] The role of public correction in the statutory cause of action has not yet been definitively characterized. However, as the Court of Appeal held in *Baldwin*, at paras. 50-51, misrepresentation

2024 ONSC 3675 (CanLII)

does the heavy lifting in the statutory cause of action. “It is the wrong at issue and it forms part of the context in which the public correction operates and would be understood by the market”. Its role at the leave stage is a modest one.

[57] Very recently, in *Barrick CA #2*, the Court of Appeal reiterated its earlier guidance on public correction, finding that it will serve as a necessary time-post for the cause of action and any eventual damages calculation. The Court of Appeal described a motion judge’s task in relation to public correction as follows:

> In identifying possible public correction dates a motion judge’s ultimate task is to determine if there is a reasonable possibility that a trial court will find that a public disclosure was a public correction, an inquiry that requires a reasoned consideration of the evidence. As I have indicated above, this inquiry may alternatively be profitably framed by asking “whether the alleged public correction was reasonably capable of being understood in the secondary market as correcting what was misleading in the impugned statement”.

[58] With respect to the relationship between the misrepresentation and the alleged public correction, the Court of Appeal held, at para. 79 of *Barrick CA #2*, that a linkage or connection will assist the judge in determining how the alleged corrective disclosure would be understood in the secondary market. A sufficient linkage or connection will exist if the alleged public correction can reasonably be taken as correcting the alleged misrepresentation, but not otherwise. A mere coincidence in subject matter will not suffice.

[59] Both the plaintiff and the Akumin defendants rely on the decision of the Court of Appeal in *Cronos*. Akumin cites para. 66 of that decision, where the court, discussing the decision of the motion judge in that case, wrote:

> The motion judge held that whether a correction is material is not a matter of semantics, but rather requires an understanding of how a specific correction would be understood in an efficient market and also requires a statistical analysis of the effect of the correction.

[60] In the same paragraph, the court then quoted from the motion judge’s decision: *Badesha v. Cronos Group*, 2021 ONSC 4346, at paras. 53-54:

> The Court of Appeal made this very point in [*Barrick CA #1*], at para. 50, quoting approvingly from the motion court’s judgment in *Drywall Acoustic Lathing and Insulation, Local 675 Pension Fund (Trustees of) v. SNC-Lavalin Group Inc.*, 2016 ONSC 5784, at para. 45:
>
> > [T]he determination of whether a corrective disclosure is corrective depends not only on a semantic analysis of how the words would be understood in an efficient market and also a statistical analysis of the effect of those words on the market’s evaluation of the value of the securities that had been misrepresented to the marketplace.

2024 ONSC 3675 (CanLII)

> The impact on the market lies at the heart of the statutory definition of "material fact". It is not just an add-on to be examined in case the public corrections are somehow unclear. The possibility exists that there were misrepresentations in the form of inaccuracies in financial statements, but that they had negligible impact and were not material in the *OSA* sense of the term.

[61] Akumin relies on the passage above to argue that a disclosure that is not accompanied by a statistically significant share price decline cannot be a public correction for purposes of the statutory scheme.

[62] For his part, the plaintiff emphasizes that in *Cronos*, the court held, at para. 78, that:

> …where there was a drop in share prices, and there is credible, complex and competing evidence on whether misrepresentations have a material effect on share prices, the reasonable possibility threshold is met and the issue should be left for trial.

[63] In my view, Akumin's approach muddles the materiality of the representation with the materiality of the correction.

[64] I acknowledge that the Court of Appeal, in para. 66 of its reasons in *Cronos*, referred to the materiality of the correction. With the greatest of respect to the Court of Appeal, it appears that in characterizing the motion judge's reasons, it erred in referring to the materiality of the public correction.

[65] The motion judge's reasons make clear that he was considering the materiality of the misrepresentation. He noted, at para. 51, that assessing materiality includes taking into account the entire circumstances of the company, its industry, and market, and requires an examination of the context in which the alleged public corrections were made and how they would be understood in the secondary market. In other words, the impact of the public correction may assist the court in assessing materiality. Indeed, it is obvious that the impact of the public correction on share price is a factor that can assist the judge in determining whether the representation that is corrected in the public correction is material, but it is the materiality of the misrepresentation at issue, not the materiality of the public correction.

[66] In my view, the distinction is important. If the public correction has to be material — a conclusion not supported by the plain wording of the statute — then the court is encouraged to parse each partial correction in a way that disconnects the circumstances around each public correction from the others. That is how Akumin has approached this motion. It argues that there is no public correction followed by a statistically significant share price decline. There is either a correction or a statistically significant share price decline. In my view, this siloed approach does not support the legislative goal of incentivizing fair and accurate disclosure by issuers. Rather, it incentivizes issuers to do exactly what Strathy C.J.O. rejected in *Baldwin*: disclose that "something has happened and we are looking into it" in the hopes of provoking the expected share price decline, and leaving the clear public correction until later, hoping to minimize or avoid a share price decline following the corrective disclosure.

2024 ONSC 3675 (CanLII)

[67] An approach that involves parsing each alleged partial correction to determine whether it provoked a statistically significant share price decline, and parsing each statistically significant share price decline to determine if it was provoked by a (partial) correction, would encourage the court to limit the contextual analysis it undertakes, when the jurisprudence to date clearly favours a contextual approach to the questions of materiality and public correction.

[68] Another impact of the approach Akumin urges me to take is that it, in effect, elevates the importance of the public correction, inconsistent with the Court of Appeal's finding in *Baldwin* that misrepresentation does the heavy lifting, and that at the leave stage, the role of public correction is modest.

[69] In my view, the approach to public correction that Akumin proposes does not serve the aims of the statutory scheme and is inconsistent with the jurisprudence to date.

[70] As to the plaintiff's reliance on *Cronos*, in order to determine whether the conclusion reached there is warranted in this case, I must turn to an analysis of the evidence.

Is there a reasonable possibility the alleged misrepresentations were untrue?

The Alleged Akumin Misrepresentations

[71] The Akumin defendants do not join issue about whether the misrepresentations they are alleged to have made were untrue. As a result, I consider this requirement only briefly.

[72] As I have already noted, Akumin reported that there were errors in its financial statements which required restatements for FY 2019, FY 2020 and Q1 2021. It also disclosed weaknesses in its internal controls in its MD&A.

[73] Akumin restated its AR, PPE, revenue, and shareholders' equity, from FY 2019 to Q1 2021. Dr. Elitzur gives credible evidence that these restatements were, by definition under US GAAP and IFRS, acknowledgements that the prior financial statements contained errors in those areas that were material for accounting purposes in those time periods. Akumin's expert Mr. Stanton gives consistent evidence on cross-examination.

[74] Moreover, there is evidence in the record from Mr. Stanton that the weaknesses in the design or implementation of Akumin's internal controls were related to, at the very least, the PPE error. Mr. Stanton agreed that the weaknesses in internal controls were present between December 31, 2019, until they were remediated in December 2022.

[75] Dr. Elitzur gives evidence that Akumin's disclosure demonstrates that it recognized revenue when it was not probable that it would collect the receivable, and that doing so violated IFRS 15 *Revenue from Contracts with Customers* which requires that it be probable a receivable will be collected in order to recognize the related revenue. Dr. Elitzur also notes the corresponding provision in US GAAP which similarly requires revenue to be recognized only when the collectability of substantially all of the receivable is probable.

2024 ONSC 3675 (CanLII)

[76] Dr. Elitzur identifies the ways in which the PPE reporting violated IFRS and US GAAP standards. In particular, IAS 16 *Property Plant and Equipment* requires that an entity not recognize in the carrying amount of an item of property, plant and equipment the costs of the day-to-day servicing of the item; such costs are recognized in profit or loss as incurred. By capitalizing these costs rather than expensing them, Dr. Elitzur concludes that Akumin violated IAS 16. To similar effect is US GAAP ASC 360 – Property Plant and Equipment, which requires that if a cost does not extend an asset's useful life, increase its productivity, improve its operating efficiency, or add additional production capacity, the cost should be recognized as an expense as incurred. Dr. Elitzur thus concluded that in capitalizing the costs rather than expensing them, Akumin violated both US GAAP and IFRS.

[77] The evidence I have just reviewed is enough to conclude that there is sufficient credible and reliable evidence for me to find a reasonable possibility the plaintiff will prove that each of Akumin's impugned statements were untrue.

The Alleged EY Misrepresentations

[78] It is plain that the case against EY is derivative of the case against Akumin. The bulk of the record before me is focused on proving a reasonable possibility of success against Akumin.

[79] EY does not accept that the representations it made were untrue. EY's expert and the plaintiff's expert agree that a proper audit can be conducted, and a valid, clean audit opinion issued, but a financial statement might still contain an error requiring a restatement. An auditor does not guarantee the company's reported financial results. An audit is conducted under the principle of obtaining reasonable assurance. Errors can still exist even though an auditor adheres to the applicable professional standards.

[80] Mr. Regan, the plaintiff's expert, is clear in his report that he cannot offer an opinion on whether EY complied with the applicable audit standards in this case. He cannot do so because the audit file has not been produced. At this stage in the action, the plaintiff is not entitled to demand it, and EY has no obligation to disclose it. I draw no adverse inference against EY relating to its decision not to produce the audit file. But I have the obligation to keep in mind the evidence that is not before me on this motion, and that includes EY's audit file, which one would expect to be key evidence on the question of whether EY complied with the applicable audit standards.

[81] Mr. Regan's evidence includes an analysis of whether, based on publicly available documents, there is a reasonable possibility that EY did not comply with US GAAS and/or PCAOB Standards, as applicable, during its 2019 audit and 2020 audit. In using the phrase "reasonable possibility", Mr. Regan indicates that he has drawn the definition of that standard from US GAAP's definitions of "reasonably possible" and "probable", where reasonably possible is "the chance of the event or events occurring is more than remote but less than likely", and where probable is "the event or events are likely to occur".

[82] Mr. Regan concludes that it is reasonably possible that EY failed to comply with applicable US GAAS and PCAOB Standards during its audits and did not have an appropriate basis to provide

2024 ONSC 3675 (CanLII)

its unqualified opinions that Akumin's 2019 and 2020 financial statements were fairly presented in all material respects, in conformity with IFRS and US GAAP.

[83] Among his reasons for so concluding, Mr. Regan explains:

a. Akumin's restatement demonstrates that information necessary to detect and prevent material accounting errors in Akumin's financial statements was available during EY's audits. Implicitly, then, there is a reasonable possibility that EY failed to properly obtain or respond to the available information, in violation of applicable standards.

b. The PCAOB acknowledges that restatements similar to those reported by Akumin provide a possible indicator of lapsed audit quality, although this is not conclusive.

c. The quantitative significance and nature of Akumin's acknowledged accounting errors increase the likelihood that EY failed to comply with US GAAS and PCAOB Standards during its audits.

d. The restatements affected specific accounts (revenue and accounts receivable) that were subject to presumed fraud risk and higher risk of material misstatement under US GAAS and PCAOB Standards. The applicable standards required EY to obtain more persuasive audit evidence and perform specific audit procedures in response to such risks. The fact that there were errors in these accounts increases the likelihood that EY failed to (i) appropriately respond to risks that Akumin's financial statements could be materially misstated due to fraud or error, and (ii) comply with US GAAS and PCAOB Standards during its audits.

e. The accounting errors occurred over multiple audit periods, increasing the likelihood that EY failed to comply with applicable standards during its audits.

f. The reported material weaknesses in Akumin's Internal Controls, when combined with EY's requirement to understand the company's Internal Controls, increases the likelihood that EY failed to properly respond to deficiencies in Akumin's Internal Controls and related risks of material misstatement caused by those deficiencies, in violation of applicable standards.

[84] Mr. Regan's opinion involves a certain amount of speculation. He offers some credible evidence that there are factors in Akumin's restatements that raise the prospect that EY failed to comply with applicable standards, but without the audit file, Mr. Regan can go no further.

[85] However, given that (i) EY, while not conceding that its representations were untrue, focused its defence of this motion elsewhere, (ii) I must be cognizant of the evidence that is not before me, including the audit file; and (iii) the low threshold applicable on a leave motion, I conclude that the plaintiff has proven a reasonable possibility that EY's representations will be found at trial to be untrue.

2024 ONSC 3675 (CanLII)

Materiality and Public Correction

[86] The crux of the defence mounted by the Akumin defendants to this motion relates to materiality and public correction. They argue that the first alleged public correction on August 15, 2021 did not correct anything, and that it is the only alleged public correction after which there is a statistically significant share price decline. They argue that without a public correction followed by a statistically significant share price decline, the plaintiff has failed to make out materiality and public correction. Not surprisingly, the plaintiff does not accept Akumin's characterization of the evidence.

[87] Due to the nature of the arguments made by the Akumin defendants, it is necessary, in my view, to consider whether the impugned statements made by Akumin were material at the same time as I consider whether they were publicly corrected.

The Alleged Akumin Misrepresentations

[88] The parties put forth competing narratives about the events that transpired, and in particular, the events between August 12, 2021 and November 15, 2021. Both point to the disclosures at issue, the expert evidence, and the analyst reports in support of their theories.

[89] In brief summary, Akumin argues that the disclosure of August 15, 2021 alerted the market that its Q2 2021 financial report would be delayed, and Akumin would ask the OSC for a MCTO. The market responded to that information with a statistically significant share price decline, largely because of the uncertainty of the delayed current financial results, and the concern that there was risk to the closing of the Alliance deal. Akumin argues that the disclosures of October 12, 2021, November 8, 2021, and November 15, 2021 provided the market with information that corrected information reported in Akumin's financial statements for FY 2019, FY 2020 and Q1 2021, but that the release of this information was either not accompanied by statistically significant share price movement, or it was accompanied by a statistically significant share price increase, because the information was not material, and perhaps was positive. Among other things, Akumin alleges that its credit loss risk was already well-known to the market, and it had, in Q4 2020 shortly before these events, taken an AR write-down, so nothing about the potential additional credit losses disclosed on August 15, 2021 would have taken the market by surprise or been understood as a new risk.

[90] The plaintiff argues that the August 15, 2021 disclosure put the market on notice of several things, including that Akumin was facing potential additional credit losses, which would impact AR, revenue, and shareholders' equity in some fashion. He alleges that, after the October 12, 2021 disclosure, using a two-day event window, there was a statistically significant share price decline. The plaintiff argues that the disclosures of November 8, 2021 and November 15, 2021 were partial corrections that did not lead to a statistically significant share price decline because the market had already impounded the information about Akumin's financial errors. The plaintiff points to the fact that Akumin's share price never recovered to the pre-August 15, 2021 levels, which one would have expected if the share price movement were related to the Alliance deal risk and the delayed

2024 ONSC 3675 (CanLII)

Q2 2021 financial statements, at least once the Alliance deal closed and the Q2 2021 financial statements were released.

[91] The evidence before me indicates that Akumin was understood in the market to have credit loss risk, in particular because one of its significant sources of business at its clinics was for attorney-payors who required medical examinations of their clients, presumably in support of their personal injury claims. The time to payment of those attorney invoices was historically longer than Akumin's other invoices, and inevitably some of those receivables were written off. At the same time, the attorney-payor channel was higher margin than other channels. On the other hand, Akumin also included among its payor clients insurance companies and government, which historically paid accounts faster, albeit at lower profit margins. Akumin had also taken a write down in its AR in Q4 2020.

[92] The evidence before me also indicates that the Alliance transaction would be a significant one for Akumin; as I have indicated, once the transaction closed, Akumin more or less tripled in size. The Alliance transaction would have been relevant to investors when considering whether to invest in Akumin, and at what price.

[93] Akumin's disclosure on August 15, 2021 advised the market of at least three important things:

a. The Q2 2021 financial report would be delayed;

b. The delay was occasioned because additional information and analysis relating to potential additional credit losses with respect to prior years was required to complete the report;

c. Management had applied to the OSC for a MCTO.

[94] In support of its argument that the August 15, 2021 disclosure did not correct anything, Akumin points to the MCR filed shortly thereafter, which, in the "Summary of Material Change", focuses on the delay in reporting Q2 2021 financial results and on the MCTO. I note that in its "Full Description of Material Change", the MCTO makes note of all three important facts from the August 15, 2021 press release.

[95] In any event, the August 15, 2021 disclosure on its face called into question prior financial period reporting as it related to credit losses. It is reasonably possible that the market would have understood this as a correction relating to past reporting of AR, which would have an effect on revenue and could have follow-on effects on shareholder equity. Dr. Surana's evidence is to this effect.

[96] Were I to conclude that this disclosure was not a correction, I would be falling into the error that Strathy J.A. recognized in *Baldwin*, that is, "[p]ermitting an issuer to escape liability by making vague or general disclosures ("something has happened and we are looking into it")."

2024 ONSC 3675 (CanLII)

[97] Following the August 15, 2021 disclosure, Akumin's share price fell. Both Dr. Surana and Mr. Patton produced event studies that demonstrate a statistically significant share price decline. Dr. Patton found a one-day excess return of -20.36%, and a two-day cumulative excess return of -27.16%, both statistically significant at the 5% level. Dr. Surana's event study showed a one-day excess return of -18.5%, and a two-day cumulative excess return of -23.9%, both of which were statistically significant at the 1% level.

[98] Dr. Surana and Mr. Patton disagreed as to why Akumin's share price declined. Dr. Surana's opinion is that the share price decline is due predominantly to the accounting issues that were disclosed. She noted that the accounting issues were also the root cause of the other issues that Akumin argues concerned the market: the delay in the Q2 2021 financial report and the MCTO.

[99] Mr. Patton concluded that there was no economic correspondence between the misrepresentations and the excess decline because the August 15, 2021 disclosure was not understood by the market to relate to an upcoming restatement. However, on cross-examination, he appears to concede that the accounting issue was a "potential candidate" to explain the cause of the share price decline on August 15, 2021.

[100] There are other issues with Akumin's theory that the share price decline was related only to the Alliance deal risk and the delay in releasing Q2 2021 results. First, once the Alliance deal closed on September 1, 2021, Akumin's share price went up, but remained significantly below the share price before the August 2021 disclosure. Second, by the time the financial statements were released on November 15, 2021, the share price went up again, but it had fallen in the interim, and it remained well below the share price before the August 2021 disclosure. This does not mean that Akumin is wrong, but it is evidence that, without other explanation, does not support Akumin's theory.

[101] The analyst reports in the days after the August 15, 2021 disclosure indicate that the analysts that were following Akumin paid attention to the credit losses. National Bank of Canada considered that the credit losses likely related to attorney-payer AR write-downs. It indicated that the credit losses "are not entirely surprising", and at that stage, indicated it would "remain on the sidelines" waiting to see how things developed.

[102] After the closing of the Alliance transaction on September 1, 2021, in an analyst report the following day, Cormark Securities Inc. lowered its target price for Akumin. It commented that the closing of the Alliance deal "puts an end to perceived risks that the takeout and related financings had material closing risk following the delay of [Akumin's] Q2/21 financials." However, it was concerned about certain other aspects of the Alliance transaction. Cormark was also waiting on Akumin's Q2 21 financials and, while it considered that the fact that the Alliance deal closed suggested that there was no material revenue recognition issue at Akumin, it continued to acknowledge the risk that there was such an issue. It concluded that it would revisit its forecast and target metrics once it had improved visibility on some of the issues it had addressed.

[103] In contrast to Cormark, Canaccord Genuity raised its price target for Akumin on September 20, 2021. It noted that the stock would continue to remain "under pressure" until Akumin released

2024 ONSC 3675 (CanLII)

its Q2 21 results. It noted that the accounting issues could result "in either a positive or negative impact on past periods".

[104] Some of the analysts' speculation turned out to be wrong, as the credit losses were not specific to attorney-payors. There is inconsistency in the analyst reports: one analyst raised their target price for Akumin while another lowered it. While deal risk and delayed financials are mentioned as issues in valuing Akumin, the impact of the accounting issues is not discounted in the analyst reports.

[105] On October 12, 2021, Akumin released its bi-weekly MCTO status update in which it disclosed the following relevant information:

a. The credit loss issue was expected to result in a negative adjustment to AR of $25-30 million.

b. Akumin had discovered the PPE error which it had not yet quantified.

c. The financial statements for FY 2019, 2021 and Q1 21 and their related MD&A would have to be restated.

d. The Q2 21 financial results would not be released on October 15, 2021 as previously expected, but were now anticipated to be released prior to November 15, 2021.

[106] Akumin does not dispute that this disclosure is corrective of at least some of the impugned statements. The parties disagree about the impact of the disclosure.

[107] The crux of the disagreement between the plaintiff's and Akumin's experts relates to the appropriate window for the event study. Dr. Surana adopted a contextual approach to the length of the event window. She chose a two-day event window, which she indicated was appropriate to ensure that the market had time to impound the October 12, 2021 disclosure, particularly in view of an analyst report released on October 13, 2021, which I address below. Mr. Patton agrees that, if one uses the two-day event window, there was a statistically significant share price decline following the October 12, 2021 disclosure.

[108] However, Mr. Patton concludes that a one-day event window is appropriate, because in his view, the event window ends on the first day where there is no statistically significant share movement. Using a one-day event window, Mr. Patton finds no statistically significant share price movement. Dr. Surana agrees that a one-day event window does not yield a statistically significant share price movement.

[109] On October 12, 2021, National Bank of Canada released an analyst report in which it identified takeaways from Akumin's disclosure: (i) the expected AR write-down is likely related to the attorney-payor channel; (ii) the final impact of the PPE error has yet to be determined, but higher operating expenses are expected to impact profitability and potentially result in the Alliance acquisition being less accretive than originally thought; and (iii) the higher expenses and write-

2024 ONSC 3675 (CanLII)

down of higher-margin attorney AR will likely impact Akumin's margins in coming quarters. National Bank of Canada made no change to its outlook.

[110] On October 13, 2021, Cormark released a "morning note" in which it lowered its recommendation for Akumin from "buy" to "speculative buy" and reduced its target price from $4.60 to $3.75. Cormark indicated that the details on the accounting issues had "an incrementally negative impact on [its] outlook" for Akumin. Cormark expected Akumin stock to remain "under pressure" but indicated it saw quick re-rate potential if the accounting issues resolved as it forecast they would.

[111] The November 8, 2021 disclosure repeated Akumin's expectation that it would file its restated filings and Q2 21 financial results on November 15, 2021. It also quantified the PPE error, indicating that, although the figure was still being finalized, Akumin expected it would reduce the net book value of property and equipment by approximately $19 million as at June 30, 2021 compared to the March 31, 2021 net book value. Akumin also disclosed that it might not be able to file its interim financial results for Q3 2021 by November 15, 2021, but expected to file them by December 15, 2021.

[112] Dr. Surana and Mr. Patton agree that there was no statistically significant share price movement following the November 8, 2021 disclosure. According to Mr. Patton, the lack of share price movement indicates that the PPE error was not material. Dr. Surana opines that the share price did not move because the market had already incorporated the impact of the information in this disclosure from the earlier disclosures. This theory is referred to as "truth-on-the-market". In other words, Dr. Surana suggests that the market did not wait until full disclosure was made, but rather, investors formed expectations about future incomes which were already reflected in Akumin's share price after the October 12, 2021 disclosure.

[113] A National Bank of Canada analyst report released on November 8, 2021 repriced Akumin's target price at $2.00 from $3.50. It noted the delay in Q3 21 financial statements to December 15, 2021, and the impact of the PPE error that had been disclosed. It described the PPE error as "disappointing", and suggested that, along with the AR error, the margins of Akumin's legacy (i.e. pre-Alliance transaction) operations would decrease in the coming quarters.

[114] Finally, the restatements and Q2 21 financial results were released on November 15, 2021. Akumin's AR, PPE, revenue and shareholder's equity were all lowered in the restatements.

[115] Dr. Surana and Mr. Patton again disagree about the appropriate event window to use to determine whether and how the price of Akumin's shares reacted to this disclosure.

[116] Dr. Surana uses a four-day event window, which results in no statistically significant share price reaction. She attributes the lack of share price movement to the truth-on-the-market theory I have already noted. Mr. Patton uses a one-day event window, which results in statistically significant positive share price movement, which Mr. Patton concludes means that the restatement was considered by the market to be positive as compared to the mix of information immediately preceding the announcement.

2024 ONSC 3675 (CanLII)

[117] In an analyst report released on November 15, 2021, National Bank of Canada left its target price for Akumin unchanged. Of Akumin's Q2 21 financial results, it noted mixed results, "revenues in line, EBITDA miss". It described the AR and PPE errors as having a negative impression associated with improper accounting, and called the resulting financial impacts "mostly negative".

[118] On November 17, 2021, Cormark released an analyst report in which it raised the target price for Akumin to $4.25 from $3.75, concluding that Akumin "presents a deep value opportunity with share price upside well beyond our target".

[119] On November 18, 2021, Canaccord Genuity released an analyst report in which it lowered its price target for Akumin from $5.75 to $5.00, noting the "sizable adjusted EBITDA miss" for Q2 21 along with other Q2 21 period financial results. It also made note of the AR and PPE errors, and in particular, that the cumulative impact of the errors was a decrease in shareholders' equity of $58.2 million as at Q1 21.

[120] Both Akumin and the plaintiff have plausible theories to explain the market's understanding of the information disclosed by Akumin. Both theories are supported by documentary evidence. Both are supported by credible and reliable expert evidence. It is not the role of a judge on a leave motion to resolve the questions on which those experts disagree. I decline to stray into a mini-trial.

[121] I am satisfied that the plaintiff has established a reasonable possibility that he will prove that the impugned statements were material for *OSA* purposes. This is supported by, among other things, Dr. Surana's evidence, the share price movement between August 12, 2021 and up to the period following the November 15, 2021 disclosure, some of the commentary from the analysts, the quantum of the adjustments made in the restatements, and the representations and alleged public corrections themselves.

[122] In reaching this conclusion, I note that the parties have all approached the internal controls statement and the impugned statement that Akumin complied with IFRS and US GAAP as derivative of the primary accounting representations.

[123] I am also satisfied that the plaintiffs have established a reasonable possibility that all four alleged public corrections were partial corrections. A plain reading of the disclosure reveals that they each correct or clarify information about the impugned statements and would have been understood to do so by the market.

[124] Having said that, I have some difficulty with the notion that a public correction that does not result in a statistically significant share price decline, especially when it comes after a public correction associated with a statistically significant share price decline, can be a useful time-post for calculating damages under the *OSA*, and more particularly, how such an interpretation of the *OSA* would serve the goals of the statutory scheme.

[125] However, on a leave motion, I would not go further. The impact of Dr. Surana's evidence about the "truth-on-the-market" theory, and how that theory interacts with the legislative public

2024 ONSC 3675 (CanLII)

correction requirement is for another day. The plaintiff has a plausible legal theory behind his allegation that there are four partial corrective disclosures, and it is supported by some credible evidence. The question of the role of public correction in circumstances like these is best left to be decided on a fully developed record.

[126] There is a separate issue that arises with respect to Akumin's notes that traded in the secondary market, and in respect of which a secondary market claim is advanced under Part XXIII.1 of the *OSA*.

[127] The analysis I have just gone through suffices to establish that, as with the shareholder class members, the noteholder class members who acquired their notes in the secondary market have demonstrated that there is a reasonable possibility that they will prove that Akumin made untrue statements, and those statements were publicly corrected.

[128] Akumin takes issue with respect to whether the noteholders can prove a reasonable possibility that the impugned statements were material as they relate to the notes.

[129] First, there is no event study indicating any statistically significant price impact on the notes following Akumin's corrective disclosure. Everyone acknowledges that, while the Akumin shares traded in an efficient market, the notes did not.

[130] According to Akumin, the statutory scheme requires an efficient market for relief to be available under it.

[131] The plaintiff disagrees, and relies on s. 138.5(1)(2)(ii)(B) of the *OSA* which provides for a calculation of damages in a secondary market misrepresentation claim in the amount the court considers just if there is no published market. The plaintiff states that since the statute itself contemplates assessing damages for securities that are not traded in an efficient market, it cannot be a requirement that there be an event study for the noteholders to prove materiality of the misrepresentations to the notes.

[132] In an argument made briefly in sur-reply, Akumin argues that s. 138.5(1)(2)(ii)(B) only applies where securities are not disposed of within ten days, and denies that the section has relevance.

[133] In my view, the reading of the *OSA* that the plaintiff puts forward is plausible and sufficient to clear the leave bar. I conclude that, for purposes of the leave test, and in view of the current state of the jurisprudence, where securities trade in a market that is not efficient, the court can look to other evidence to determine materiality for purposes of leave. Requiring an event study when one cannot be completed, and thus denying investors who hold securities that do not trade in an efficient market access to the statutory regime is, at this stage of the proceeding, inconsistent with the goals of the *OSA*. To the extent Akumin wishes to advance a different theory of the statute, it is free to do so at trial where the issue can be determined on a full record.

2024 ONSC 3675 (CanLII)

[134] There is evidence of the note price history in the record. It indicates that the note prices dropped following the August 15, 2021 disclosure, and did not return to pre-disclosure levels. But there is no evidence from any expert as to why.

[135] The plaintiff relies on four reports from Moody's Investor Services commenting on the Akumin notes. Moody's reports are not as timely as the analyst reports on Akumin's shares, but nonetheless, they provide some context to the market reaction to Akumin's disclosures:

a. On September 15, 2021, Moody's reported a rating action, in which it affirmed Akumin's corporate family rating, probability of default rating and B senior secured ratings. However, it changed the outlook for Akumin notes from stable to negative, reflecting the continued delay in Akumin's Q2 21 filings, increasing Moody's assessment of Akumin's liquidity and governance risk.

b. The next day, on September 16, 2021, Moody's released an update following the change in its outlook for Akumin to negative. It raised governance risks associated with Akumin's inability to file Q2 21 financial statements on time, high leverage, and other concerns.

c. On October 14, 2021, just after the second corrective disclosure, Moody's released an announcement indicating that Akumin's filing delay and accounting review "are credit negative".

d. On November 23, 2021, about a week after the restatements were filed, Moody's issued an "Issuer Comment" about Akumin. It wrote that the Q2 21 filings and restatements revealed "credit negative corrections that materially reduce historical EBITDA compared to original statements, unveiling a significant increase in leverage for 2019 and 2020". It also made reference to the then-ongoing delay in Q3 21 filings.

[136] Given the price decline of the notes, and Moody's stated concerns about Akumin's accounting review, I conclude that the plaintiff has established a reasonable possibility that he will prove that the impugned statements were material with respect to the notes.

[137] It follows from this analysis that leave shall be granted to the plaintiff to pursue the secondary market misrepresentation claims against the Akumin defendants.

The Alleged EY Misrepresentations

[138] EY argues that its impugned statements were neither material nor publicly corrected.

[139] It is common ground that EY did not withdraw its audit opinions. It is also common ground that an auditor can perform an audit in accordance with applicable standards, issue a clean audit opinion, and there can still be errors in the audited financial statements that require restatement.

2024 ONSC 3675 (CanLII)

[140] The plaintiff argues that once Akumin stated that its prior financial reporting was no longer accurate, that statement cast doubt on EY's audit opinion that the financial statements fairly presented the company's financial situation, and that it had conducted its audit in accordance with applicable standards. Thus, the plaintiff argues that all the statements that I have found to be reasonably possible public corrections are also corrective of EY's impugned statements.

[141] The plaintiff argues that materiality can be inferred as a matter of common sense. People rely on audited financial statements because they are audited. In the plaintiff's view, the market response to Akumin's disclosure is more than sufficiently linked to EY's representations.

[142] I have difficulty with the plaintiff's argument as it relates to EY. The case against EY is largely derivative of the case against Akumin, and seeks to make EY responsible by association, not by evidence.

[143] There is very little evidence in the record that speaks directly to EY's impugned statements, and how they would be perceived in the market. Dr. Surana and Mr. Regan comment briefly on the general importance of audits and auditor's opinions. But there is nothing particular to EY, the Akumin audits, or the Akumin restatements that address the criteria of materiality and public corrections with respect to EY. Mr. Regan's evidence is focused on the potential for EY's statements to be untrue, not on their materiality or public correction.

[144] Nor do I find that an inference of materiality can be drawn. A finding that an auditor's opinion or its statement that it complied with applicable standards is material and corrected by virtue of disclosure and correction of accounting errors in an issuer's financial statements would be inconsistent with the jurisprudence in Ontario to the effect that a restatement alone is not sufficient to prove *OSA* materiality. There has to be something more. The "something more" cannot be that people pay attention to audited statements more than they do to unaudited statements; that is always true. Here, there is nothing more in the record to support a finding or an inference of materiality.

[145] The evidence on this record does not support a conclusion that it is reasonably possible that the plaintiff will prove that the four corrective disclosures corrected EY's impugned statements. Moreover, without any evidence of economic or other materiality of EY's impugned statements, there is no reasonable possibility that the plaintiff will prove materiality with respect to EY's statements.

[146] It follows that I do not grant leave to the plaintiff to pursue his claim against EY. The claim against EY must be dismissed.

Certification

[147] Having granted leave to the plaintiff to pursue the secondary market misrepresentation claims against the Akumin defendants, I turn next to consider certification of all of the plaintiff's claims, that is, the secondary market claims, the primary market claims, and the common law negligence claims.

2024 ONSC 3675 (CanLII)

[148] Pursuant to s. 5(1) of the *CPA*, the court shall certify a class proceeding if: (a) the pleadings or the notice of application disclose a cause of action; (b) there is an identifiable class of two or more persons that would be represented by the representative plaintiff; (c) the claims or defences of the class members raise common issues; (d) a class proceeding would be the preferable procedure for the resolution of the common issues; and (e) there is a representative plaintiff who would fairly and adequately represent the interests of the class, has produced a workable plan for the proceeding, and does not have an interest in conflict with the interests of other class members.

[149] In *Pro-Sys Consultants Ltd. v. Microsoft Corporation*, 2013 SCC 57, [2013] 3 S.C.R. 477, the Supreme Court of Canada provided guidance on the proper approach to the standard of proof and evidence on a certification motion.

[150] The Court noted that Canadian courts do not engage in a robust analysis of the merits of a claim at the certification stage; the outcome of a certification motion is thus not predictive of the success of the common issues trial. However, neither does the certification motion "involve such a superficial level of analysis into the sufficiency of the evidence that it would amount to nothing more than symbolic scrutiny": *Pro-Sys*, at paras. 103, 105.

[151] On a certification motion, the class representative is required to show some basis in fact for each of the certification requirements set out in the *CPA*, other than the requirement that the pleadings disclose a cause of action. The focus is on whether the form of the action is such that it can proceed as a class action. Thus, the question is not whether there is some basis in fact for the claim itself, but whether there is some basis in fact that establishes the certification requirements: *Pro-Sys*, at paras. 99-100.

[152] In cases where a plaintiff seeks leave under Part XXIII.1 of the *OSA*, it is common for parties to agree that a case where leave is granted shall be certified. In this case, however, the Akumin defendants raise particular objections to the plaintiff's motion for certification. These are:

a. The secondary market claim should be limited to Canadian purchasers;

b. The primary market claim should not be certified; and

c. The proposed class period should be narrowed.

[153] I will review each element of the certification test, with particular focus on the issues raised by the Akumin defendants. First, however, I turn to consider the issues the defendants raise with respect to the American purchasers. Those issues impact different aspects of the certification analysis, but I find it most convenient to address them together, after which I turn to the individual branches of the certification test separately to address the remaining arguments raised that are specific to each.

Should the claims of the American purchasers be certified?

[154] Akumin argues that any certified class ought to exclude purchasers of Akumin securities in the United States or who purchased on American exchanges. The plaintiff has withdrawn the

2024 ONSC 3675 (CanLII)

claims made on behalf of primary market purchasers who purchased outside of Canada. The question thus relates to whether secondary market purchasers who purchased outside Canada are properly included in the class.

[155] Forty-three percent of the total secondary market volume of shares traded during the proposed class period were traded in the United States. The defendants have pleaded that American law applies to American shareholders, but American law is not pleaded in the Statement of Claim.

[156] Akumin and the plaintiff each adduced expert evidence on American law. In summary, Akumin's expert deposes that an American court would exercise jurisdiction over, and apply United States federal securities laws to, claims asserted on behalf of investors who are considered U.S. purchasers of Akumin securities during the relevant period. There is a reasonable prospect that an American court would exercise its discretion to decline to assert jurisdiction over any claims asserted on behalf of non-American purchasers of Akumin securities under Canadian laws or another jurisdiction's laws. Moreover, he opines that not all the facts needed to establish liability under American securities law have been pleaded in the statement of claim.

[157] The plaintiff's expert deposes that the limitation period under American law has expired. There is no proceeding ongoing in the United States. Accordingly, American purchasers will have no recourse if they are excluded from the class in this action.

[158] Akumin argues that the certified class in this case ought to be limited to purchasers on Canadian exchanges in order to extend comity to the assertion of exclusive jurisdiction under American securities law over trades within US territory, in accordance with the reasonable expectations of purchasers on foreign exchanges. However, Akumin has brought neither a *forum non conveniens* motion nor a jurisdiction motion.

[159] I begin with the non-controversial statement that the statutory cause of action under Part XXIII.1 of the *OSA* does not have a place of trading qualification. It has been accepted that the Ontario court has long-arm jurisdiction when Ontario has a real and substantial connection to the defendant. As a result, when Part XXIII.1 of the *OSA* applies extra-territorially, an Ontario court is obliged to apply Ontario law to an appropriate extra-territorial claim: *Piniccia*, at para. 90.

[160] Akumin relies on *Kaynes v. BP, PLC*, 2014 ONCA 580, at paras. 50, 52, where Sharpe J.A., considering a *forum non conveniens* motion, held that "order and fairness will be achieved by adhering to the prevailing international standard tying jurisdiction to the place where the securities were traded and a multiplicity of proceedings involving the same claims or class of claims will be avoided". He found that purchasers on foreign exchanges would reasonably have expected to litigate their claims in the foreign jurisdiction. As a result, the court stayed the claim of an Ontario purchaser who purchased on an American exchange.

[161] In *Kaynes*, the court noted that the principle that shareholders who use foreign exchanges should look to the foreign court to litigate their claims was applied in *Silver v. Imax*, 2013 ONSC 1667, where the court amended the certified class definition to carve out class members who were covered by a settlement of similar claims in an American proceeding.

2024 ONSC 3675 (CanLII)

[162] However, a couple of years later, the same panel of the Court of Appeal lifted the stay in *Kaynes*. The lead plaintiff in the American proceeding had limited the scope of the American class action in a way that excluded Kaynes' claim, limiting the Ontario plaintiff to an individual action in the United States: *Kaynes v. BP, LP*, 2016 ONCA 601, at para. 18. The Court of Appeal found it significant that the defendant acknowledged on the return of the issue in 2016 that the plaintiff's claim was governed by Ontario law, and did not assert that it fell within the exclusive jurisdiction of the American courts. It noted that the claim of exclusive jurisdiction of the American court was a significant factor in its assessment in 2014 of comity and *forum non conveniens*.

[163] The plaintiff notes that there are now six examples (including *Kaynes*) of the Ontario court taking jurisdiction over secondary market *OSA* claims advanced on behalf of American exchange purchasers with no ensuing unfairness or comity problems. The other five are described below.

a. In *Silver v. Imax Corporation*, 2009 CanLII 72334 (Ont. S.C.), Justice van Rensburg (as she then was) certified a global class in circumstances where 85% of trading was on the U.S. exchange and 15% in Canada. At paras. 133-134, she found that the fact that another parallel proceeding was pending in the United States was not an obstacle to certifying a class including non-resident members in Ontario. Certification orders are not final judgments, but interlocutory procedural orders that may be amended at any time as the case proceeds.

b. In *Dyck v. Tahoe Resources Inc.*, 2021 ONSC 5712, a cross-listed issuer with a majority of its trading volume on an American exchange was a defendant in class proceedings in Canada and in the United States. Justice Glustein certified a global class including American purchasers, concluding that any modifications to class members would be subsequently addressed if required: at para. 25.

c. In *Paniccia*, the defendants argued that the court should assume the jurisdiction *simpliciter* but decline to include as putative class members Canadians who purchased shares on the Nasdaq. Perell J. considered both *forum non conveniens* and choice of law arguments. He noted that Canadian law accepts that where there is jurisdiction *simpliciter*, Canadian law can apply extra-territorially to secondary market trading; the case law thus accepts an intrusion on comity in appropriate cases.

d. In *Abdula v. Canadian Solar*, 2012 ONCA 211, at para. 88, the Court of Appeal held that Part XXIII.1 of the *OSA* was intended to have extra-territorial effect. In that case, the issuer's shares traded only on a U.S. exchange, but the court found that a class comprised entirely of U.S. exchange purchasers could proceed because extra-territorial application is specifically envisioned by Part XXIII.1.

e. In *Cronos*, defendants brought a partial *forum non conveniens* motion (seeking to stay only the US shareholders' claims in that case). Morgan J. found it undeniable that the defendants had a real and substantial connection to Ontario. He rejected the contention that there was an international norm of hearing a secondary market

2024 ONSC 3675 (CanLII)

securities claim in the place where the securities traded, as the defendants in that case did not demonstrate a widespread state practice of following the norm. He found that the most that could be said is that the "place of trade" rule is an American norm. After a lengthy discussion on comity, Morgan J. concluded that s. 10(b)-(5) of the American *Securities and Exchange Act* respects foreign sovereignty and cooperation by restricting membership in its class actions to US shareholders only, while s. 138.3 of the *OSA* "respects sovereignty and international cooperation by allowing access to justice for a class that includes all shareholders regardless of where they purchased their shares." The result was that US shareholders were permitted to remain in the class even though there was a parallel American case ongoing. Adopting the same approach as van Rensburg J. in *Silver* and Glustein J. in *Dyck*, Morgan J. held that it will be for the court in the event of a future settlement or judgment to keep in mind that no class member should get two bites at the apple.

[164] Based on this review of the law, I note the following:

a. There is no doubt that Akumin has a real and substantial connection to Ontario, such that the *OSA* may apply to it extra-territorially.

b. The comity concerns that sometimes arise in the context of *forum non conveniens* motions when there are competing class actions (as in *Kaynes* in 2014) do not have the same force when there is no, and can be no, competing foreign proceeding. Rather, especially in such circumstances, the statutory scheme under the *OSA* respects sovereignty and international cooperation by allowing access to justice for a class that includes all shareholders regardless of where they purchased their shares.

c. Even when there are competing proceedings, the "cross that bridge when we come to it" approach adopted in *Silver*, *Dyck*, and *Cronos* is consistent with the nature of certification as a procedural step, and allows the court to ensure that no class member can recover twice against the same defendant.

d. There is no evidence before me of an international "place of trading" norm to which comity would demand I accede in deciding whether and what to certify in this case.

e. To the extent Akumin relies on reasonable expectations of purchasers on foreign markets, there is no evidence of that either. If I am asked to draw conclusions based on common sense, I agree that one can make a practical case for an American purchaser of shares on the Nasdaq expecting that they would be able to assert their rights under American law. However, one can also make a practical case that a shareholder residing in the United States who purchases shares of an Ontario company on the Nasdaq would expect to be able to hold the company responsible for its actions based on the law of its home jurisdiction, especially when the jurisprudence in Ontario has endorsed global classes in securities litigation.

2024 ONSC 3675 (CanLII)

[165] I thus would not give effect to Akumin's argument that comity requires me to limit the class to Canadian purchasers. Nor does comity require me to conclude this class action is not the preferable procedure to resolve the claims of American purchasers. There is no other process available to them, given the expiry of the limitation period, that would be preferable.

[166] But that does not end the enquiry. There is another argument, raised by EY and adopted by Akumin, related to choice of law. Choice of law is pleaded by the defendants. They argue that I ought to decide the choice of law issue for American purchasers at this stage in the proceeding. I describe this argument below.

[167] The defendants argue that Ontario law does not apply to all proposed class members, and that by pleading securities legislation of each Province and Territory, the plaintiff has in fact acknowledged this. However, the plaintiff has not pleaded legislation applicable to non-Canadian investors, including American investors.

[168] EY argues that American law governs the claims of investors who are American residents, and since neither the law nor the facts needed to sustain claims under it have been pleaded, they should be excluded from the class.

[169] EY urges me to create a new choice of law rule to deal with the choice of law in secondary market securities transactions. It argues that the choice of law rule applicable to primary markets, where the law of the place where a public company distributes its securities to purchasers governs, is based on the idea that once a provincial statute regulates the distribution, it should also regulate the civil claims flowing from it.

[170] EY argues that secondary market claims are different than primary market claims, because securities are bought and sold by investors, typically through a securities exchange. Because Akumin was listed on the TSX and the Nasdaq, it was subject to continuous disclosure requirements under the laws of multiple jurisdictions.

[171] The choice of law for primary market claims was addressed in *Pearson v. Boliden*, 2002 BCCA 624. The court concluded that the *lex loci delicti* rule is not directly applicable to the question of which provincial statutes may found a statutory cause of action for misrepresentation in a prospectus. Rather, once the Act of a province applies to regulate the distribution of securities within the province's boundaries, the same Act must be looked to for any statutory cause of action for misrepresentation in the document: at para. 64. The court noted that there are practical reasons that support this choice of law, at para. 66:

> In an industry in which certainty and predictability are important, it avoids the complexity and uncertainty of rules such as the *lex loci delicti* rule applied to torts and the "most substantial connection" rule applied to contracts. It provides a principled way through the thicket of the many extra-provincial aspects that will be involved in any national securities distribution – the vagaries of where the issuer carries on business or maintains its share register, where the prospectus was prepared, where the issuer's directors reside, where the stock exchange… is located… or where a particular plaintiff or defendant resided or carried on business

2024 ONSC 3675 (CanLII)

> at any particular time. …As well, it comports with what a reasonable investor would expect – that when he or she purchases shares offered under a distribution taking place in a province, the securities legislation of that province will govern the filing of the prospectus, its contents, and the rights and obligations of the parties thereunder.

[172] The plaintiff argues that *Boliden* holds that statutory interpretation, not *lex loci delicti*, guides the analysis for the availability of a statutory right of action.

[173] The plaintiff also relies on *Abdula*, where the Court of Appeal confirmed, as I have already noted, that Part XXIII.1 of the *OSA* envisages extra-territorial application.

[174] In *Paniccia*, at para. 88, Perell J. noted that there are several discrete choice of law problems in a global or partial-global proposed securities misrepresentation class action about trading in a domestic and foreign stock exchange. In the case before him, he had to determine only the choice of law that applies to Canadian purchasers on the Nasdaq.

[175] As I have already noted, Perell J. found that the statutory cause of action under Part XXIII.1 of the *OSA* does not have a place of trading qualification, thus the Ontario court has long-arm jurisdiction when Ontario has a real and substantial connection the defendant. As a result, when Part XXIII.1 of the *OSA* applies extra-territorially, an Ontario court is obliged to apply Ontario law to an appropriate extra-territorial claim: *Paniccia*, at para. 90. Perell J. thus concluded that the law for Canadian purchasers who purchased shares on the Nasdaq is the *OSA*.

[176] In reaching his conclusion, Perell J. noted the inconsistency that would arise if a court could conclude on the one hand that Part XXIII.1 of the *OSA* applies extra-territorially but to conclude on the other hand that choice of law mandates that it does not apply with respect to the defendant's shares that traded outside Ontario: *Paniccia*, at para. 92.

[177] In contrast to the plaintiff's analysis of the issue, the defendants argue that the choice of law rule for secondary market securities misrepresentation claims has not been definitively pronounced upon.

[178] EY argues that the choice of law decision in this instance, for American purchasers who purchased on the Nasdaq, needs to be decided according to generally accepted conflict of laws principles:

a. Reasonable expectations: it argues that a foreign investor trading shares on a secondary market would reasonably expect any claims related to that purchase to be governed by the law of the jurisdiction in which they reside and/or purchased their securities. I note that, given the state of technology today, a purchaser resident in the United States could purchase securities on the Nasdaq from anywhere in the world. Moreover, as I have already noted, such a purchaser might also reasonably expect to be able to hold an issuer whose home jurisdiction is Ontario to the laws applicable to it in that jurisdiction. In any event, there is no evidence before me of shareholders' expectations at all.

2024 ONSC 3675 (CanLII)

b. Comity: EY argues that if an Ontario court will apply Ontario law to Ontario purchasers, it makes sense for American law to apply to American purchasers. I have already reviewed the choice made by the legislature in creating long-arm jurisdiction where a company has a real and substantial connection to Ontario.

c. Analogous Tort Choice of Law Principles: EY argues that common law misrepresentation claims follow the general choice of law for torts, that is, *lex loci delicti*. The place of the misrepresentation should thus be the place where the misrepresentation was received and relied upon, which, for foreign investors, is where they reside or the location of the exchange on which they traded the securities. I note that EY offers these two choices up as if they are equivalent, when in fact they may not be the same, and could create competing choices of law between them.

[179] As a result, EY argues that the choice of law rule for secondary market claims should be the law of the place the purchaser resided or the place of the exchange on which they traded the securities at issue. This provides no certainty in circumstances where the place a purchaser resides is different from the place of the exchange.

[180] This approach also assumes that the "place of trade" international norm that was rejected in *Cronos* ought to be applied or adopted, but without any evidence before me of such a norm.

[181] Applying its proposed choice of law rule, EY argues that American purchasers should be excluded from the class, since the pleading does not plead the facts necessary to support claims under US law. It argues that the claims of American purchasers fail s. 5(1)(a) on this analysis. Moreover, EY states that to the extent there are non-American foreign purchasers, applying a myriad of foreign laws in a single proceeding would present unnecessary complexity. The putative class should thus, on EY's analysis, be limited to Canadian purchasers only.

[182] I cannot accede to EY's argument. Fundamentally, I agree with the plaintiff that when determining the application of a statutory remedy, one must look to the statute in question. Here, Part XXIII.1 envisions extra-territorial application where the company has a real and substantial connection to Ontario. That is the choice made by our legislature, which can be presumed to understand the importance of comity. Thus, a purchaser who wishes to assert a cause of action based on Part XXIII.1 of the *OSA* may do so, subject to questions of jurisdiction and *forum non conveniens*.

[183] I am bolstered in this conclusion by the fact that the analysis EY offers up does not lead to a choice of law rule that would yield a consistent, predictable result. Recalling the words of the British Columbia Court of Appeal in *Boliden*, "[i]n an industry in which certainty and predictability are important", practicality weighs in favour of avoiding the complexity and uncertainty of rules such as *lex loci delicti*.

[184] I would thus not give effect to the defendants' argument that choice of law for American purchasers demands that they be excluded from the class definition, or that there is no claim made out with respect to them.

2024 ONSC 3675 (CanLII)

[185] Having concluded that the arguments raised with respect to American purchasers are not an impediment to certification, I now turn to review the individual criteria for certification with reference to the other arguments made by the defendants.

Section 5(1)(a): The pleadings disclose a cause of action.

[186] Certification will not be denied under s. 5(1)(a) unless it is plain and obvious that the pleadings disclose no cause of action: *Hollick v. Toronto (City)*, 2001 SCC 68, [2001] 3 S.C.R. 158, at para. 25.

[187] As I have noted, the claim alleges (i) secondary market misrepresentation under part XXIII.1 of the *OSA*; (ii) primary market misrepresentation under the *OSA*; and (iii) common law negligence.

[188] The Akumin defendants argue that the claim does not properly plead the noteholders' claims because it fails to adequately plead that the noteholders suffered damages as a result of any alleged public correction.

[189] The claim contains a general pleading that Akumin's shares and "other securities" declined in value. In the context of negligent misrepresentation, it pleads that the plaintiff and other class members suffered damages when the falsity of Akumin's misrepresentations was revealed.

[190] There is no specific pleading of damages suffered by noteholders in the context of the *OSA* claims. However, that is a technical issue that can be corrected by way of a pleading amendment. The plaintiff has proposed one in its reply factum on certification.

[191] In my view, this technical issue is not a basis on which to deny certification.

[192] There is no other basis on which the defendant resists certification under s. 5(1)(a), [1] and in fact the claim properly pleads the other elements of the causes of action alleged.

[193] I conclude that this element of the certification test is made out.

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[1] I note that, in one sentence in its factum, Akumin states that the noteholders provided releases of the Akumin defendants in Akumin's chapter 11 proceedings in the United States. In support, it cites to an order of an American judge approving the chapter 11 plan that is hundreds of pages long, but it provides no pinpoint. For his part, the plaintiff cites language from the order that reflects the fact that the plaintiff, Akumin and EY negotiated language carving out the claims asserted in this action from the releases, subject to limiting any recovery from the Akumin defendants to responsive insurance policies. Akumin did not develop its argument as to the alleged releases. I thus conclude that there are no operative releases that are relevant to this analysis.

2024 ONSC 3675 (CanLII)

Section 5(1)(b): There is an identifiable class of two or more persons that would be represented by the representative plaintiff.

[194] In determining whether there is an identifiable class, the court asks whether the plaintiff has defined the class by reference to objective criteria such that a person can be identified to be a class member without reference to the merits of the action. The class must be bounded, and not of unlimited membership, or unnecessarily broad, and have some rational relationship with the common issues: *Hollick*, at para. 17, *Cloud v. Canada (Attorney General)* (2004), 73 O.R. (3d) 401 (C.A.), at para. 45. The class definition needs to identify all those who may have a claim, will be bound by the result of the litigation, and are entitled to notice: *Bywater Toronto Transit Commission*, [1998] O.J. No. 4913 (Gen. Div.). Defining the class is a technical, rather than a substantive challenge: *Waldman v. Thomson Reuters Corp.*, 2012 ONSC 1138, at para. 122.

2024 ONSC 3675 (CanLII)

Identification of a Noteholder

[195] Akumin argues, without authority, that by failing to identify any noteholder that purchased notes on the primary market from a Canadian underwriter, the plaintiff has failed to satisfy the s. 5(1)(b) criterion.

[196] In *Keatley Surveying Ltd. v. Teranet Inc.*, 2014 ONSC 1677, at para. 84, the Divisional Court held that s. 5(1)(b) of the *CPA* does not require evidence of a desire among class members to pursue an action. It requires there is an identifiable class of two or more persons that would be represented by the representative plaintiff.

[197] The Divisional Court went on in *Keatley* to identify reasons why requiring evidence from class members could be problematic, for example, in an employment case where class members may not wish to identify themselves due to fear of retaliation from an employer: paras. 86-90. There is no need for evidence from other class members where the existence of the class is not dependent on personal or subjective criteria, as is the case here.

[198] Moreover, I note that the legislation requires an identifiable class, not an identified class. An identifiable class is one that meets the requirements I reviewed above, including where membership is defined objectively, and without regard to the merits of the claim. We do not need to know the names of the class members, or any of them; we need to be sure we can identify whether someone falls into the class or not such that they are bound by the result of the proceeding (subject to opt-out rights). The objective nature of the class definition proposed provides some basis in fact to conclude that at least two class members can be (not are) identified.

Appropriate Class Period

[199] Akumin also argues that the class period should be narrowed. Akumin argues that any class period should start on March 31, 2020, the date on which Akumin's 2019 annual financial statements were released, and end on October 13, 2021, following the October 12, 2021 disclosure.

[200] Akumin relies on the fact that the interim financial reports for Q1-Q3 2019 were not restated, and the evidence of Mr. Stanton indicates that they did not need to be. Akumin argues

that there is no expert evidence that even attempts to establish that the line-item revisions in Akumin's interim financial statements for 2019 were material. In the absence of this evidence, Akumin argues that there is no basis in fact for a class period that begins before March 31, 2020.

[201] There is evidence in the record that indicates that Akumin's financial results were misstated as early as the release of its Q1 2019 financial report. Although the interim financial results were not restated, the relevant individual line items for the financial periods Q1-Q3 2019 were corrected in the FY 2019 restatement. According to Mr. Elitzur, this amounts to a re-statement. Mr. Stanton gave evidence that Akumin was not required to restate its interim financial results for Q1-Q3 2019, but he did not disagree with Mr. Elitzur's conclusion that at least certain items were restated. Moreover, on cross-examination, Mr. Stanton indicated that he was not opining that the financial statements, beginning in Q1 2019, were not materially misstated.

[202] The actual changes to the line items in Q1-Q3 2019 appear significant. For example, Q1 2019 revenue was decreased by 13.29%, while Q2 and Q3 2019 revenue were decreased by around 9.5% in each quarter.

[203] In a qualitative sense, the misstatements in Q1-Q3 2019 are the same type of misstatement that Dr. Surana concluded would have impacted the market.

[204] Whether the claim for damages beginning prior to the FY 2019 financial reports is ultimately successful, in these circumstances, I am not inclined to pre-judge it. Were I to shorten the class period, I would, in effect, be reaching conclusions on the merits of the materiality assessment of the Q1-Q3 statements which, in my view, ought to be made at trial on a full record.

[205] Akumin further argues that the class period ought to end after the August 15, 2021 disclosure which, in its submission, is the only disclosure that resulted in a statistically significant share price decline.

[206] I have already expressed some reservations about the potential role of the November 8 and 15, 2021 disclosures as public corrections in the statutory scheme given the lack of statistically significant share price decline associated with those dates. However, there is some basis in the evidence for the truth-on-the-market theory, and a plausible legal theory put forward by the plaintiff as to why all of the identified statements are public corrections. I am not inclined to pre-determine that question under the guise of shortening the class period, especially when, as the law currently stands, there is uncertainty with respect to the role of public correction in the statute.

Conclusion on s. 5(1)(b): Class Definition

[207] In my view, the proposed class has been defined by reference to objective criteria, without reference to the merits of the action. Moreover, it is bounded, not unnecessarily broad, and bears some relationship to the proposed common issues.

Section 5(1)(c): The claims raise common issues.

2024 ONSC 3675 (CanLII)

[208] When considering whether a claim raises a common issue, the court asks whether it is necessary to resolve the issue in order to resolve each class member's claim, and whether the issue is a substantial ingredient of each of the class members' claims. The issue is a substantial ingredient of each claim if its resolution will advance the case or move the litigation forward, and if it is capable of extrapolation to all class members: *Vivendi Canada Inc. v. Dell'Aniello*, 2014 SCC 1, [2014] 1 S.C.R. 3, at para. 46.

[209] Akumin argues that the plaintiff has failed to show some basis in fact that there are common issues among the primary market purchasers. I disagree.

[210] The common issues identified include issues of fact that are common to all class members:

> Did the Misleading Documents contain misrepresentations within the meaning of the *OSA* and the Securities Legislation? If so, who made these representations, when, and how?

[211] The common issues also identify issues relating to the primary market claims under Part XXIII of the *OSA* which are common to the primary market purchasers:

> Do the misrepresentations in the Misleading Documents that are Offering Memoranda give rise to liability against Akumin on behalf of purchasers who purchased securities by the Offering Memoranda pursuant to section 130.1 of Part XXIII of the *OSA* and the Securities Legislation?
>
> What is the method of calculating the damages payable to the Class Members in respect of Part XXIII of the *OSA* and the Securities Legislation?

[212] It also raises questions of law common to the secondary market purchasers:

> Do the misrepresentations in the Misleading Documents give rise to liability on behalf of the Class for damages against the Defendants pursuant to section 138.3 of Part XXIII.1 of the *OSA* and the Securities Legislation? If so, for which Defendants?
>
> What is the method of calculating the damages payable to the Class Members in respect of Part XXIII.1 of the *OSA* and the Securities Legislation?

[213] Finally, the plaintiff identifies issues of fact and law common to all class members with respect to the negligent misrepresentation claims:

> Did Akumin and the Individual Defendants owe a duty of care to the Class Members?
>
> Did Akumin and the Individual Defendants make representations in the Misleading Documents that were untrue, inaccurate or misleading?

2024 ONSC 3675 (CanLII)

Did Akumin and the Individual Defendants act negligently in making those representations?

Was it reasonable for the Class to rely on those representations?

What is the method of calculating damages for negligent misrepresentation?

[214] The resolution of these questions will substantially advance the claims of all class members. In my view, this criterion is satisfied.

Section 5(1)(d): Preferable Procedure

[215] This branch of the test requires that the court be satisfied that a class proceeding would be the preferable procedure for the resolution of the common issues. This inquiry is directed at two questions: first, whether the class proceeding would be a fair, efficient, and manageable way to advance the claim, and second, whether the class proceeding would be preferable to other procedures for resolving the common issues. Section 5(1.1) of the *CPA* adds two further criteria for the court to consider: superiority and predominance.

[216] Preferable procedure is addressed through the lens of the three goals of class proceedings, that is, access to justice, behaviour modification, and judicial economy: *Hollick*, at para. 27.

[217] I find that a class proceeding is the preferable procedure in this case.

[218] There is a long history of this court concluding that statutory causes of action for misrepresentation in the primary and secondary market are fairly, efficiently, and manageably adjudicated in class proceedings: see, for example, *Silver v. Imax Corporation*, 2009 CanLII 72334 (Ont. S.C.J.), at para. 216.

[219] The cost for any individual investor to advance their claim against the defendants would be out of proportion to their losses, making it inefficient from an economic perspective to advance an individual action. By aggregating the claims of the class members into one proceeding, the three goals of class proceedings are met.

[220] The common issues predominate in this litigation, and there is no superior procedure that has been identified which could address the class members' claims.

[221] I thus find that a class proceeding is the preferable procedure in this case.

Section 5(1)(e): There is an adequate representative plaintiff.

[222] To be an adequate representative plaintiff, a proposed plaintiff must be able to fairly and adequately represent the class, have developed a plan for proceeding, and not have a conflict with the class. She must be prepared and able to vigorously represent the interests of the class: *Rosen v. BMO Nesbitt Burns Inc.,* 2013 ONSC 2144, at para. 73.

2024 ONSC 3675 (CanLII)

[223] Akumin argues that the plaintiff has failed to establish that he, as a secondary market purchaser of shares, can appropriately represent the interests of primary market noteholders. It relies on s. 5(2) of the *CPA* which provides that, where a class includes a subclass whose members have claims or defences that raise common issues not shared by all the class members so that the protection of the interests of the subclass members requires that they be separately represented, a representative plaintiff for that class is required.

[224] However, a representative plaintiff is permitted to advance claims on behalf of class members that she does not have herself, as long as it shares common issues of fact or law with the claim she does have, and there is no conflict in doing so: *Poirier v. Silver Wheaton Corp. et al. v.*, 2022 ONSC 80, at para. 139, citing *Ragoonanan Estate v. Imperial Tobacco Canada Ltd*., 2000 CanLII 22719 (Ont. S.C.).

[225] Here, no conflict is alleged. Akumin relies on s. 5(2) but does not explain why the interests of the primary market claimants diverge from the interests of the secondary market claimants such that they require separate representation for the protection of their interests. The statutory scheme is different, but the claims of the primary market purchasers raise issues of fact and law that are common to the claims of the secondary market purchasers. Accordingly, I find that the proposed representative plaintiff can adequately represent all class members in this case. This criterion is satisfied.

Costs

[226] The parties were not in a position to agree on costs or make costs submissions before the release of these reasons. I encourage the parties to reach an agreement on costs. If that is not possible, the parties shall write to me to propose a consent schedule for the exchange of brief costs submissions for my approval.

J.T. Akbarali J.

Date: June 26, 2024

2024 ONSC 3675 (CanLII)

Tab 5

Court File No.: CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N :

TERRY LONGAIR PROFESSIONAL CORPORATION

Plaintiff

- and -

AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP

Defendants

Proceeding under the *Class Proceedings Act, 1992*

SECOND AMENDED STATEMENT OF CLAIM

TO THE DEFENDANTS

A LEGAL PROCEEDING HAS BEEN COMMENCED AGAINST YOU by the plaintiff. The claim made against you is set out in the following pages.

IF YOU WISH TO DEFEND THIS PROCEEDING, you or an Ontario lawyer acting for you must prepare a statement of defence in Form 18A prescribed by the *Rules of Civil Procedure*, serve it on the plaintiff's lawyer or, where the plaintiff does not have a lawyer, serve it on the plaintiff, and file it, with proof of service, in this court office, WITHIN TWENTY DAYS after this statement of claim is served on you, if you are served in Ontario.

If you are served in another province or territory of Canada or in the United States of America, the period for serving and filing your statement of defence is forty days. If you are served outside Canada and the United States of America, the period is sixty days.

Instead of serving and filing a statement of defence, you may serve and file a notice of intent to defend in Form 18B prescribed by the *Rules of Civil Procedure*. This will entitle you to ten more days within which to serve and file your statement of defence.

IF YOU FAIL TO DEFEND THIS PROCEEDING, JUDGMENT MAY BE GIVEN AGAINST YOU IN YOUR ABSENCE AND WITHOUT FURTHER NOTICE TO YOU. IF YOU WISH TO DEFEND THIS PROCEEDING BUT ARE UNABLE TO PAY LEGAL FEES, LEGAL AID MAY BE AVAILABLE TO YOU BY CONTACTING A LOCAL LEGAL AID OFFICE.

IF YOU PAY THE PLAINTIFF'S CLAIM, and costs, within the time for serving and filing your statement of defence, you may move to have this proceeding dismissed by the court. If you believe the amount claimed for costs is excessive, you may pay the plaintiff's claim and costs and have the costs assessed by the court.

TAKE NOTICE: THIS ACTION WILL AUTOMATICALLY BE DISMISSED if it has not been set down for trial or terminated by any means within five years after the action was commenced unless otherwise ordered by the court.

Date: December 20, 2021
Amended: February 17, 2023
Amended:

Issued by _____
Local registrar

Address of court office: 330 University Ave.
Toronto, ON
M5G 1R8

TO: **Akumin Inc.**
151 Bloor St W., Suite 603
Toronto, Ontario
M5S 1S4

AND TO: **Riadh Zine-El-Abidine**
c/o Akumin Inc.
151 Bloor St W., Suite 603
Toronto, Ontario
M5S 1S4

AND TO: **Mohammad Saleem**
c/o Akumin Inc.
151 Bloor St W., Suite 603
Toronto, Ontario
M5S 1S4

AND TO: **Thomas Davies**
c/o Akumin Inc.
151 Bloor St W., Suite 603
Toronto, Ontario
M5S 1S4

AND TO: **Stan Dunford**
c/o Akumin Inc.
151 Bloor St W., Suite 603
Toronto, Ontario

M5S 1S4

AND TO: **Murray Lee**
c/o Akumin Inc.
151 Bloor St W., Suite 603
Toronto, Ontario
M5S 1S4

AND TO: **James Webb**
c/o Akumin Inc.
151 Bloor St W., Suite 603
Toronto, Ontario
M5S 1S4

AND TO: **Ernst & Young LLP**
100 Adelaide St W Suite 3100
Toronto, ON,
M5H 0B3

Table of Contents

I. Prayer for Relief 5
II. Defined Terms 6
III. Overview 10
IV. The Parties 11
A. The Plaintiff 11
B. The Defendants 12
C. Duties of Akumin's Audit Committee 15
V. Akumin's Disclosure Obligations 16
A. Akumin's Disclosure Obligations 16
B. Individual Defendants' Role in Disclosure 18
VI. The Offerings 19
VII. The Misrepresentations 20
A. Accounts Receivable and Revenue Misrepresentations 21
B. Costs Associated with Repairs and Maintenance Misrepresentations 23
C. Shareholders' Equity Misrepresentations 24
D. Compliance with Financial Accounting Standards Misrepresentations 24
E. Effectiveness of ICFR and DC&P Misrepresentations 26
F. The Auditor Misrepresentations 27
VIII. The Corrective Disclosures 29
A. Press Release, August 15, 2021 29
B. Press Release, October 12, 2021 31
C. Press Release, November 8, 2021 32
D. Restatement, November 15, 2021 33
IX. Rights of Action 37
A. Negligent Misrepresentation 37
B. Negligence *Simpliciter* 38
C. *OSA* Part XXIII – Liability for Misrepresentation in the Offering Memoranda 40
D. *OSA* Part XXIII.1 – Liability for Misrepresentation in Secondary Market Disclosure . 40
X. Relationship Between the Misrepresentations and the Price of Akumin's Securities 42
XI. Damages and Remedies 43
XII. Vicarious Liability 44
XIII. Real and Substantial Connection to Ontario 44
XIV. Legislation 45
XV. Service Outside of Ontario and Place of Trial 45

I. PRAYER FOR RELIEF

1. The Plaintiff claims:

(a) an order granting leave to proceed with a statutory claim for misrepresentation under Part XXIII.1 of the *OSA,* or, if necessary, the corresponding provisions of the Securities Legislation;

(b) an order certifying this action as a class proceeding and appointing the Plaintiff as the representative Plaintiff for the Class, pursuant to sections 5 and 8 of the *CPA*;

(c) a declaration that the Misleading Documents contained misrepresentations within the meaning of the *OSA*, the other Securities Legislation and the common law;

(d) a declaration that Zine-El-Abidine and Saleem authorized, permitted or acquiesced in the making of the misrepresentations;

(e) a declaration that Akumin and the Individual Defendants owed the Plaintiff and Class Members a duty of care in the preparation and dissemination of the Misleading Documents and that they breached that duty of care;

(f) a declaration that Akumin and the Individual Defendants are liable for damages to the Class Members for misrepresentations in Akumin's public disclosures alleged herein under Part XXIII.1 of the *OSA*, the corresponding provisions of the Securities Legislation and the common law;

(g) a declaration that Ernst & Young LLP is liable for damages to the Class Members for misrepresentations in Akumin's public disclosures alleged herein under Part XXIII.1 of the *OSA* and the corresponding provisions of the Securities Legislation;

(h) a declaration that Akumin is liable in damages and/or for rescission to the Class for misrepresentations in its public disclosures alleged herein under Part XXIII of the *OSA* and the corresponding provisions of the Securities Legislation;

(i) damages for negligent misrepresentation, negligence *simpliciter* and under Part XXIII.1 of the *OSA* and, if necessary, the corresponding provisions of the Securities Legislation in an amount that this Court find appropriate;

(j) punitive damages against the Defendants in an amount that this Court find appropriate;

(k) a declaration that Akumin and Ernst & Young LLP are vicariously liable for the acts and omissions of their partners, officers, directors, and employees;

(l) an order directing a reference or giving such other directions as may be necessary to determine issues not determined in the trial of the common issues;

(m) pre-judgment interest and post-judgment interest, pursuant to the *CJA*;

(n) costs of this action, plus the costs of notice and of administering the plan of distribution of the recovery in this action plus applicable taxes, pursuant to s. 26(9) of the *CPA*; and

(o) such further and other relief as to this Honourable Court seems just.

II. DEFINED TERMS

2. In this Statement of Claim the capitalized terms have the following meanings:

(a) **"Akumin"** means Akumin Inc;

(b) **"CEO"** means Chief Executive Officer;

(c) **"CFO"** means Chief Financial Officer;

(d) **"*CJA*"** means the *Courts of Justice Act*, RSO 1990, c C-43, as amended;

(e) **"Class"** and **"Class Members"** means, all persons and entities, other than the Excluded Persons, that acquired Akumin's securities during the Class Period;

(f) **"Class Period"** means the period from May 15, 2019 at 7:46 AM ET to November 15, 2021 at 7:04 AM ET;

(g) **"*CPA*"** means the *Class Proceedings Act, 1992*, SO 1992, c6;

(h) "**DC&P**" means disclosure controls and procedures;

(i) "**Defendants**" means Akumin, the Individual Defendants and Ernst & Young LLP;

(j) "**Excluded Persons**" means Akumin and Ernst & Young LLP and their subsidiaries, affiliates, partners, officers, directors, senior employees, legal representatives, heirs, predecessors, successors and assigns, the Individual Defendants and any member of their families and any entity in which any of them has or had during the Class Period any legal or de facto controlling interest;

(k) "**GAAP**" means generally accepted accounting principles;

(l) "**IAS**" means International Accounting Standard;

(m) "**IASB**" means International Accounting Standards Board;

(n) "**ICFR**" means internal controls over financial reporting;

(o) "**IFRS**" means International Financial Reporting Standards;

(p) "**Individual Defendants**" means Riadh Zine-El-Abidine, Stan Dunford, Thomas Davies, Murray Lee, James Webb, and Mohammad Saleem;

(q) "**Misleading Documents**" means **Akumin**'**s**:

(i) Interim Financial Statements for the three months ended March 31, 2019 filed on SEDAR on May 15, 2019 ("**Q1 2019 Financials**")

(ii) MD&A for the three months ended March 31, 2019 filed on SEDAR on May 15, 2019 ("**Q1 2019 MD&A**");

(iii) Form 52-109F2 Certification of Interim Filings (CEO) for the three months ended March 31, 2019 filed on SEDAR on May 15, 2019

(iv) Form 52-109F2 Certification of Interim Filings (CFO) for the three months ended March 31, 2019 filed on SEDAR on May 15, 2019

(v) Interim Financial Statements for the three and six months ended June 30, 2019 filed on SEDAR on August 14, 2019; ("**Q2 2019 Financials**")

(vi) MD&A for the three and six months ended June 30, 2019 filed on SEDAR on August 14, 2019 ("**Q2 2019 MD&A**");

(vii) Form 52-109F2 Certification of Interim Filings (CEO) for the three and six months ended June 30, 2019 filed on SEDAR on August 14, 2019;

(viii) Form 52-109F2 Certification of Interim Filings (CFO) for the three and six months ended June 30, 2019 filed on SEDAR on August 14, 2019;

(ix) Interim Financial Statements for the three and nine months ended September 30, 2019 filed on SEDAR on November 14, 2019 ("**Q3 2019 Financials**");

(x) MD&A for the three and nine months ended September 30, 2019 filed on SEDAR on November 14, 2019 ("**Q3 2019 MD&A**");

(xi) Form 52-109F2 Certification of Interim Filings (CEO) for the three and nine months ended September 30, 2019 filed on SEDAR on November 14, 2019;

(xii) Form 52-109F2 Certification of Interim Filings (CFO) for the three and nine months ended September 30, 2019 filed on SEDAR on November 14, 2019;

(xiii) Interim Financial statement for the three months ended March 31, 2020 (US GAAP) filed on SEDAR on March 31, 2021 ("**Q1 2020 Financials (US GAAP)**");

(xiv) Interim Financial statement for the six months ended June 30, 2020 (US GAAP) filed on SEDAR on March 31, 2021 ("**Q2 2020 Financials (US GAAP)**");

(xv) Interim Financial statement for the nine months ended September 30, 2020 (US GAAP) filed on SEDAR on March 31, 2021 ("**Q3 2020 Financials (US GAAP)**");

(xvi) Audited Annual Financial Statements for the year ended December 31, 2019 filed on SEDAR on March 31, 2020 ("**2019 Annual Financials**");

(xvii) MD&A for the year ended December 31, 2019 filed on SEDAR on March 31, 2020 ("**2019 Annual MD&A**");

(xviii) Form 52-109F1 Certification of Annual Filings (CEO) for the year ended December 31, 2019 filed on SEDAR on March 31, 2020;

(xix) Form 52-109F1 Certification of Annual Filings (CFO) for the year ended December 31, 2019 filed on SEDAR on March 31, 2020;

(xx) Interim Financial Statements for the three months ended March 31, 2020 filed on SEDAR on June 3, 2020 ("**Q1 2020 Financials**");

(xxi) MD&A for the three months ended March 31, 2020 filed on SEDAR on June 3, 2020 ("**Q1 2020 MD&A**");

(xxii) Form 52-109F2 Certification of Interim Filings (CEO) for the three months ended March 31, 2020 filed on SEDAR on June 3, 2020;

(xxiii) Form 52-109F2 Certification of Interim Filings (CFO) for the three months ended March 31, 2020 filed on SEDAR on June 3, 2020;

(xxiv) Interim Financial Statements for the three and six months ended June 30, 2020 filed on SEDAR on August 12, 2020 ("**Q2 2020 Financials**");

(xxv) MD&A for the three and six months ended June 30, 2020 filed on SEDAR on August 12, 2020 ("**Q2 2020 MD&A**");

(xxvi) Form 52-109F2 Certification of Interim Filings (CEO) for the three and six months ended June 30, 2020 filed on SEDAR on August 12, 2020;

(xxvii) Form 52-109F2 Certification of Interim Filings (CFO) for the three and six months ended June 30, 2020 filed on SEDAR on August 12, 2020;

(xxviii) Interim Financial Statements for the three and nine months ended September 30, 2020 filed on SEDAR on November 11, 2020 ("**Q3 2020 Financials**");

(xxix) MD&A for the three and nine months ended September 30, 2020 filed on SEDAR on November 11, 2020 ("**Q3 2020 MD&A**");

(xxx) Form 52-109F2 Certification of Interim Filings (CEO) for the three and nine months ended September 30, 2020 filed on SEDAR on November 11, 2020;

(xxxi) Form 52-109F2 Certification of Interim Filings (CFO) for the three and nine months ended September 30, 2020 filed on SEDAR on November 11, 2020;

(xxxii) Audited Annual Financial Statements for the year ended December 31, 2020 filed on SEDAR on March 31, 2021 ("**2020 Annual Financials**");

(xxxiii) MD&A for the year ended December 31, 2020 filed on SEDAR on March 31, 2021 ("**2020 Annual MD&A**");

(xxxiv) Form 52-109F1 Certification of Annual Filings (CEO) filed on SEDAR on March 31, 2021;

(xxxv) Form 52-109F1 Certification of Annual Filings (CFO) filed on SEDAR on March 31, 2021;

(xxxvi) Interim Financial Statements for the three months ended March 31, 2021 filed on SEDAR on May 17, 2021; ("**Q1 2021 Financials**")

(xxxvii) MD&A for the three months ended March 31, 2021 filed on SEDAR on May 17, 2021 ("**Q1 2021 MD&A**");

(xxxviii) Form 52-109F2 Certification of Interim Filings (CEO) for the three months ended March 31, 2021 filed on SEDAR on May 17, 2021;

(xxxix) Form 52-109F2 Certification of Interim Filings (CFO) for the three months ended March 31, 2021 filed on SEDAR on May 17, 2021;

(xl) the Offering Memoranda;

in each case, where applicable, including all documents incorporated by reference therein;

(r) "**MD&A**" means Management's Discussion and Analysis;

(s) "***OBCA***" means the Ontario *Business Corporations Act;*

(t) "**Offering Memoranda**" means the offering memoranda for the distribution of Akumin's:

(i) $400 million of 7.0% senior secured notes due November 1, 2025 completed on November 2, 2020;

(ii) $75 million of 7.00% notes due November 1, 2025 completed on February 11, 2021; and

(iii) $375 million of a 7.5% senior notes due August 1, 2028 completed on August 9, 2021;

(u) "***OSA***" means the Ontario *Securities Act,* R.S.O. 1990, c. S.5, as amended;

(v) "**Securities Legislation**" means, collectively, the *Securities Act*, RSA 2000, c S-4, as amended; the *Securities Act*, RSBC 1996, c 418, as amended; the *Securities Act*, CCSM c S50, as amended; the *Securities Act*, SNB 2004, c S-5.5, as amended; the *Securities Act*, RSNL 1990, c S-13, as amended; the *Securities Act*, SNWT 2008, c 10, as amended; the *Securities Act*, RSNS 1989, c 418, as amended; the *Securities Act*, S Nu 2008, c 12, as amended; the *Securities Act*, RSPEI 1988, c S-3.1, as amended; the *Securities Act*, RSQ c

V-1.1, as amended; the *Securities Act*, *1988*, SS 1988-89, c S-42.2, as amended; and the *Securities Act*, SY 2007, c 16, as amended;

(w) "**SEDAR**" means the System for Electronic Document Analysis and Retrieval which is a filing system developed for the Canadian Securities Administration;

(x) "**TSX**" means Toronto Stock Exchange; and

(y) "**US GAAP**" means the accounting principles generally accepted in the United States of America.

III. OVERVIEW

3. This is a proposed securities class proceeding against Akumin, its senior officers and directors and its auditor Ernst & Young LLP. The Plaintiff brings this action on behalf of Akumin's securityholders who suffered losses when the truth behind Akumin's misrepresentations was publicly revealed.

4. Akumin is a Canadian publicly traded company that made quarterly and annual disclosures in accordance with its reporting obligations under Ontario law. In these quarterly and annual reports, Akumin disclosed financial information about its results, including its assets, revenue and costs. Akumin also certified that its quarterly and annual results complied with applicable financial accounting standards and that it had adequate internal controls so that its financial reports were reliable.

5. Akumin's annual financial reports were audited by Ernst & Young LLP. In so doing, Ernst & Young LLP represented to the investing public that it conducted its audit in accordance with applicable auditing standards and that Akumin's financial statements complied with applicable financial accounting standards.

6. All these representations permitted Akumin's securities to trade in the secondary market. They also permitted Akumin to raise hundreds of millions of dollars in the primary market.

7. In August 2021, just before the filing deadline for Akumin's Q2 2021 quarterly reports, Akumin disclosed that these disclosure documents would be delayed because Akumin and Ernst & Young LLP were conducting a review of Akumin's historic filings. Akumin also disclosed that it had applied to the Ontario Securities Commission for a management cease trade order.

8. Two months later, Akumin had still not filed its Q2 2021 quarterly reports, and in October 2021, Akumin disclosed that it had identified errors requiring it to restate prior period financial statements and MD&A.

9. Finally, in November 2021, Akumin restated financial statements and MD&A going all the way back to Q1 2019, identifying dozens of errors in its prior quarterly and annual disclosures, and confirming that, contrary to earlier representations, its prior period financial statements had not been prepared in accordance with financial accounting standards and that its internal controls were inadequate and contained material weaknesses.

10. On these announcements, the value of Akumin's securities sank and its securityholders suffered damages. This proposed class proceeding seeks recovery against those responsible: Akumin, its officers and directors, and its auditor.

IV. THE PARTIES

A. The Plaintiff

11. Terry Longair is an individual residing in Lethbridge, Alberta. Longair owns Terry Longair Professional Corporation. Longair Professional Corporation purchased 3,000 Akumin shares on the TSX during the Class Period and continued to own these shares at the end of the Class Period.

B. The Defendants

(i) Akumin Inc.

12. Akumin is a corporation formed under the *OBCA* with its principal executive offices in Toronto, Ontario. Akumin describes itself as a provider of outpatient diagnostic imaging services.

13. Akumin was a reporting issuer during the Class Period in all Canadian provinces except Québec. Its shares were publicly listed for trading on the TSX under the trading symbol "AKU". Akumin published the documents identified below on, among other places, SEDAR.

14. Akumin controlled the contents of its MD&As, financial statements and the other Misleading Documents, and the misrepresentations made therein were made by Akumin.

(ii) The Individual Defendants

(1) Riadh Zine-El-Abidine, CEO, Chairman and Director

15. Riadh Zine-El-Abidine is an individual residing in Ontario, Canada. During the Class Period, he was Akumin's CEO and President and was on its Board of Directors. During this time, he was a "director" and an "officer" of Akumin within the meaning of the *OSA* and the Securities Legislation.

16. As a director and officer, Zine-El-Abidine caused Akumin to make the misrepresentations particularized below.

17. Zine-El-Abidine:

(a) in his capacity as CEO and Director, certified each of the Misleading Documents that were quarterly and annual disclosures of Akumin; and

(b) on behalf of the Board of Directors, approved and signed each of Akumin's financial statements issued during the Class Period.

18. In doing so, he adopted as his own the false statements made in those documents.

(2) Mohammad Saleem, CFO

19. Saleem was Akumin's CFO during the Class Period. During this time, Saleem was an "officer" of Akumin within the meaning of the *OSA* and the Securities Legislation.

20. In his capacity as CFO, Saleem certified each of the Misleading Documents that were financial statements of Akumin. In doing so, he adopted as his own the false statements made in those documents.

21. As an officer, Saleem caused Akumin to make the misrepresentations particularized below, and adopted as his own the false statements in Akumin's public disclosure when such statements were signed on his behalf.

(3) Thomas Davies, Director, Chair of Akumin's Audit Committee

22. Davies is an individual residing in Ontario, Canada. He was on Akumin's Board of Directors during the Class Period. During this time, Davies was a "director" within the meaning of the *OSA* and the Securities Legislation. Davies was also Chair of Akumin's Audit Committee, a position he held until the end of the Class Period.

23. As a director, Davies caused Akumin to make the misrepresentations particularized below. In his capacity as director, and on behalf of the Board of Directors, Davies approved and signed each of Akumin's financial statements issued during the Class Period. In doing so, he adopted as his own the false statements made in those documents.

(4) Stan Dunford, Director

24. Dunford is an individual residing in Ontario, Canada. He was on Akumin's Board of Directors during the Class Period. During this time, Dunford was a "director" within the meaning of the *OSA* and the Securities Legislation. As a director, Dunford caused Akumin to make the misrepresentations particularized below, and adopted as his own the false statements in Akumin's public disclosure when such statements were approved and signed on his behalf.

(5) Murray Lee, Director, Member of the Audit Committee

25. Lee is an individual residing in Alberta, Canada. He was on Akumin's Board of Directors during the Class Period. During this time, Lee was a "director" within the meaning of the *OSA* and the Securities Legislation. Lee was also member of Akumin's Audit Committee, a position he held until the end of the Class Period. As a director, Lee caused Akumin to make the misrepresentations particularized below, and adopted as his own the false statements in Akumin's public disclosure when such statements were approved and signed on his behalf.

(6) James Webb, Director, Members of the Audit Committee

26. Webb is an individual residing in Texas, United Stated. He was on Akumin's Board of Directors during the Class Period. During this time, Webb was a "director" within the meaning of the *OSA* and the Securities Legislation. Webb was a member of Akumin's Audit Committee, a

position he held until the end of the Class Period. As a director, Webb caused Akumin to make the misrepresentations particularized below, and adopted as his own the false statements in Akumin's public disclosure when such statements were approved and signed on his behalf.

(iii) Ernst & Young LLP

27. Ernst & Young LLP was Akumin's auditor for the years ended December 31, 2019 and December 31, 2020. Ernst & Young LLP purported to conduct audits of Akumin in accordance with Canadian and United States of America generally accepted auditing standards.

C. Duties of Akumin's Audit Committee

28. As members of Akumin's Audit Committee, Davies, Lee, and Webb, were mandated to, among other things:

(a) review and recommend to the board of directors for approval the audited annual financial statements, including the auditors' report thereon, the quarterly financial statements, management discussion and analysis, financial reports, press releases related to any of the foregoing and other applicable financial disclosure, prior to the public disclosure of such information;

(b) review and recommend to the board of directors for approval financial information contained in any prospectuses, annual information forms, annual reports to shareholders, management proxy circulars, material change disclosures of a financial nature and similar disclosure documents prior to the public disclosure of such documents or information;

(c) review with senior executives and with external auditors, significant accounting principles and disclosure issues and alternative treatments under IFRS, with a view to gaining reasonable assurance that financial statements are accurate, complete and present fairly Akumin's financial position and the results of its operations in accordance with IFRS;

(d) seek to ensure that adequate procedures are in place for the review of Akumin's public disclosure of financial information extracted or derived from Akumin's financial statements, Akumin's disclosure controls and procedures and periodically assess the adequacy of those procedures and recommend any proposed changes to the board of directors for consideration;

(e) review the adequacy and effectiveness of Akumin's internal control and management information systems through discussions with senior executives of Akumin's and the external auditor relating to the maintenance of: (i) necessary books, records and accounts in sufficient detail to accurately and fairly reflect Akumin's transactions; (ii) effective ICFR; and (iii) adequate processes for assessing the risk of material misstatements in the financial statements and for detecting control weaknesses or fraud;

(f) assess any requirements or changes with respect to the establishment or operations of the internal audit function having regard to the size and stage of development of Akumin at any particular time;

(g) satisfy itself, through discussions with senior executives o that the adequacy of internal controls, systems and procedures has been periodically assessed in accordance with regulatory requirements and recommendations;

(h) review and discuss Akumin's major financial risk exposures and the steps taken to monitor and control such exposures, including the use of any financial derivatives and hedging activities;

(i) review and make recommendations to the board of directors regarding the adequacy of Akumin's risk management policies and procedures, with regard to identification of Akumin's principal risks, and implementation of appropriate systems and controls to manage such risks, including an assessment of the adequacy of insurance coverage maintained by Akumin; and

(j) periodically review Akumin's policies and procedures for reviewing and approving or ratifying related-party transactions.

29. At all material times during the Class Period, Davies, Lee, and Webb failed in these duties.

V. AKUMIN'S DISCLOSURE OBLIGATIONS

A. Akumin's Disclosure Obligations

30. As a reporting issuer, Akumin was subject to the continuous disclosure obligations prescribed by National Instrument 51-102 to prepare and file on SEDAR certain disclosure documents prepared on regular basis, including:

(a) interim financial statements, which provide information about Akumin's business and financial positions; and

(b) annual and interim MD&As (filed together with the financial statements) which provide material information about Akumin's business, management and operational and financial status during the period covered by the financial statements.

31. An MD&A is a narrative explanation, through the eyes of management, of how the company performed during the period covered by the financial statements, and of its financial conditions and future prospects. Among other things, the MD&A is required to:

(a) discuss material information that may not be fully reflected in the financial statements;

(b) discuss important trends and risks that have affected the financial statements, and trends and risks that are reasonably likely to affect them in the future; and

(c) provide information about the quality and potential variability, of the company's profit, loss or cash flow, to assist investors in determining if past performance is indicative of future performance.

32. In fulfilling its continuous disclosure obligations, Akumin was prohibited from making a statement that it knew or reasonably ought to have known:

(a) in a material respect and at the time and in the light of the circumstances under which it was made, was misleading or untrue or did not state a fact that was required to be stated or that was necessary to make the statement not misleading; and

(b) would reasonably be expected to have a significant effect on the market price or value of its securities.

33. Contemporaneously with the filing of the financial statements and MD&As, Akumin was required to file certifications signed by the CEO and CFO certifying their review of the required documents and certain other matters.

34. The Plaintiff pleads and relies on:

(a) the *OSA*, in particular s. 126.2, and the concordant provisions of the Securities Legislation;

(b) National Policy 51-201, in particular, s. 4.1 to 4.5; and

(c) the TSX Company Manual, in particular, s. 406 to 410.

35. Akumin and the Individual Defendants controlled the contents of its MD&As, financial statements, and the other Misleading Documents particularized herein and the misrepresentations made therein were made by Akumin and the Individual Defendants.

B. Individual Defendants' Role in Disclosure

36. Each of the Individual Defendants knew that Akumin was a reporting issuer and that, in his role as a director and/or officer of Akumin, he would have direct responsibility for ensuring the accuracy and completeness of Akumin's disclosure documents.

37. The *OSA*, Securities Legislation, and National Instruments and Companion Policies promulgated thereunder imposed specific obligations on the Individual Defendants in the preparation of Akumin's continuous disclosure documents.

38. Sections 77 and 78 of the *OSA*, and the concordant provisions of the Securities Legislation, informed by National Instrument 52-109, required Zine-El-Abidine as CEO and Saleem as CFO to review, approve and certify the accuracy of Akumin's interim and annual financial statements and MD&As released during the Class Period.

39. National Instrument 51-102 requires the board of directors of a reporting issuer to approve each interim and annual financial statement and MD&A released by an issuer prior to the release of those documents.

40. Each of the Individual Defendants was aware of and accepted these obligations in assuming his or her position as a director and/or officer of Akumin. The Individual Defendants authorized, permitted and/or acquiesced in the release or making of, and adopted as their own, the false statements particularized below.

VI. THE OFFERINGS

41. Akumin completed offerings during the Class Period:

(a) November 2, 2020: Akumin completed an offering of $400 million of 7.0% senior secured notes due November 1, 2025;

(b) February 11, 2021: Akumin completed a private offering of $75 million of 7.00% notes due November 1, 2025; and

(c) August 9, 2021: Akumin completed its offering of $375 million of aggregate principal amount of 7.5% senior notes due August 1, 2028. The offering was completed by Akumin Escrow Inc, a wholly-owned subsidiary. Upon completion of the offering, Akumin assumed all obligations of Akumin Escrow Inc.

42. The Offering Memorandum for the distribution of Akumin's $400 million of 7.0% senior secured notes due November 1, 2025 completed on November 2, 2020 contains within it the 2019 Annual Financials and the Q2 2020 Financials and all the misrepresentations alleged therein.

43. The Offering Memorandum for the distribution of Akumin's $75 million of 7.00% notes due November 1, 2025 completed on February 11, 2021 contains within it the 2019 Annual Financials and the Q3 2020 Financials and all the misrepresentations alleged therein.

44. The Offering Memorandum for the distribution of Akumin's $375 million of a 7.5% senior notes due August 1, 2028 completed on August 9, 2021 contains within it Akumin's 2020 Annual Financials and Q1 2021 Financials and all the misrepresentations alleged therein.

VII. TRANSITION FROM IFRS TO US GAAP

45. Beginning with its 2020 Annual Financials, Akumin switched from reporting under IFRS to US GAAP. In addition to recasting information in prior periods from IFRS to US GAAP for their inclusion as comparative amounts in Akumin's 2020 Annual Financials, Akumin also converted its 2020 quarterly filings from IFRS to US GAAP and re-issued them as the Q1 2020 Financials (US GAAP), Q1 2020 Financials (US GAAP) and Q1 2020 Financials (US GAAP) on March 31, 2021.

VIII. THE MISREPRESENTATIONS

46. Akumin and the Individual Defendants made the following misrepresentations during the Class Period:

(a) misrepresentations about Akumin's accounts receivables and revenue as particularized herein at paragraphs ~~43-49~~ 48-53 (the "**Accounts Receivable and Revenue Misrepresentations**");

(b) misrepresentations about Akumin's property and equipment, particularized herein at paragraphs ~~50-54~~ 54-58 (the "**Costs Associated with Repairs and Maintenance Misrepresentations**");

(c) misrepresentations about Akumin's shareholders' equity particularized herein at paragraphs ~~55-57~~ 59-61 (the "**Shareholders' Equity Misrepresentation**");

(d) misrepresentations about Akumin's compliance with applicable financial accounting standards as particularized herein at paragraphs ~~58-60~~ 62-66, including:

(i) Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 270, Interim Reporting;

(ii) generally accepted accounting principles;

(iii) IAS 34, Interim Financial Reporting; and

(iv) IFRS; and

(the "**Compliance with Financial Accounting Standards Misrepresentations**")

(e) misrepresentations about the design and effectiveness of Akumin's ICFR and DC&P particularized herein at paragraphs ~~61-67~~ 67-73 (the "**Effectiveness of ICFR and DC&P Misrepresentations**").

40. During the Class Period, Ernst & Young LLP made misrepresentations in its audit reports, as particularized herein at paragraphs ~~68-71~~ 74-76 (the "**Auditor Misrepresentations**").

A. Accounts Receivable and Revenue Misrepresentations

47. During the Class Period, Akumin purported to report its accounts receivable on a net realizable value based on the amount expected to be collected from customers, which considered historical implicit price concessions and expected collection rates. Akumin did not accurately calculate its historical implicit price concessions. This caused Akumin to overstate its accounts receivable and revenue in its in its public disclosures, as set out below.

(i) Accounts receivable:

48. Akumin misrepresented the amount of its accounts receivable in all Misleading Documents that were Interim and Annual Financial Statements and MD&A as follows (in millions):

Document	Reported	Actual
2019 Annual Financials and MD&A	$82.9	$53.3
Q1 2020 Financials and MD&A	$91.7	$59.2
Q2 2020 Financials and MD&A	$91.9	$58.0
Q3 2020 Financials and MD&A	$99.0	$61.3
2020 Annual Financials and MD&A	$91.1	$62.3
Q1 2021 Financials and MD&A	$95.9	$64.2

49. Akumin also reported its accounts receivable in its Q1, Q2, and Q3 2019 Financials. Akumin's accounts receivable were materially overstated in each one of these documents.

50. Each overstatement of accounts receivable identified above was a misrepresentation.

(ii) Revenue:

51. Akumin misrepresented the amount of its revenue in all Misleading Documents that were Interim and Annual Financial Statements and MD&A as follows (in millions):

Document	Reported	~~Reported~~ Converted to US GAAP (as applicable)	Actual
Q1 2019 Financials and MD&A (three-months ended March 31, 2019)	$47.6 (IFRS)	$47.6	$41.2
Q2 2019 Financials and MD&A (six-months ended June 30, 2019)	$101.5 (IFRS)	$101.5	$90.1
Q3 2019 Financials and MD&A (nine-months ended September 30, 2019)	$170.4 (IFRS)	$170.4	$152.4
2019 Annual Financials and MD&A (year ended December 31, 2019)	$247.4 (IFRS)	$247.4	$221.0
Q1 2020 Financials and MD&A (three-months ended March 31, 2020)	$71.3 (IFRS)	$71.3	$68.2
Q2 2020 Financials and MD&A (six-months ended June 30, 2020)	$124.9 (IFRS)	$126.0	$115.5
Q3 2020 Financials and MD&A (nine-months ended September 30, 2020)	$192.0 (IFRS)	$193.1	$178.8
2020 Annual Financials and MD&A (year ended December 31, 2020)	$251.3 (US GAAP)	~~$251.3~~	$245.6
Q1 2021 Financials and MD&A (three-months ended March 31, 2021)	$66.9 (US GAAP)	~~$66.9~~	$64.0

52. Each overstatement of revenue identified above was a misrepresentation.

53. The Accounts Receivable and Revenue Misrepresentations were made in the Offering Memoranda or were otherwise incorporated therein by reference.

B. Costs Associated with Repairs and Maintenance Misrepresentations

54. During the Class Period, Akumin improperly capitalized costs associated with replacement components when it repaired and recorded these costs in property and equipment. The cost of these replacement components should have been expensed as repairs and maintenance rather than capitalized and recorded as costs in property and equipment. This resulted in Akumin materially overstating its property and equipment, net.

55. Akumin misrepresented its property and equipment, net in all Misleading Documents that were Interim and Annual Financial Statements and MD&As, as follows (in millions):

Document	Reported	Actual
2019 Annual Financials and MD&A	$75.9	$64.2
Q1 2020 Financials and MD&A	$78.2	$65.1
Q2 2020 Financials and MD&A	$78.3	$64.1
Q3 2020 Financials and MD&A	$78.0	$62.4
2020 Annual Financials and MD&A	$79.9	$63.7
Q1 2021 Financials and MD&A	$79.2	$61.6

56. Akumin also reported its property and equipment, net in its Q1, Q2, and Q3 2019 Financials. Akumin's property and equipment, net was materially overstated in each one of these documents.

57. Each overstatement of property and equipment identified above was a misrepresentation.

58. The Costs Associated with Repairs and Maintenance Misrepresentations were made in the Offering Memoranda or were otherwise incorporated therein by reference.

C. Shareholders' Equity Misrepresentations

59. The cumulative impact of these misrepresentations caused Akumin to overstate its total shareholders' equity during the Class Period, as follows (in millions):

Document	Reported	~~Reported~~ Converted to US GAAP (as applicable)	Actual (US GAAP)
Q1 2019 Financials and MD&A	$107.5 (IFRS)	$123.2	$102.0
Q2 2019 Financials and MD&A	$131.8 (IFRS)	$149.2	$122.9
Q3 2019 Financials and MD&A	$134.7 (IFRS)	$152.9	$120.6
2019 Annual Financials and MD&A	$138.7 (IFRS)	$157.1	$119.0
Q1 2020 Financials and MD&A	$140.8 (IFRS)	$160.1	$116.8
Q2 2020 Financials and MD&A	$138.4 (IFRS)	$161.6	$109.6
Q3 2020 Financials and MD&A	$140.2 (IFRS)	$161.1	$103.4
2020 Annual Financials and MD&A	$139.7 (US GAAP)	~~$139.7~~	$85.2
Q1 2021 Financials and MD&A	$140.8 (US GAAP)	~~$140.8~~	$82.6

60. Each overstatement of shareholders' equity identified above was a misrepresentation.

61. The Shareholders' Equity Misrepresentations were made in the Offering Memoranda or were otherwise incorporated therein by reference.

D. Compliance with Financial Accounting Standards Misrepresentations

62. During the Class Period, Akumin reported that its Interim and Annual Financial Statements complied with financial accounting standards:

(a) **IAS 34 – Interim Financial Reporting**:

(i) In its Q1, Q2, and Q3 Financials for 2019 and 2020, Akumin reported that its Interim Financial Statements were prepared in accordance with IAS 34 – Interim Financial Reporting.

(b) **IFRS**:

(i) In its Q1 and Q2 2019 MD&A, Akumin reported that its Interim Financial Statements were prepared using the significant accounting policies consistent with those applied in its December 31, 2018 consolidated financial statements. Akumin's December 31, 2018 consolidated financial statements reported that they were prepared in accordance with IFRS as issued by IASB.

(ii) In its 2020 Annual Financials, Akumin reported that its 2020 Annual Financials were prepared in accordance with IFRS as issued by IASB.

(iii) In its 2019 Annual MD&A, and Q1, Q2, and Q3 2020 MD&As, Akumin reported that its Interim Financial Statements were prepared using the significant accounting policies consistent with those applied in its 2019 Annual Financials consolidated financial statements.

(c) **US GAAP:**

(i) In its 2020 Annual Financials and MD&A, Akumin reported that it adopted US GAAP as the basis of preparation for its 2020 Annual Financials.

(ii) In its Q1 2020 Financials, Akumin reported that its Q1 2020 Financials were prepared in accordance with FASB Accounting Standards Codification (ASC) Topic 270, Interim Reporting.

63. The Offering Memoranda for the distribution of Akumin's $400 million of 7.0% senior secured notes due November 1, 2025 completed on November 2, 2020 and for the distribution of Akumin's $75 million of 7.00% notes due November 1, 2025 completed on February 11, 2021 state that Akumin's consolidated financial statements have been prepared in accordance IFRS, as issued by IASB.

64. The Offering Memorandum for the distribution of Akumin's $375 million of a 7.5% senior notes due August 1, 2028 completed on August 9, 2021 states that Akumin's financial statements have been prepared in accordance with US GAAP.

65. These representations were false. Akumin's Interim and Annual Financial Statements during the Class Period did not comply with IAS 34 – Interim Financial Reporting, IFRS, US GAAP or FASB Accounting Standards Codification (ASC) Topic 270, Interim Reporting.

66. The Compliance with Financial Accounting Standards Misrepresentations were made in the Offering Memoranda or were otherwise incorporated therein by reference.

E. Effectiveness of ICFR and DC&P Misrepresentations

67. In its 2020 Annual and Q1 2021 MD&As Akumin stated that:

(a) "[…] we have assessed the effectiveness of our internal control over financial reporting and disclosure controls and procedures using the Committee of Sponsoring Organizations of the Treadway Commission's 2013 framework."

(b) "Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that these controls and procedures are effective."

68. In each Misleading Document that was a Form 52-109F2 Certification of Interim Filing and Form 52-109F1 Certification of Annual Filing, Zine-El-Abidine and Saleem certified that had, as at the end of the period covered by each filing, that they had:

(a) designed DC&P, or caused it to be designed under their supervision, to provide reasonable assurance that

(i) material information relating to Akumin is made known to them by others, particularly during the period in which the interim filings are being prepared; and

(ii) information required to be disclosed by Akumin in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

(b) designed ICFR, or caused it to be designed under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

69. These representations were false. Akumin's DC&P and ICFR were not designed to provide such reasonable assurance.

70. At all material times during the Class Period, Akumin had material weaknesses in its ICFR, and its DC&P were not effective in respect of Akumin's ability to identify, process, record, and value its accounts receivable.

71. These material weaknesses were caused because the period-end process design, including review controls, did not effectively consider historical collection information to record write-offs and other adjustments to accounts receivable in order to accurately assess and reflect the effect of implicit price concessions in estimating net realizable value of accounts receivable.

72. Akumin also had material weaknesses in its ICFR and its DC&P because they were not effective in respect of Akumin's ability to identify, process, record, and value its capitalization adjustments. These material weaknesses were caused by review control design, which did not sufficiently ensure whether the nature of capital additions adhered to Akumin's capitalization policy.

73. The Effectiveness of ICFR and DC&P Misrepresentations were made in the Offering Memoranda or were otherwise incorporated therein by reference.

F. The Auditor Misrepresentations

74. Akumin filed its 2019 Annual Financials on March 31, 2020. These Audited Annual Financial Statements contained a report from Akumin's auditor Ernst & Young LLP in which Ernst & Young LLP stated:

(a) "In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as at December 31, 2019 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS)."

(b) "We conducted our audit in accordance with Canadian generally accepted auditing standards (Canadian GAAS) and auditing standards generally accepted in the United States of America (U.S. GAAS)."

(c) "We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion."

75. Akumin filed its 2020 Annual Financials on March 31, 2021. These financial statements contained a report from Akumin's auditor Ernst & Young LLP in which Ernst & Young LLP stated:

(a) "In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles."

(b) "We conducted our audits in accordance with the standards of the PCAOB [Public Company Accounting Oversight Board]."

(c) "Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud."

(d) "Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements."

(e) "Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements."

(f) "We believe that our audits provide a reasonable basis for our opinion."

(collectively, with the representations set out in paragraph ~~68~~ 73, the "**Auditor Misrepresentations**")

76. All the representations made by Ernst & Young LLP set out above were false. Akumin's 2019 and 2020 Annual Financial Statements did not present Akumin's financial position, results of operations, and cash flows in accordance with IFRS or US GAAP, and Ernst & Young LLP had no reasonable basis to opine that it did, because, contrary to its representations:

(a) it did not conduct its audits in accordance with Canadian generally accepted auditing principles, auditing standards generally accepted in the United States of America or in accordance with the standards of the PCAOB;

(b) it did not plan and perform the audit to obtain reasonable assurance about whether the financial statements were free of material misstatement, whether due to error or fraud;

(c) it did not perform procedures to assess applicable risks or perform procedures to respond to those risks; and

(d) it did not evaluate the accounting principles used and significant estimates made by management and it did not evaluate the overall presentation of the financial statements.

~~VIII~~ IX. THE CORRECTIVE DISCLOSURES

A. Press Release, August 15, 2021

77. On August 15, 2020, Akumin issued a press release announcing that it would delay its interim financial report for the quarter ended June 30, 2021. Akumin further disclosed that:

(a) "both management and its external auditors, Ernst & Young LLP, agreed that additional information and analysis is necessary to complete the interim financial report for the quarter ended June 30, 2021 and Ernst & Young's review of such report";

(b) "The additional information and analysis relates to potential additional credit losses with respect to prior years."

(c) "The production of this additional information and analysis will not be completed prior to the filing deadline of August 16, 2021."

(d) "As a result, Akumin will not file such financial report, or the related management's discussion and analysis and CEO and CFO certificates (such filings, collectively, the "Required Documents") before the August 16, 2021 deadline."

(e) "Akumin is currently working to complete the preparation of the analysis to conclude and facilitate the review of these filings at the earliest possible date and currently expects to be in a position to file the Required Documents within 60 days of the original filing deadline."

(f) "Akumin has applied to the Ontario Securities Commission (the "OSC"), as principal regulator for Akumin, for the imposition of a management cease trade order under National Policy 12-203 – Management Cease Trade Orders ("NP 12-203") throughout the duration of the default."

(g) "The management cease trade order, if approved, will generally not affect the ability of persons who are not or have not been management of Akumin to trade in its securities."

(h) "Akumin confirms that it will satisfy the provisions of the alternative information guidelines under NP 12-203 by issuing bi-weekly default status reports in the form of news releases for so long as it remains in default of the above-noted filing requirements. The OSC may issue a general cease trade order against Akumin for failure to file the Required Documents within the prescribed time period or sooner if Akumin fails to file its status reports during the prescribed time limits."

(i) "Akumin confirms that there are no insolvency proceedings that Akumin is subject to and there is no other material information relating to its affairs that has not been generally disclosed."

(j) "In light of the foregoing, Akumin has elected to reschedule its previously announced conference call to discuss its second quarter 2021 financial results from 8:30 a.m. Eastern Time on August 16, 2021 to a time and date to be determined by Akumin following the filing of Akumin's second quarter results."

78. On this news, the 10-day volume weighted average price of Akumin's shares declined by $0.81, or 22%. Akumin's other securities also declined in value.

79. Akumin's press release dated Akumin 15, 2021 was a public correction within the meaning of the *OSA* and the Securities Legislation.

B. Press Release, October 12, 2021

80. On October 12, 2021, Akumin issued a press release announcing that it intended to restate certain financial statements. Akumin further disclosed that:

(a) "For the period ended June 30, 2021, in conjunction with performing its period-end review of accounts receivable and performing additional review of historical collection rates using its enhanced reporting and analytics tools, Akumin identified issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods."

(b) "In addition, during the review the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections which were occurring and Akumin has determined that a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 is required."

(c) "Under ASC 250, Accounting Changes and Error Corrections, this change is considered an error for accounting purposes and thus a restatement of (i) Akumin's annual financial statements for the period ended December 31, 2020 and December 31, 2019, and (ii) Akumin's interim financial statements for the period ended March 31, 2021, in each case together with their related management's discussion and analysis (collectively, the "Restated Filings"), will be required, which Restated Filings will also account for certain adjustments for the tax impact of these changes, previously uncorrected immaterial misstatements, and other items impacted by the correction of the error."

(d) "Although the quantum of the adjustments is still being finalized, it is currently expected that the changes in the Restated Filings will result in an accounts receivable balance as at June 30, 2021 of between $65.0 million and $70.0 million as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of $95.9 million."

(e) "In addition to the foregoing, while integrating the accounting policies and procedures of Akumin and Alliance HealthCare Services Inc. ("Alliance") in connection with Akumin's acquisition of Alliance on September 1, 2021, Akumin has identified certain differences in recording the capitalization, as opposed to the repair and maintenance expense, of components that are replaced when equipment is repaired."

(f) "As Akumin remains in the process of finalizing the Required Reports and Restated Filings, Akumin also intends to reflect any further adjustments resulting from the review of the accounting treatment of these components prior to being in a position to file the Required Reports and Restated Filings, which work remains ongoing."

(g) "Although Akumin's review of the impact of these changes remains preliminary, any adjustments related to such review would be expected to be reflected as an

> adjustment to the net book value of property and equipment and additional repairs and maintenance costs which are included in operating expenses (any such adjustments, "Capitalization Adjustments")."
>
> (h) "Akumin is continuing to work to complete the preparation of the analysis to conclude and facilitate the review of the Required Reports and the Restated Filings and expects to complete the remaining steps in order to file the Required Reports and refile the Restated Filings at the earliest possible date; however, given the additional review and analysis required to finalize the impact, if any, of the Capitalization Adjustments on the Required Reports and Restated Filings, Akumin no longer expects to be able to file the Required Reports and Restated Filings by October 15, 2021.":
>
> (i) "Although the timing of such filings remains to be determined in connection with the completion of such additional analysis, Akumin anticipates filing the Required Reports and Restated Filings prior to November 15, 2021, being the filing deadline for its Q3 interim financial statements and its business acquisition report related to the Alliance acquisition."

81. On this news, the 10-day volume weighted average price of Akumin's shares declined by $0.84, or 27%. Akumin's other securities also declined in value.

Akumin's press release dated October 12, 2021 was a public correction within the meaning of the *OSA* and the Securities Legislation.

C. Press Release, November 8, 2021

82. On November 8, 2021, Akumin issued a press release announcing that it had determined that it expected the changes from its restated filings would result in a net book value of property and equipment as at June 30, 2021 of $60.4 million as compared to the previously reported March 31, 2021 net book value of $79.2 million. Akumin's press release stated as follows:

> Also as previously announced, in connection with that restatement, Akumin conducted a review of its procedures for those same periods relating to the capitalization, as opposed to the repair and maintenance expense, of components that are replaced when equipment is repaired. Akumin now confirms that, while in the process of integrating the accounting policies and procedures of the Company and Alliance HealthCare Services, Inc. ("Alliance") in connection with Akumin's acquisition of Alliance on September 1, 2021, management identified certain costs that were capitalized by Akumin under a process that differed from the processes applied by Alliance. Because of these differing processes,

> Akumin instigated a review of these capitalized expenditures and consulted the limited authoritative GAAP literature, as well as related non-authoritative accounting guidance, with respect to capitalization of property and equipment. While the review is ongoing, Akumin has determined that certain costs that were previously capitalized for the fiscal years ended December 31, 2020 and 2019, and for the quarter ended March 31, 2021, should more accurately be expensed as repair and maintenance. Under ASC 250, Accounting Changes and Error Corrections, this change is considered an error for accounting purposes. Although the quantum of the change is still being finalized, it is currently expected that the changes from the Restated Filings will result in a net book value of property and equipment as at June 30, 2021 of $60.4 million as compared to Akumin's previously reported March 31, 2021 net book value of property and equipment of $79.2 million.

83. Akumin's press release dated November 8, 2021 was a public correction within the meaning of the *OSA* and the Securities Legislation.

D. Restatement, November 15, 2021

84. On November 15, 2021, Akumin issued a press release announcing that it had restated its 2019 and 2020 Annual Financials and MD&A and its Q1 2019 Financials and MD&A. Akumin also issued:

(a) restated Audited Annual Financial Statements for the year ended December 31, 2020;

(b) restated MD&A for the years ended December 31, 2020 and 2019;

(c) Form 52-109F1R Certification of Refiled Annual Filings (CEO) for the year ended December 31, 2020;

(d) Form 52-109F1R Certification of Refiled Annual Filings (CFO) for the year ended December 31, 2020;

(e) restated Interim Financial Statements for the three months ended March 31, 2021;

(f) restated MD&A for the three months ended Mach 31, 2021 and 2020;

(g) Form 52-109F2R Certification of Refiled Interim Filings (CEO) for the three months ended March 31, 2019 and 2020; and

(h) Form 52-109F2R Certification of Refiled Interim Filings (CFP) for the three months ended March 31, 2019 and 2020.

85. Akumin's restated 2020 Annual Financials described the nature of the restatements as follows:

> Accounts Receivable
>
> During the quarter ended June 30, 2021, in conjunction with performing its quarter-end review of accounts receivable and review of historical collection rates, Akumin identified issues in the recording of write-offs and cash collections on its accounts receivable and acquired accounts receivable balances impacting current and prior periods. During the review, the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections experience. Using additional historical data and enhanced reporting and analytics tools, management was able to more accurately estimate its historical implicit price concessions, which impacts the net realizable value of accounts receivable. This analysis resulted in a reduction in accounts receivable, a reduction in goodwill, and a reduction of net revenue, which are considered errors in accordance with ASC 250, Accounting Changes and Error Corrections ("ASC 250"), and are material to prior periods and required the consolidated financial statements to be restated.
>
> The impact of these errors was (i) a decrease of accounts receivable of $28.9 million, $29.5 million and $5.6 million as of December 31, 2020, December 31, 2019 and January 1, 2019, respectively, (ii) a decrease of goodwill of $9.6 million, $3.7 million and $2.6 million as of December 31, 2020, December 31, 2019 and January 1, 2019, respectively, and (iii) a decrease of revenue of $5.7 million and $26.4 million for the years ending December 31, 2020 and December 31, 2019, respectively.
>
> Repairs and Maintenance
>
> While performing its review of the interim financial statements for the quarter ended June 30, 2021, management identified costs associated with certain replacement components on equipment when repaired were capitalized and recorded in property and equipment in the Company's consolidated balance sheets as of December 31, 2020 and 2019 and prior periods. Management determined the costs of the replacement components should have been expensed as repairs and maintenance, rather than capitalized. This analysis resulted in a reduction to the carrying value of property and equipment (and the associated amounts of accumulated depreciation), as well as an increase in repairs and maintenance costs and decreases in depreciation expense and loss on disposal of property and equipment, which are included in operating expenses. These are considered errors in accordance with ASC 250, and are material to prior periods and required the consolidated financial statements to be restated.
>
> The impact of these errors was (i) a decrease of property and equipment, net, of $16.6 million, $11.8 million and $7.3 million as of December 31, 2020, December 31, 2019 and January 1, 2019, respectively, (ii) an increase in the cost of operations of $8.5 million and $6.6 million for the years ended December 31, 2020 and December 31, 2019, respectively, (iii) a decrease in depreciation expense of $3.4 million and $2.1 million for the years ended December 31, 2020 and December 31, 2019, respectively, and (iv) a decrease to the loss on disposal of property and equipment of $0.2 million and $0.04 million for the years ended December 31, 2020 and December 31, 2019, respectively.

> The tax impact of the above-noted changes, along with other previously uncorrected immaterial misstatements to certain balance sheet and income statement accounts, are included in the total adjustments described in the tables below. The cumulative impact of these items was a decrease in shareholders' equity of $54.6 million and $38.1 million at December 31, 2020 and 2019, respectively.

86. The restated Q1 2021 Financials disclosed similar information relating to errors in the Q1 reporting periods.

87. In its restated 2019 and 2020 Annual MD&A, Akumin described the nature of the material weaknesses in its ICFR and DC&P:

> Accounts Receivable
>
> Historically, management used a provision matrix to determine estimated implicit price concessions based on actual experience with consideration of forward-looking information including changes to economic conditions that would have an impact on its customers. Such implicit price concessions were considered when calculating net revenue and subsequently adjusted as necessary based on the estimate. During the quarter ended June 30, 2021, in conjunction with performing its quarter-end review of accounts receivable and review of historical collection rates using its enhanced reporting and analytics tools, and inquiries from our external auditors, Akumin identified issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods. In addition, during the review the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections experience. Using additional historical data that was available together with enhanced reporting and analytics tools, management was able to more accurately estimate its historical implicit price concessions, which impacts the net realizable value of the accounts receivable. This analysis resulted in a reduction in accounts receivable with an offset to net revenue which is material to prior periods and required the consolidated financial statements to be restated.
>
> Through the use of such improved analytical tools and the interpretation of the information produced from such tools, management was able to confirm that its period-end process and related review control, could be enhanced to provide greater accuracy in estimating the implicit price concessions for accounts receivable.
>
> The material weakness was caused because the period-end process design, including review controls, did not effectively consider historical collection information to record write-offs and other adjustments to accounts receivable in order to accurately assess and reflect the effect of implicit price concessions in estimating net realizable value of accounts receivable. Starting in mid-2018 and continuing through 2019, 2020, and into the present, the Company made investments in its revenue cycle platform and data analytics tools. Among other benefits, these investments were intended to better integrate legacy revenue cycle information of acquired businesses into the Company's revenue cycle platform. Subsequent to December 31, 2020, these investments allowed management to perform a

more comprehensive analysis of historical collection data on a consolidated basis. After applying this more comprehensive analysis to the quarter ended June 30, 2021, management consequently adopted an enhanced estimation methodology to assess net realizable value of accounts receivable. Applying this new methodology required a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020. Under ASC 250, Accounting Changes and Error Corrections ("ASC 250"), this change was considered an error and thus a restatement of the financial statements for the period ended December 31, 2020 and December 31, 2019, was required.

Capitalization Adjustments

The Capitalization Adjustments primarily relate to capitalization of components that are replaced when equipment is repaired. The Company's rationale for capitalizing these components was that most of the Company's equipment is relatively old, and the components replaced were extending the useful life of the already aged equipment. Management consistently applied this policy to capitalize such items. Based on a thorough review of the components that were replaced and considering the authoritative and non-authoritative GAAP literature, management determined that certain components that were previously capitalized prior to the fiscal year ended December 31, 2020 did not extend the life of the assets and should have been expensed to repair and maintenance rather than capitalized.

The material weakness was caused by review control design, which did not sufficiently ensure whether the nature of capital additions adhered to the Company's capitalization policy. Determinations were made in the judgment of management that certain expenditures extended the useful life of capital assets and therefore should be capitalized. However, considering authoritative and non-authoritative GAAP guidance available and conducting a detailed analysis of the nature of the expenditures, management determined these expenditures should have been recorded as repair and maintenance expenses as opposed to capital expenditures.

Applying revised judgment toward application of the Company's capitalization policy required a material change to previously capitalized medical equipment components as of January 1, 2019, December 31, 2019 and December 31, 2020. Under ASC 250, this change was considered an error and thus a restatement of the financial statements for the period ended December 31, 2020 and December 31, 2019 was required.

88. The restated Q1 2021 Financials disclosed similar information relating to material weaknesses in the Q1 reporting periods.

89. On this news, the 10-day volume weighted average price of Akumin's shares declined by $0.01, or 0.267%. Akumin's other securities also declined in value.

90. The November 15, 2021 disclosures were a public correction within the meaning of the *OSA* and the Securities Legislation.

~~I~~X. RIGHTS OF ACTION

A. Negligent Misrepresentation

91. The Plaintiff, on behalf of the Class, pleads negligent misrepresentation against Akumin and the Individual Defendants in respect of:

(a) the Accounts Receivable and Revenue Misrepresentations;

(b) the Costs Associated with Repairs and Maintenance Misrepresentations;

(c) the Shareholders' Equity Misrepresentation;

(d) the Compliance with Financial Accounting Standards Misrepresentations; and

(e) the Effectiveness of ICFR and DC&P Misrepresentations.

92. Each of these misrepresentations was untrue for the reasons particularized herein.

93. The Misleading Documents were prepared for the purpose of attracting investment and inducing members of the investing public to purchase Akumin securities. The Defendants undertook to provide the Misleading Documents to those current and prospective securities holders (*i.e.*, the Class Members) for the purpose of relying on them to make informed decisions as to whether to acquire the securities.

94. The Defendants knew and intended at all material times that those documents had been prepared for that purpose, and that the Class Members would reasonably rely to their detriment upon such documents in making their decision to purchase Akumin securities.

95. The Defendants had a duty at common law to exercise care and diligence to ensure that the Misleading Documents were free from material misstatement. Those Defendants breached that duty by making the misrepresentations as particularized above.

96. The Plaintiff and other Class Members directly or indirectly relied on the misrepresentations in making decisions to purchase Akumin's securities and suffered damages when the falsity of the information was revealed.

B. Negligence *Simpliciter*

97. The Plaintiff, on behalf of Class Members who purchased or otherwise acquired Akumin securities pursuant to the Offering Memoranda, pleads negligence against Akumin and the Individual Defendants.

98. Akumin and the Individual Defendants owed a duty of care to ensure that the Offering Memoranda made full, true and plain disclosure of all material facts relating to the securities offered.

99. Akumin and the Individual Defendants ought to have known that the Offering Memoranda and the documents incorporated therein by reference were materially misleading in that they contained the following misrepresentations:

(a) the Accounts Receivable and Revenue Misrepresentations;

(b) the Costs Associated with Repairs and Maintenance Misrepresentations;

(c) the Shareholders' Equity Misrepresentation;

(d) the Compliance with Financial Accounting Standards Misrepresentations; and

(e) the Effectiveness of ICFR and DC&P Misrepresentations.

100. The Individual Defendants were senior officers and/or directors at the time of the offerings. The Offering Memorandum were created for the purposes of obtaining financing for Akumin's operations. The Individual Defendants had a statutory obligation to manage and supervise the management of the business and affairs of Akumin.

101. Akumin and the Individual Defendants violated their duties to those Class Members who purchased Akumin's securities in the offerings.

102. The reasonable standard of care expected in the circumstances required Akumin and the Individual Defendants to prevent the distributions to which the Offering Memoranda related from occurring prior to the correction of misrepresentations alleged above to have been contained in the Offering Memoranda, or in the documents incorporated therein by reference. Those Defendants failed to meet the standard of care required by causing the offerings to occur before the correction of such misrepresentations.

103. Akumin and the Individual Defendants further breached their duty of care as they failed to maintain or to ensure that Akumin maintained appropriate DC&P and ICFR to ensure that Akumin's disclosure documents adequately and fairly presented its business and affairs on a timely basis.

104. Had Akumin and the Individual Defendants exercised reasonable care and diligence in connection with the distributions to which the Offering Memoranda related, then those distributions would not have occurred, or would have occurred at prices that reflected the true value of Akumin's notes.

105. Akumin and the Individual Defendants' negligence in relation to the Offering Memoranda resulted in damage to the Class Members who purchased Akumin's securities in the related distributions. Had those Defendants satisfied their duty of care to such Class Members, then those Class Members would not have purchased the securities that they acquired under the Offering Memoranda, or they would have purchased them at a lower price that reflected their true value.

C. *OSA* Part XXIII – Liability for Misrepresentation in the Offering Memoranda

106. As against Akumin, and on behalf of Class Members who purchased or otherwise acquired Akumin securities pursuant to the Offering Memoranda, the Plaintiff asserts the right of action in section 130.1 of the *OSA* and, if necessary, the equivalent provisions of the Securities Legislation.

107. Each of the following misrepresentations was contained in the Offering Memoranda or incorporated therein by reference:

(a) the Accounts Receivable and Revenue Misrepresentations;

(b) the Costs Associated with Repairs and Maintenance Misrepresentations;

(c) the Shareholders' Equity Misrepresentation;

(d) the Compliance with Financial Accounting Standards Misrepresentations; and

(e) the Effectiveness of ICFR and DC&P Misrepresentations.

108. Akumin issued the Offering Memoranda, which contained the misrepresentations pleaded herein or they were contained in the disclosure documents incorporated by reference.

D. *OSA* Part XXIII.1 – Liability for Misrepresentation in Secondary Market Disclosure

109. On behalf of the Class Members who purchased Akumin securities on the secondary market, the Plaintiff pleads the right of action in Part XXIII.1 of the *OSA* and, if necessary, the

equivalent provisions of the Securities Legislation against the Defendants for the misrepresentations in the Misleading Documents.

110. Akumin and the Individual Defendants are liable for:

(a) the Accounts Receivable and Revenue Misrepresentations;

(b) the Costs Associated with Repairs and Maintenance Misrepresentations;

(c) the Shareholders' Equity Misrepresentation;

(d) the Compliance with Financial Accounting Standards Misrepresentations; and

(e) the Effectiveness of ICFR and DC&P Misrepresentations.

111. Ernst & Young LLP is liable for the Auditor Misrepresentations.

112. Akumin is a responsible issuer within the meaning of the *OSA* and Securities Legislation.

113. Each of the Misleading Documents is a document under s. 138.1 of the *OSA* and corresponding provisions of the Securities Legislation.

114. The Misleading Documents that are financial statements, MD&As and certifications are core documents under s. 138.1 of the *OSA* and corresponding provisions of the Securities Legislation.

115. Akumin was a responsible issuer at the time that each of the Misleading Documents was released by it.

116. The Individual Defendants were officers and/or directors of Akumin at the time that each of the Misleading Documents was released, and each of them authorized, permitted and/or acquiesced in the release of such documents.

117. Ernst & Young LLP was an expert and it is alleged herein that there were misrepresentations in its reports filed with Akumin's Audited Annual Financial Statements.

118. Accordingly, the Defendants are, pursuant to *OSA* ss. 138.3(1), liable in respect of the misrepresentations made by them that are contained in the Misleading Documents as particularized above.

XI. RELATIONSHIP BETWEEN THE MISREPRESENTATIONS AND THE PRICE OF AKUMIN'S SECURITIES

119. The price of Akumin's securities was directly affected during the Class Period by the release of the documents containing the misrepresentations as particularized herein. The Defendants were aware at all material times of the effect of Akumin's disclosure documents upon the price of Akumin's securities.

120. The Misleading Documents were filed, among other places, with SEDAR, and thereby became immediately available to, and were reproduced for inspection by, the Class Members, other members of the investing public, financial analysts and the financial press.

121. Akumin routinely transmitted the Misleading Documents to the financial press, financial analysts and certain prospective and actual holders of Akumin's securities. Akumin provided either copies of the Misleading Documents or links thereto on its website.

122. Akumin regularly communicated with investors and financial analysts via established market communication mechanisms, including through regular disseminations of their disclosure documents, including on newswire services in Canada, the United States and elsewhere. When Akumin communicated that new material information about Akumin's business, and operations and its financial results to the public, the price of Akumin's securities was directly affected.

123. Akumin was the subject of analysts' reports that incorporated certain of the information contained in the Misleading Documents, with the effect that any recommendations to buy, hold or sell Akumin's securities in such reports during the Class Period were based, in whole or in part, upon that information.

124. Akumin's securities were and are traded, among other places, on the TSX, which is an efficient and automated market. The price at which Akumin's securities traded promptly incorporated material information from Akumin's disclosure documents about Akumin's business and affairs, including the misrepresentations alleged herein, which were disseminated to the public through the Misleading Documents distributed by Akumin, as well as by other means.

XII. DAMAGES AND REMEDIES

125. The Class Members suffered damages as a result of the Defendants' breach of their duties, and the misrepresentations. The Plaintiff and the other Class Members suffered damages equivalent to the inflation in the price of Akumin's securities they acquired during the Class Period which was related to the misrepresentations alleged herein. If the Defendants had not breached their duties and made the misrepresentations described above, Akumin's securities would not have been offered, traded or been sold at artificially high levels that Class Members paid for them, and the Class Members would not have suffered losses as alleged herein.

126. The Class Members who purchased Akumin securities pursuant to Akumin's August 9, 2021 offering of $375 million of 7.5% senior notes due August 1, 2028 are entitled to elect to exercise a right of recission against Akumin.

127. The Defendants' conduct was high-handed, outrageous, reckless, wanton, entirely without care, deliberate, callous, motivated by economic considerations, and amounted to an abuse of the capital markets. Such conduct renders the Defendants liable to pay punitive damages.

XIII. VICARIOUS LIABILITY

128. Akumin is vicariously liable for the acts and omissions of the Individual Defendants particularized in this claim.

129. The acts or omissions alleged herein to have been done by Akumin were authorized, ordered and done by the Individual Defendants and other agents, employees and representatives of Akumin, while engaged in the management, direction, control and transaction of the business and affairs of Akumin. Such acts and omissions are, therefore, not only the acts and omissions of the Individual Defendants but are also the acts and omissions of Akumin.

130. At all material times, the Individual Defendants were officers and/or directors of Akumin. As their acts and omissions are independently tortious, they are personally liable for same to the Plaintiff and the other Class Members.

131. Ernst & Young LLP is vicariously liable for the acts and omissions of its partners, officers, directors, and employees that were involved in the matters at issue in this claim.

XIV~~II~~. REAL AND SUBSTANTIAL CONNECTION TO ONTARIO

132. This action has a real and substantial connection with Ontario because, among other things:

(a) Akumin is a reporting issuer in Ontario;

(b) Akumin's shares trade on the TSX which is located in Toronto, Ontario;

(c) Akumin's registered and head office is in Toronto, Ontario;

(d) the Akumin disclosure documents referred to herein were disseminated in and from Ontario;

(e) some or all of the Individual Defendants reside in Ontario;

(f) a substantial portion of Class Members reside in Ontario; and

(g) a substantial portion of the damages sustained by the Class were sustained by person and entities domiciled in Ontario.

~~XI~~IV. LEGISLATION

133. The Plaintiff relies upon the *CJA*, the *CPA*, the *OSA*, and the Securities Legislation.

XV<u>I</u>. SERVICE OUTSIDE OF ONTARIO AND PLACE OF TRIAL

134. The Plaintiff relies on Rules 17.02(a), (g), (n), and (p) of the *Rules of Civil Procedure* to serve this statement of claim outside Ontario without leave.

135. The Plaintiff proposes that this action be tried in the City of Toronto, in the Province of Ontario.

December 20, 2021
Amended: February 17, 2023
Amended:

Kalloghlian Myers LLP
~~250 Yonge Street, Suite 2201~~
35 Prince Arthur Avenue
Toronto, Ontario
~~M5B 2l7~~
M5R 1B2

Dimitri Lascaris (LSO#: 50074A)
dimitri@kalloghlianmyers.com

Paul Guy (LSO#: 49794K)
paul@kalloghlianmyers.com

Serge Kalloghlian (LSO#: 55557F)
serge@kalloghlianmyers.com

Garth Myers (LSO#: 62307G)
garth@kalloghlianmyers.com

~~**Ashley Seely** (LSO#: 80755F)~~
~~ashley@kalloghlianmyers.com~~

Lawyers for the Plaintiff

Terry Longair Professional Corporation
Plaintiff

and

Akumin Inc. et al.
Defendants

Court File No.: CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

Proceeding commenced at Toronto

SECOND AMENDED STATEMENT OF CLAIM

Kalloghlian Myers LLP
35 Prince Arthur Avenue
Toronto, Ontario M5R 1B2

Dimitri Lascaris (LSO#: 50074A)
dimitri@kalloghlianmyers.com

Paul Guy (LSO#: 49794K)
paul@kalloghlianmyers.com

Serge Kalloghlian (LSO#: 55557F)
serge@kalloghlianmyers.com

Garth Myers (LSO#: 62307G)
garth@kalloghlianmyers.com

Lawyers for the Plaintiff

Tab 6

Akumin Inc.

Consolidated Financial Statements
December 31, 2020
(expressed in US dollars unless otherwise stated)

Akumin Inc.

Consolidated Balance Sheets

(expressed in US dollars unless otherwise stated)

	December 31, 2020 $	December 31, 2019 $
Assets		
Current assets		
Cash	44,395,988	23,388,916
Accounts receivable	91,126,923	82,867,225
Prepaid expenses and other current assets	3,942,268	3,927,949
	139,465,179	110,184,090
Security deposits and other assets	4,876,208	1,967,053
Property and equipment (note 4)	79,929,574	75,938,590
Operating lease right-of-use assets (note 3)	127,061,894	126,675,770
Goodwill (notes 3 and 6)	360,603,613	358,802,534
Intangible assets (note 5)	6,748,073	9,432,480
Total assets	718,684,541	683,000,517
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (note 7)	34,233,142	26,262,225
Finance lease liabilities (note 9)	3,264,806	1,789,995
Operating lease liabilities (right-of-use) (notes 3 and 9)	9,345,656	9,276,298
Senior loans payable (note 10)	405,698	3,705,952
Earn-out liability (note 8)	4,688,553	7,529,962
	51,937,855	48,564,432
Finance lease liabilities (note 9)	12,308,780	6,625,409
Operating lease liabilities (right-of-use) (notes 3 and 9)	122,953,656	119,773,692
Senior loans payable (note 10)	389,580,046	336,276,370
Derivative financial instruments (note 10)	-	951,702
Subordinated notes payable – earn-out (note 11)	-	184,485
Earn-out liability (note 8)	-	7,304,105
Accrued payroll taxes (note 25)	1,346,088	-
Deferred tax liability	826,566	6,256,820
Total liabilities	578,952,991	525,937,015
Shareholders' equity		
Additional paid-in capital (common shares: no par value, unlimited authorized number of shares, 70,178,428 and 69,840,928 shares issued and outstanding as of December 31, 2020 and December 31, 2019, respectively) (notes 12 and 15)	160,965,034	158,881,120
Deficit	(26,759,151)	(6,361,767)
Equity attributable to shareholders of Akumin Inc.	134,205,883	152,519,353
Non-controlling interests (note 24)	5,525,667	4,544,149
Total shareholders' equity	139,731,550	157,063,502
Total liabilities and shareholders' equity	718,684,541	683,000,517

Approved by the Board of Directors

(signed) "*Riadh Zine*" Director (signed) "*Tom Davies*" Director

The accompanying notes are an integral part of these consolidated financial statements.

Akumin Inc.

Consolidated Statements of Operations and Comprehensive Income (Loss)

(expressed in US dollars unless otherwise stated)

	Year ended December 31, 2020 $	Year ended December 31, 2019 $
Revenue		
Service fees - net of allowances and discounts	243,981,183	244,841,400
Other revenue	7,301,666	2,594,903
	251,282,849	247,436,303
Operating expenses		
Cost of operations, excluding depreciation and amortization (note 22)	197,803,388	187,802,601
Depreciation and amortization (notes 4 and 5)	20,459,767	15,587,200
Stock-based compensation (notes 12 and 15)	2,083,914	3,554,765
Operational financial instruments revaluation and other (gains) losses (note 20)	(3,907,666)	1,017,401
Total operating expenses	216,439,403	207,961,967
Income from operations	34,843,446	39,474,336
Other income and expenses		
Interest expense (notes 9 and 10)	32,781,210	20,783,438
Other financial instruments revaluation and other (gains) losses (note 20)	22,078,745	1,805,816
Settlement costs and other (recoveries) (note 23)	2,324,151	(1,881,233)
Acquisition-related costs	1,079,255	3,403,160
Total other expenses (income)	58,263,361	24,111,181
Income (loss) before income taxes	(23,419,915)	15,363,155
Income tax provision (benefit) (note 13)	(5,751,070)	3,735,548
Net income (loss) and comprehensive income (loss) for the period	(17,668,845)	11,627,607
Non-controlling interests (note 24)	2,728,539	2,199,629
Net income (loss) attributable to common shareholders	(20,397,384)	9,427,978
Net income (loss) per share (note 19)		
Basic and diluted	(0.29)	0.14

The accompanying notes are an integral part of these consolidated financial statements.

1 Presentation of consolidated financial statements and nature of operations

The operations of Akumin Inc. (Akumin or the Company) and its Subsidiaries (defined below) primarily consist of operating outpatient diagnostic imaging centres located in Delaware, Florida, Georgia, Illinois, Kansas, Pennsylvania and Texas. Substantially all of the centres operated by Akumin were obtained through acquisition. Related to its imaging centre operations, Akumin also operates a medical equipment business, SyncMed, LLC (SyncMed), which provides maintenance services to Akumin's imaging centres in Illinois, Kansas and Texas and a billing and revenue cycle management business, as a division of Akumin's wholly owned indirect subsidiary, Akumin Corp., which was previously operated by a subsidiary, Rev Flo Inc., which was merged into Akumin Corp. on December 31, 2018.

The services offered by the Company (through the Subsidiaries) include magnetic resonance imaging (MRI), computed tomography (CT), positron emission tomography (PET), nuclear medicine, mammography, ultrasound, digital radiography (X-ray), fluoroscopy and other related procedures.

The Company has a diverse mix of payers, including private, managed care, capitated and government payers.

The registered and Canadian head office of Akumin is located at 151 Bloor Street West, Suite 603, Toronto, Ontario, M5S 1S4. The United States head office is located at 8300 W. Sunrise Boulevard, Plantation, Florida, 33322. All operating activities are conducted through its wholly owned US subsidiary, Akumin Holdings Corp. and its wholly owned subsidiary, Akumin Corp. Akumin Corp. operates its business directly and through its key wholly owned direct and indirect subsidiaries, which include Akumin Florida Holdings, LLC, formerly known as Tri-State Imaging FL Holdings, LLC (FL Holdings), Akumin Imaging Texas, LLC, formerly known as Preferred Medical Imaging, LLC (PMI), SyncMed, Akumin FL, LLC (Akumin FL), Advanced Diagnostics Group, LLC (ADG), TIC Acquisition Holdings, LLC (TIC) and Akumin Health Illinois, LLC (Akumin IL) (collectively, the Subsidiaries), as well as through Delaware Open MRI Radiology Associates, LLC, Elite Imaging, LLC, Elite Radiology of Georgia, LLC, Jeanes Radiology Associates, LLC, Lebanon Diagnostic Imaging, LLC, Rittenhouse Imaging Center, LLC, Rose Radiology Centers, LLC and Wilkes-Barre Imaging, LLC (collectively, the Revenue Practices), all of which are located in the United States.

2 Summary of significant accounting policies

The Company adopted the accounting principles generally accepted in the United States of America (GAAP) as the basis of preparation for the comparative 2020 and 2019 annual financial statements effective for the fiscal year-ended December 31, 2020. Previously, the Company's financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), for the period up to and including the 9-months ended September 30, 2020. On August 28, 2020, the Company filed a Form 40-F with the United States Securities and Exchange Commission pursuant to Section 12 of the Securities Exchange Act of 1934. This filing resulted in the Company becoming an "SEC Issuer" for purposes of National Instrument 51-102 -- Continuous Disclosure Obligations and as such the Company is entitled to prepare and report its financial statements in GAAP as opposed to IFRS.

The preparation of consolidated financial statements in accordance with GAAP requires the use of estimates and assumptions that affect the reported amounts of revenue, expenses, assets, liabilities and contingencies. Although actual results in subsequent periods may differ from these estimates, such estimates are developed based on the best information available to management and based on management's best judgments at the time. The Company bases its estimates on historical experience, observable trends and various other



Management's Discussion and Analysis of Financial Condition and Results of Operations

For the years ended December 31, 2020 and 2019

March 31, 2021

Income Taxes

Income tax expense comprises current and deferred tax. Income tax is recognized in the consolidated statements of operations and comprehensive income (loss). Current income tax expense represents the amount of income taxes payable based on tax law that is enacted at the reporting date and is adjusted for changes in estimates of tax expense recognized in prior periods. A current tax liability or asset is recognized for income taxes payable, or paid but recoverable, in respect of all periods to date.

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is more likely than not that future taxable income will be available to utilize such amounts. Deferred tax assets are reviewed at each reporting date and are adjusted to the extent that it is no longer probable that the related tax benefits will be realized. When it appears more likely than not that deferred taxes will not be realized, a valuation allowance is recorded to reduce the deferred tax asset to its estimated realizable value. For net deferred tax assets, estimates of future taxable income are considered in determining whether net deferred tax assets are more likely than not to be realized. Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same tax authority and the Company intends to settle its current tax assets and liabilities on a net basis.

The Company reports a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. The Company recognizes interest and penalties, if any, related to unrecognized tax benefits in income tax expense.

Business Combinations

The Company accounts for business combinations using the acquisition accounting method. The total purchase price is allocated to the assets acquired and liabilities assumed based on fair values as at the date of acquisition. Goodwill as at the acquisition date is measured as the excess of the aggregate of the consideration transferred and the amount of any non-controlling interests in the acquired company over the net of the acquisition date fair values of the identifiable assets acquired and the liabilities assumed. Any non-controlling interests in the acquired company are measured at their fair value. Best estimates and assumptions are used in the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business combination date. These estimates and assumptions are inherently uncertain and are subject to refinement. As a result, during the measurement period, which may be up to one year from the business combination date, the Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. On conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded in the consolidated statements of operations and comprehensive income (loss) in the period in which the adjustments were determined.

Disclosure Controls and Procedures and Internal Controls Over Financial Reporting

Management is responsible for establishing and maintaining a system of disclosure controls and procedures to provide reasonable assurance that all material information relating to the Company is gathered and reported to senior management on a timely basis so that appropriate decisions can be made regarding public disclosure. Management is also responsible for establishing and maintaining adequate internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial reports for external purposes in accordance with GAAP. In designing such controls, it should be recognized that due to inherent limitations, any controls, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and may not prevent or detect misstatements. Additionally, management is required to use judgment in evaluating controls and procedures.

There were no changes in our internal control over financial reporting that occurred during the three months ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. As at December 31, 2020, we have assessed the effectiveness of our internal control over financial reporting and disclosure controls and procedures using the Committee of Sponsoring Organizations of the Treadway Commission's 2013 framework. Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer have concluded that these controls and procedures are effective.

Risk Factors

For a detailed description of risk factors associated with the Company, refer to the "Risk Factors" section of the Company's annual information form dated March 31, 2021 for its fiscal year ended December 31, 2020 (the "**Annual Information Form**"), which is available in the Company's public filings at www.sedar.com and www.sec.gov.

In addition, we are exposed to a variety of financial risks in the normal course of operations, including risks relating to cash flows from operations, liquidity, capital reserves, market rate fluctuations and internal controls over financial reporting. Our overall risk management program and business practices seek to minimize any potential adverse effects on our consolidated financial performance. Financial risk management is carried out under practices approved by our Audit Committee. This includes reviewing and making recommendations to the board of directors regarding the adequacy of our risk management policies and procedures regarding identification of the Company's principal risks, and implementation of appropriate systems and controls to manage these risks.

Tab 7

AKUMIN ANNOUNCES DELAY IN FILING 2021 Q2 INTERIM FINANCIAL REPORT AND RELATED MANAGEMENT'S DISCUSSION AND ANALYSIS

Plantation, FL — August 15, 2021 — Akumin Inc. (NASDAQ/TSX: AKU) ("Akumin"), announced today that both management and its external auditors, Ernst & Young LLP, agreed that additional information and analysis is necessary to complete the interim financial report for the quarter ended June 30, 2021 and Ernst & Young's review of such report. The additional information and analysis relates to potential additional credit losses with respect to prior years. The production of this additional information and analysis will not be completed prior to the filing deadline of August 16, 2021. As a result, Akumin will not file such financial report, or the related management's discussion and analysis and CEO and CFO certificates (such filings, collectively, the "Required Documents") before the August 16, 2021 deadline. Akumin is currently working to complete the preparation of the analysis to conclude and facilitate the review of these filings at the earliest possible date and currently expects to be in a position to file the Required Documents within 60 days of the original filing deadline. Akumin has applied to the Ontario Securities Commission (the "OSC"), as principal regulator for Akumin, for the imposition of a management cease trade order under National Policy 12-203 – Management Cease Trade Orders ("NP 12-203") throughout the duration of the default.

The management cease trade order, if approved, will generally not affect the ability of persons who are not or have not been management of Akumin to trade in its securities.

Akumin confirms that it will satisfy the provisions of the alternative information guidelines under NP 12-203 by issuing bi-weekly default status reports in the form of news releases for so long as it remains in default of the above-noted filing requirements. The OSC may issue a general cease trade order against Akumin for failure to file the Required Documents within the prescribed time period or sooner if Akumin fails to file its status reports during the prescribed time limits.

Akumin confirms that there are no insolvency proceedings that Akumin is subject to and there is no other material information relating to its affairs that has not been generally disclosed.

Other than as disclosed herein, Akumin is up to date in its filing obligations.

Financial Results Call Update

In light of the foregoing, Akumin has elected to reschedule its previously announced conference call to discuss its second quarter 2021 financial results from 8:30 a.m. Eastern Time on August 16, 2021 to a time and date to be determined by Akumin following the filing of Akumin's second quarter results.

About Akumin Inc.

Akumin Inc. is a leading provider of freestanding, fixed-site outpatient diagnostic imaging services in the United States with a network of 137 owned and/or operated imaging centers located in Florida, Texas, Pennsylvania, Delaware, Illinois, Kansas, Georgia, and Massachusetts. By combining our clinical expertise with the latest advances in technology and information systems, our centers provide physicians with imaging capabilities to facilitate the diagnosis and treatment of diseases and disorders and may reduce unnecessary invasive procedures, minimizing the cost and amount of care for patients. Our imaging procedures include MRI, CT, positron emission tomography (PET), ultrasound, diagnostic radiology (X-ray), mammography, and other interventional procedures, performed with the help of over 1,500 team members. For more information, visit www.akumin.com.

Key Contacts

For Akumin:

R. Jeffrey White
Investor Relations
1-866-640-5222
jeffrey.white@akumin.com

Forward-Looking Information

Certain statements contained in this press release may constitute forward-looking information. These statements relate to future events or future performance. The use of any of the words "could", "intend", "expect", "believe", "will", "projected", "estimated", "proposed" and similar expressions and statements relating to matters that are not historical facts are intended to identify forward-looking information and are based on Akumin's current belief or assumptions as to the outcome and timing of such future events. In particular, this release contains forward-looking information relating to the anticipated filing of the financial statements, the approval of the management cease trade order by the OSC and the potential issuance of a general cease trade order by the OSC. Such forward-looking information are subject to risks and uncertainties that may cause actual results, performance or developments to differ materially from those contained in the statements, including, but not limited to, the risks described in greater detail in the “Risk Factors” section of Akumin’s Annual Information Form dated March 31, 2021, which is available at www.sedar.com and www.sec.gov. These risks are not intended to represent a complete list of the risks that could affect Akumin; however, these risks should be considered carefully. Further, various assumptions or factors are typically applied in drawing conclusions or making the forecasts or projections set out in forward-looking information. Those assumptions and factors are based on information currently available to Akumin. The forward-looking information contained in this release is made as of the date hereof and Akumin is not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. Because of the risks, uncertainties and assumptions contained herein, investors should not place undue reliance on forward-looking information. The foregoing statements expressly qualify any forward-looking information contained herein.

The TSX has not in any way passed upon the merits of and has neither approved nor disapproved the contents of this news release.

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Tab 8

AKUMIN PROVIDES BI-WEEKLY MCTO STATUS UPDATE

Plantation, FL — October 12, 2021 — Akumin Inc. (NASDAQ/TSX: AKU) ("Akumin") is providing this update on the status of the management cease trade order granted by the Ontario Securities Commission (the "OSC"), as principal regulator of Akumin, on August 20, 2021 (the "MCTO") under National Policy 12-203 – *Management Cease Trader Orders* ("NP 12-203"). The MCTO was granted following Akumin's application to the OSC once it was determined it was not in a position to file its interim financial report for the quarter ended June 30, 2021 along with the related management's discussion and analysis and CEO and CFO certificates (collectively, the "Required Reports") by the reporting deadline of August 16, 2021, as initially announced on August 15, 2021 (the "Default Announcement"). The management cease trade order prevents the officers and/or directors named in the order from trading in Akumin's securities but does not affect the ability of other shareholders, including the public, to trade in securities of Akumin.

For the period ended June 30, 2021, in conjunction with performing its period-end review of accounts receivable and performing additional review of historical collection rates using its enhanced reporting and analytics tools, Akumin identified issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods. In addition, during the review the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections which were occurring and Akumin has determined that a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 is required. Under ASC 250, *Accounting Changes and Error Corrections*, this change is considered an error for accounting purposes and thus a restatement of (i) Akumin's annual financial statements for the period ended December 31, 2020 and December 31, 2019, and (ii) Akumin's interim financial statements for the period ended March 31, 2021, in each case together with their related management's discussion and analysis (collectively, the "Restated Filings"), will be required, which Restated Filings will also account for certain adjustments for the tax impact of these changes, previously uncorrected immaterial misstatements, and other items impacted by the correction of the error. Although the quantum of the adjustments is still being finalized, it is currently expected that the changes in the Restated Filings will result in an accounts receivable balance as at June 30, 2021 of between $65.0 million and $70.0 million as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of $95.9 million.

In addition to the foregoing, while integrating the accounting policies and procedures of Akumin and Alliance HealthCare Services Inc. ("Alliance") in connection with Akumin's acquisition of Alliance on September 1, 2021, Akumin has identified certain differences in recording the capitalization, as opposed to the repair and maintenance expense, of components that are replaced when equipment is repaired. As Akumin remains in the process of finalizing the Required Reports and Restated Filings, Akumin also intends to reflect any further adjustments resulting from the review of the accounting treatment of these components prior to being in a position to file the Required Reports and Restated Filings, which work remains ongoing. Although Akumin's review of the impact of these changes remains preliminary, any adjustments related to such review would be expected to be reflected as an adjustment to the net book value of property and equipment and additional repairs and maintenance costs which are included in operating expenses (any such adjustments, "Capitalization Adjustments").

Riadh Zine, Akumin's Chairman and Co-CEO, said, "Akumin is conducting a robust review process relating to its financial results which is taking more time than originally envisioned in light of the recent acquisition of Alliance HealthCare Services that was completed on September 1, 2021. Notwithstanding the delay in filing our financial statements, we remain confident and excited about the fundamentals of the combined business and thank our various stakeholders for their patience."

Added President and Co-CEO Rhonda Longmore-Grund, "Our leadership team is working very hard to complete this review in an expeditious manner and is focused on ensuring we are delivering excellence

across the organization as we integrate the company, with continued focus on consistent and robust internal controls and policy applications."

Akumin is continuing to work to complete the preparation of the analysis to conclude and facilitate the review of the Required Reports and the Restated Filings and expects to complete the remaining steps in order to file the Required Reports and refile the Restated Filings at the earliest possible date; however, given the additional review and analysis required to finalize the impact, if any, of the Capitalization Adjustments on the Required Reports and Restated Filings, Akumin no longer expects to be able to file the Required Reports and Restated Filings by October 15, 2021. Although the timing of such filings remains to be determined in connection with the completion of such additional analysis, Akumin anticipates filing the Required Reports and Restated Filings prior to November 15, 2021, being the filing deadline for its Q3 interim financial statements and its business acquisition report related to the Alliance acquisition.

Akumin confirms that since the date of the Default Announcement, other than as described above: (i) there has been no material change to the information set out in the Default Announcement that has not been generally disclosed; (ii) there has been no failure by Akumin in fulfilling its stated intentions with respect to satisfying the provisions of the alternative information guidelines set out in NP 12-203; (iii) there has not been any other specified default by Akumin under NP 12-203; and (iv) there is no other material information concerning the affairs of Akumin that has not been generally disclosed.

Akumin confirms that it will continue to satisfy the provisions of the alternative information guidelines under NP 12-203 by issuing bi-weekly default status reports in the form of news releases for so long as it remains in default of the above-noted filing requirements and the MCTO continues to apply.

About Akumin Inc.

Akumin is a national partner of choice for U.S. hospitals, health systems and physician groups, with comprehensive solutions addressing outsourced radiology and oncology service line needs. With the acquisition of Alliance HealthCare Services, Akumin now provides (1) freestanding, fixed-site outpatient diagnostic imaging services through a network of more than 170 owned and/or operated independent imaging centers located in 11 states; and (2) outpatient radiology and oncology solutions to more than 1,000 hospitals and health systems in 46 states. By combining clinical and operational expertise with the latest advances in technology and information systems, Akumin and its ~4,000 Team Members facilitate more efficient and effective diagnosis and treatment for patients and their providers in 46 states. Akumin's imaging procedures include MRI, CT, positron emission tomography (PET and PET/CT), ultrasound, diagnostic radiology (X-ray), mammography, and other interventional procedures; our cancer care services include a full suite of radiation therapy and related offerings. For more information, visit www.akumin.com and www.alliancehealthcareservices-us.com.

For more information relating this press release, please contact:

R. Jeffrey White
Investor Relations
1-866-640-5222
jeffrey.white@akumin.com

Forward Looking Information

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under NP 12-203. Such forward-looking information are subject to risks and uncertainties that may cause actual results, performance or developments to differ materially from those contained in the statements, including, but not limited to, the risks described in greater detail in the “Risk Factors” section of Akumin’s Annual Information Form dated March 31, 2021, which is available at www.sedar.com and www.sec.gov. These risks are not intended to represent a complete list of the risks that could affect Akumin; however, these risks should be considered carefully. Further, various assumptions or factors are typically applied in drawing conclusions or making the forecasts or projections set out in forward-looking information. Those assumptions and factors are based on information currently available to Akumin. The forward-looking information contained in this release is made as of the date hereof and Akumin is not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. Because of the risks, uncertainties and assumptions contained herein, investors should not place undue reliance on forward-looking information. The foregoing statements expressly qualify any forward-looking information contained herein.

The TSX has not in any way passed upon the merits of and has neither approved nor disapproved the contents of this news release.

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Tab 9



AKUMIN PROVIDES BI-WEEKLY MCTO STATUS UPDATE

Plantation, FL — November 8, 2021 — Akumin Inc. (NASDAQ/TSX: AKU) ("Akumin") is providing this update on the status of the management cease trade order granted by the Ontario Securities Commission (the "OSC"), as principal regulator of Akumin, on August 20, 2021 (the "MCTO") under National Policy 12-203 – *Management Cease Trader Orders* ("NP 12-203"). The MCTO was granted following Akumin's application to the OSC once it was determined it was not in a position to file its interim financial report for the quarter ended June 30, 2021 along with the related management's discussion and analysis and CEO and CFO certificates (collectively, the "Required Reports") by the reporting deadline of August 16, 2021, as initially announced on August 15, 2021 (the "Default Announcement"). The management cease trade order prevents the officers and/or directors named in the order from trading in Akumin's securities but does not affect the ability of other shareholders, including the public, to trade in securities of Akumin.

As previously announced, Akumin will be restating its annual financial statements for the periods ended December 31, 2020 and December 31, 2019, its interim financial statements for the period ended March 31, 2021, and each of their related management's discussion and analysis and CEO and CFO certificates (such restated filings, the "Restated Filings") to reflect corrections relating to its estimates for implicit price concessions on historic accounts receivable. Although the timing of such filings remains to be determined, Akumin still anticipates filing the Required Reports and the Restated Filings on or before November 15, 2021.

Also as previously announced, in connection with that restatement, Akumin conducted a review of its procedures for those same periods relating to the capitalization, as opposed to the repair and maintenance expense, of components that are replaced when equipment is repaired. Akumin now confirms that, while in the process of integrating the accounting policies and procedures of the Company and Alliance HealthCare Services, Inc. ("Alliance") in connection with Akumin's acquisition of Alliance on September 1, 2021, management identified certain costs that were capitalized by Akumin under a process that differed from the processes applied by Alliance. Because of these differing processes, Akumin instigated a review of these capitalized expenditures and consulted the limited authoritative GAAP literature, as well as related non-authoritative accounting guidance, with respect to capitalization of property and equipment. While the review is ongoing, Akumin has determined that certain costs that were previously capitalized for the fiscal years ended December 31, 2020 and 2019, and for the quarter ended March 31, 2021, should more accurately be expensed as repair and maintenance. Under ASC 250, *Accounting Changes and Error Corrections*, this change is considered an error for accounting purposes. Although the quantum of the change is still being finalized, it is currently expected that the changes from the Restated Filings will result in a net book value of property and equipment as at June 30, 2021 of $60.4 million as compared to Akumin's previously reported March 31, 2021 net book value of property and equipment of $79.2 million.

Finally, preparation of the Restated Filings and the Required Reports has impacted the timely completion, and auditor's review, of Akumin's interim financial statements for the quarter ended September 30, 2021. The completion of those interim statements is dependent on the results contained in the Restated Filings and the Required Reports. As a result, Akumin may not be able file its interim financial results for the quarter ended September 30, 2021, and the related management's discussion and analysis and CEO and CFO certificates (collectively, the "Q3 Filings") by the reporting deadline of November 15, 2021. Akumin is currently working to complete the Q3 Filings and the auditor's review of such filings at the earliest possible date and currently expects to be in a position to file the Q3 Filings by December 15, 2021, being within 30 days after the November 15, 2021 deadline.

Akumin confirms that since the date of the Default Announcement, other than as described above: (i) there has been no material change to the information set out in the Default Announcement that has not been generally disclosed; (ii) there has been no failure by Akumin in fulfilling its stated intentions with respect to satisfying the provisions of the alternative information guidelines set out in NP 12-203; (iii) there has not

been any other specified default by Akumin under NP 12-203; and (iv) there is no other material information concerning the affairs of Akumin that has not been generally disclosed.

Akumin confirms that it will continue to satisfy the provisions of the alternative information guidelines under NP 12-203 by issuing bi-weekly default status reports in the form of news releases for so long as it remains in default of the above-noted filing requirements and the MCTO continues to apply.

About Akumin Inc.

Akumin is a national partner of choice for U.S. hospitals, health systems and physician groups, with comprehensive solutions addressing outsourced radiology and oncology service line needs. With the acquisition of Alliance HealthCare Services, Akumin now provides (1) freestanding, fixed-site outpatient diagnostic imaging services through a network of more than 170 owned and/or operated independent imaging centers located in 11 states; and (2) outpatient radiology and oncology solutions to more than 1,000 hospitals and health systems in 46 states. By combining clinical and operational expertise with the latest advances in technology and information systems, Akumin and its ~4,000 Team Members facilitate more efficient and effective diagnosis and treatment for patients and their providers in 46 states. Akumin's imaging procedures include MRI, CT, positron emission tomography (PET and PET/CT), ultrasound, diagnostic radiology (X-ray), mammography, and other interventional procedures; our cancer care services include a full suite of radiation therapy and related offerings. For more information, visit www.akumin.com and www.alliancehealthcareservices-us.com.

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The TSX has not in any way passed upon the merits of and has neither approved nor disapproved the contents of this news release.

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Tab 10

November 15, 2021 – Plantation, FL – Akumin Inc. (NASDAQ/TSX: AKU) ("Akumin" or the "Corporation") announced today its financial results for the quarter ended June 30, 2021 ("Q2 Fiscal 2021"), as well as the filing of its restated annual financial statements for the periods ended December 31, 2020 and 2019 and its restated interim financial statements for the quarter ended March 31, 2021 (the "Restated Financial Statements").

Q2 Fiscal 2021

Summary Consolidated Financial Results (in thousands, except for per share amounts)

		(Restated)		(Restated)
	3-month period ended Jun. 30, 2021	3-month period ended Jun. 30, 2020	6-month period ended Jun. 30, 2021	6-month period ended Jun. 30, 2020
Volume in RVUs	1,659	1,094	3,174	2,619
Revenue	69,496	47,365	133,459	115,535
EBITDA [(1)]	6,153	4,428	16,201	14,252
Adjusted EBITDA [(1)]	11,685	5,636	20,583	15,545
EPS –Diluted	(0.10)	(0.11)	(0.15)	(0.15)

[(1)] See "Non-GAAP Measures" below.

Commenting on the Q2 Fiscal 2021 financial results, Riadh Zine, Chairman and Co-Chief Executive Officer of the Corporation, said, "During the quarter, we generated revenue of $69.5 million, which is in-line with consensus estimates. After taking into account the revised approach to implicit price concessions reflected in our restated financial statements, the total service fee revenue per RVU during the second quarter of 2021 was $41, as compared to $42 after the restatement for the full fiscal 2020. Prior to the restatement, we showed total service fee revenue per RVU of $43 for fiscal 2020.

"Akumin's volume for the quarter was approximately 1,659,000 RVUs, compared to approximately 1,094,000 RVUs in the same quarter last year. This represents an increase of 52% year-over-year and a 10% increase compared to Q1 2021. On an organic volume basis, RVUs increased by 45% compared to the same prior period, which was significantly impacted by the COVID-19 pandemic. Volumes for the quarter are in-line with pre-pandemic levels in most regions where we currently operate.

"Adjusted EBITDA during the quarter was $11.7 million as compared to $5.6 million in the same period last year," Mr. Zine concluded.

Restated Financial Statements and Delayed Q3 Filings

As previously announced, Akumin has restated its annual financial statements for the years ended December 31, 2020 and 2019 and its interim financial statements for the period ended March 31, 2021, as well as the management's discussion and analysis for those periods.

The Restated Financial Statements were necessary because management determined corrections were required relating to its estimates for implicit price concessions on historic accounts receivable and because certain costs relating to the replacement of certain component parts that were previously capitalized should more accurately be expensed as repair and maintenance. In accordance with the prior disclosure in Akumin's press releases dated October 12, 2021 and November 8, 2021, the changes made in the Restated Financial Statements resulted in an accounts receivable balance as at June 30, 2021 shown in the Q2 Fiscal 2021 financial statements of $67.6 million, and a restated balance as at March 31, 2021 of $64.2 million, as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of $95.9 million, and a net book value of property and equipment as at June 30, 2021 shown in the Q2 Fiscal 2021 financial statements of $60.4 million, and a restated net book value as at March 31, 2021 of $61.6 million, as compared to Akumin's previously reported March 31, 2021 net book value of property and equipment of $79.2 million.

As disclosed previously, given preparation of the Restated Financial Statements and Akumin's interim financial statements for Q2 Fiscal 2021 has impacted the timely completion, and auditor's review, of Akumin's interim financial statements for the quarter ended September 30, 2021, Akumin will not be able file its interim financial results for the quarter ended September 30, 2021, and the related management's discussion and analysis and CEO and CFO certificates (collectively, the "Q3 Filings") by today's reporting deadline of November 15, 2021. Akumin is currently working to complete the Q3 Filings and the auditor's review of such filings at the earliest possible date and currently expects to be in a position to file the Q3 Filings by December 15, 2021.

In light of the delays related to Akumin's Q3 Filings, Akumin anticipates that it will continue to be subject to the management cease trade order granted by the Ontario Securities Commission (the "OSC"), as principal regulator of Akumin, on August 20, 2021 (the "MCTO") under National Policy 12-203 – Management Cease Trader Orders ("NP 12-203") until such order is rescinded by the OSC following Akumin's filing of the Q3 Filings. Akumin confirms that it will continue to satisfy the provisions of the alternative information guidelines under NP 12-203 by issuing bi-weekly default status reports in the form of news releases for so long as it remains in default of the above-noted filing requirements and the MCTO continues to apply.

"We appreciate the patience of our various stakeholders as we've worked to address the issues identified in our review of Akumin's Q2 and historic financial results," said Mr. Zine with respect to the filings. "We believe the robust review process undertaken is reflective of our prudent approach to ensuring the integrity of our financial statements and public filings. We continue to work hard to complete our Q3 filings as expeditiously as possible and look forward to returning to business as usual going forward, with a focus on maximizing the value of our combined company as we continue to integrate the Alliance acquisition."

Akumin Completed Acquisition of Alliance

As previously announced, subsequent to the end of the quarter, Akumin closed its acquisition of Alliance HealthCare Services, Inc. on September 1, 2021 for a purchase price of $820 million.

Akumin Inc.

Consolidated Financial Statements (Restated)
December 31, 2020
(expressed in US dollars unless otherwise stated)

Akumin Inc.

Consolidated Balance Sheets

(expressed in US dollars unless otherwise stated)

	(Restated-Note 3) December 31, 2020 $	(Restated-Note 3) December 31, 2019 $
Assets		
Current assets		
Cash	44,395,988	23,388,916
Accounts receivable	62,258,757	53,325,516
Prepaid expenses and other current assets	4,431,647	5,001,032
	111,086,392	81,715,464
Security deposits and other assets	4,832,048	1,750,303
Property and equipment (note 5)	63,713,509	64,176,795
Operating lease right-of-use assets (note 4)	127,061,894	126,675,770
Goodwill (notes 4 and 7)	351,609,561	355,667,004
Intangible assets (note 6)	6,748,073	9,432,480
Total assets	665,051,477	639,417,816
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (note 8)	34,295,256	26,325,508
Finance lease liabilities (note 10)	3,264,806	1,789,995
Operating lease liabilities (right-of-use) (notes 4 and 10)	9,345,656	9,276,298
Senior loans payable (note 11)	405,698	3,705,952
Earn-out liability (note 9)	4,688,553	7,529,962
	51,999,969	48,627,715
Finance lease liabilities (note 10)	12,308,780	6,625,409
Operating lease liabilities (right-of-use) (notes 4 and 10)	122,953,656	119,773,692
Senior loans payable (note 11)	389,580,046	336,276,370
Derivative financial instruments (note 11)	-	643,620
Subordinated notes payable – earn-out (note 12)	-	184,485
Earn-out liability (note 9)	-	7,304,105
Accrued payroll taxes (note 26)	1,346,088	-
Deferred tax liability	1,693,011	993,175
Total liabilities	579,881,550	520,428,571
Shareholders' equity		
Additional paid-in capital (common shares: no par value, unlimited authorized number of shares, 70,178,428 and 69,840,928 shares issued and outstanding as of December 31, 2020 and December 31, 2019, respectively) (notes 13 and 16)	160,965,034	158,881,120
Deficit	(80,132,559)	(43,392,028)
Equity attributable to shareholders of Akumin Inc.	80,832,475	115,489,092
Non-controlling interests (note 25)	4,337,452	3,500,153
Total shareholders' equity	85,169,927	118,989,245
Total liabilities and shareholders' equity	665,051,477	639,417,816

Approved by the Board of Directors

(signed) "*Riadh Zine*" Director (signed) "*Tom Davies*" Director

The accompanying notes are an integral part of these consolidated financial statements.

Akumin Inc.

Consolidated Statements of Operations and Comprehensive Loss

(expressed in US dollars unless otherwise stated)

	(Restated-Note 3) Year ended December 31, 2020 $	(Restated-Note 3) Year ended December 31, 2019 $
Revenue		
Service fees - net of allowances and discounts	238,324,319	218,449,704
Other revenue	7,301,666	2,594,903
	245,625,985	221,044,607
Operating expenses		
Cost of operations, excluding depreciation and amortization (note 23)	205,634,606	193,336,730
Depreciation and amortization (notes 5 and 6)	17,060,151	13,491,369
Stock-based compensation (notes 13 and 16)	2,083,914	3,554,765
Operational financial instruments revaluation and other (gains) losses (note 21)	(4,129,473)	979,928
Total operating expenses	220,649,198	211,362,792
Income from operations	24,976,787	9,681,815
Other income and expenses		
Interest expense (notes 11 and 12)	32,781,210	20,783,438
Other financial instruments revaluation and other (gains) losses (note 21)	22,386,827	1,497,734
Settlement costs and other (recoveries) (note 24)	2,324,151	(1,881,233)
Acquisition-related costs	1,079,255	3,403,160
Total other expenses	58,571,443	23,803,099
Loss before income taxes	(33,594,656)	(14,121,284)
Income tax provision (benefit) (note 14)	561,555	(2,797,559)
Net loss and comprehensive loss for the period	(34,156,211)	(11,323,725)
Non-controlling interests (note 25)	2,584,320	1,606,025
Net loss attributable to common shareholders	(36,740,531)	(12,929,750)
Net loss per share (note 20)		
Basic and diluted	(0.52)	(0.19)

The accompanying notes are an integral part of these consolidated financial statements.

Company is party to various legal proceedings, claims, and regulatory, tax or government inquiries and investigations that arise in the ordinary course of business. In assessing loss contingencies related to legal proceedings that are pending against the Company or unasserted claims that may result in such proceedings, the Company, with assistance from its legal counsel, evaluates the perceived merits of any legal proceedings or unasserted claims as well as the perceived merits of the amount of relief sought or expected to be sought. Accrued legal costs for legal contingencies are recorded when they are probable and estimable.

Accounts receivable

Accounts receivable are generally non-interest bearing, unsecured obligations due from patients and third-party payers. They are recognized initially at net realizable value and are subsequently measured at amortized cost less loss allowances. In addition to the implicit price concessions considered and recorded when the service was performed, at each reporting period, the Company estimates the expected credit losses based on a combination of probability-weighted historic and actual bad debts experience with consideration of forward-looking information including changes to economic conditions that would impact its customers (such as unemployment rate and general economic environment for non-individual payors). During the period affected by the COVID-19 pandemic, management's consideration of those changes to economic conditions included the impact of the COVID-19 pandemic.

Accounts receivable are considered to be in default when customers have failed to make the contractually required payments when due. Implicit price concessions are recorded as a reduction in revenue with an offsetting amount reducing the carrying value of the receivable. When a receivable is considered uncollectible, the receivable is written off against the allowance for bad debts account.

3 Restatement of financial statements

Accounts Receivable

During the quarter ended June 30, 2021, in conjunction with performing its quarter-end review of accounts receivable and review of historical collection rates, Akumin identified issues in the recording of write-offs and cash collections on its accounts receivable and acquired accounts receivable balances impacting current and prior periods. During the review, the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections experience. Using additional historical data and enhanced reporting and analytics tools, management was able to more accurately estimate its historical implicit price concessions, which impacts the net realizable value of accounts receivable. This analysis resulted in a reduction in accounts receivable, a reduction in goodwill, and a reduction of net revenue, which are considered errors in accordance with ASC 250, Accounting Changes and Error Corrections ("ASC 250"), and are material to prior periods and required the consolidated financial statements to be restated.

The impact of these errors was (i) a decrease of accounts receivable of $28.9 million, $29.5 million and $5.6 million as of December 31, 2020, December 31, 2019 and January 1, 2019, respectively, (ii) a decrease of goodwill of $9.6 million, $3.7 million and $2.6 million as of December 31, 2020, December 31, 2019 and

January 1, 2019, respectively, and (iii) a decrease of revenue of $5.7 million and $26.4 million for the years ending December 31, 2020 and December 31, 2019, respectively.

Repairs and Maintenance

While performing its review of the interim financial statements for the quarter ended June 30, 2021, management identified costs associated with certain replacement components on equipment when repaired were capitalized and recorded in property and equipment in the Company's consolidated balance sheets as of December 31, 2020 and 2019 and prior periods. Management determined the costs of the replacement components should have been expensed as repairs and maintenance, rather than capitalized. This analysis resulted in a reduction to the carrying value of property and equipment (and the associated amounts of accumulated depreciation), as well as an increase in repairs and maintenance costs and decreases in depreciation expense and loss on disposal of property and equipment, which are included in operating expenses. These are considered errors in accordance with ASC 250, and are material to prior periods and required the consolidated financial statements to be restated.

The impact of these errors was (i) a decrease of property and equipment, net, of $16.6 million, $11.8 million and $7.3 million as of December 31, 2020, December 31, 2019 and January 1, 2019, respectively, (ii) an increase in the cost of operations of $8.5 million and $6.6 million for the years ended December 31, 2020 and December 31, 2019, respectively, (iii) a decrease in depreciation expense of $3.4 million and $2.1 million for the years ended December 31, 2020 and December 31, 2019, respectively, and (iv) a decrease to the loss on disposal of property and equipment of $0.2 million and $0.04 million for the years ended December 31, 2020 and December 31, 2019, respectively.

The tax impact of the above-noted changes, along with other previously uncorrected immaterial misstatements to certain balance sheet and income statement accounts, are included in the total adjustments described in the tables below. The cumulative impact of these items was a decrease in shareholders' equity of $54.6 million and $38.1 million at December 31, 2020 and 2019, respectively.

Line items in the restated consolidated balance sheets

	As at December 31, 2020	Adjustment	As at December 31, 2020 - Restated
Accounts receivable	91,126,923	(28,868,166)	62,258,757
Prepaid expenses and other current assets	3,942,268	489,379	4,431,647
Current assets	139,465,179	(28,378,787)	111,086,392
Security deposits and other assets	4,876,208	(44,160)	4,832,048
Property and equipment	79,929,574	(16,216,065)	63,713,509
Goodwill	360,603,613	(8,994,052)	351,609,561
Total assets	718,684,541	(53,633,064)	665,051,477
Accounts payable and accrued liabilities	34,233,142	62,114	34,295,256
Deferred tax liability	826,566	866,445	1,693,011
Total liabilities	578,952,991	928,559	579,881,550
Deficit	(26,759,151)	(53,373,408)	(80,132,559)
Equity attributable to shareholders of Akumin Inc.	134,205,883	(53,373,408)	80,832,475
Non-controlling interests	5,525,667	(1,188,215)	4,337,452
Total shareholders' equity	139,731,550	(54,561,623)	85,169,927
Total liabilities and shareholders' equity	718,684,541	(53,633,064)	665,051,477

Line items in the restated consolidated statement of operations and comprehensive income (loss)

	Year ended December 31, 2020	Adjustment	Year ended December 31, 2020 - Restated
Service fees - net of allowances and discounts	243,981,183	(5,656,864)	238,324,319
Total revenue	251,282,849	(5,656,864)	245,625,985
Cost of operations, excluding depreciation and amortization	197,803,388	7,831,218	205,634,606
Depreciation and amortization	20,459,767	(3,399,616)	17,060,151
Operational financial instruments revaluation and other (gains) losses	(3,907,666)	(221,807)	(4,129,473)
Total operating expenses	216,439,403	4,209,795	220,649,198
Income from operations	34,843,446	(9,866,659)	24,976,787
Other financial instruments revaluation and other (gains) losses	22,078,745	308,082	22,386,827
Loss before income taxes	(23,419,915)	(10,174,741)	(33,594,656)
Income tax provision (benefit)	(5,751,070)	6,312,625	561,555
Net loss and comprehensive loss for the period	(17,668,845)	(16,487,366)	(34,156,211)
Non-controlling interests	2,728,539	(144,219)	2,584,320
Net loss attributable to common shareholders	(20,397,384)	(16,343,147)	(36,740,531)
Net loss per share - basic and diluted	(0.29)	(0.23)	(0.52)

Line items in the restated consolidated statement of cash flows

	Year ended December 31, 2020	Adjustment	Year ended December 31, 2020 - Restated
Net loss for the period	(17,668,845)	(16,487,366)	(34,156,211)
Depreciation and amortization	20,459,767	(3,399,616)	17,060,151
Deferred income tax expense (benefit)	(5,430,254)	6,130,090	699,836
Financial instruments revaluation and other (gains) losses	18,171,079	86,275	18,257,354
Changes in accounts receivable	(8,259,697)	5,184,977	(3,074,720)
Changes in prepaid expenses, security deposits and other assets	(138,395)	411,115	272,720
Changes in accounts payable and accrued liabilities	9,038,102	(1,168)	9,036,934
Cash flows from operating activities	26,690,553	(8,075,693)	18,614,860
Purchase of property and equipment and intangible assets	(13,420,375)	8,075,693	(5,344,682)
Cash flows from investing activities	(17,082,798)	8,075,693	(9,007,105)

Line items in the restated consolidated balance sheets

	As at December 31, 2019	Adjustment	As at December 31, 2019 - Restated
Accounts receivable	82,867,225	(29,541,709)	53,325,516
Prepaid expenses and other current assets	3,927,949	1,073,083	5,001,032
Current assets	110,184,090	(28,468,626)	81,715,464
Security deposits and other assets	1,967,053	(216,750)	1,750,303
Property and equipment	75,938,590	(11,761,795)	64,176,795
Goodwill	358,802,534	(3,135,530)	355,667,004
Total assets	683,000,517	(43,582,701)	639,417,816
Accounts payable and accrued liabilities	26,262,225	63,283	26,325,508
Derivative financial instruments	951,702	(308,082)	643,620
Deferred tax liability	6,256,820	(5,263,645)	993,175
Total liabilities	525,937,015	(5,508,444)	520,428,571
Deficit	(6,361,767)	(37,030,261)	(43,392,028)
Equity attributable to shareholders of Akumin Inc.	152,519,353	(37,030,261)	115,489,092
Non-controlling interests	4,544,149	(1,043,996)	3,500,153
Total shareholders' equity	157,063,502	(38,074,257)	118,989,245
Total liabilities and shareholders' equity	683,000,517	(43,582,701)	639,417,816

Line items in the restated consolidated statement of operations and comprehensive income (loss)

	Year ended December 31, 2019	Adjustment	Year ended December 31, 2019 - Restated
Service fees - net of allowances and discounts	244,841,400	(26,391,696)	218,449,704
Total revenue	247,436,303	(26,391,696)	221,044,607
Cost of operations, excluding depreciation and amortization	187,802,601	5,534,129	193,336,730
Depreciation and amortization	15,587,200	(2,095,831)	13,491,369
Operational financial instruments revaluation and other (gains) losses	1,017,401	(37,473)	979,928
Total operating expenses	207,961,967	3,400,825	211,362,792
Income from operations	39,474,336	(29,792,521)	9,681,815
Other financial instruments revaluation and other (gains) losses	1,805,816	(308,082)	1,497,734
Income (loss) before income taxes	15,363,155	(29,484,439)	(14,121,284)
Income tax provision (benefit)	3,735,548	(6,533,107)	(2,797,559)
Net income (loss) and comprehensive income (loss) for the period	11,627,607	(22,951,332)	(11,323,725)
Non-controlling interests	2,199,629	(593,604)	1,606,025
Net income (loss) attributable to common shareholders	9,427,978	(22,357,728)	(12,929,750)
Net income (loss) per share - basic and diluted	0.14	(0.34)	(0.19)

Line items in the restated consolidated statement of cash flows

	Year ended December 31, 2019	Adjustment	Year ended December 31, 2019 - Restated
Net income (loss) for the period	11,627,607	(22,951,332)	(11,323,725)
Depreciation and amortization	15,587,200	(2,095,831)	13,491,369
Deferred income tax expense (benefit)	2,092,504	(3,511,985)	(1,419,481)
Financial instruments revaluation and other (gains) losses	2,823,217	(345,555)	2,477,662
Changes in accounts receivable	(25,243,156)	25,656,280	413,124
Changes in prepaid expenses, security deposits and other assets	(3,657,429)	(1,355,327)	(5,012,756)
Changes in accounts payable and accrued liabilities	1,369,580	(1,948,040)	(578,460)
Cash flows from operating activities	12,581,077	(6,551,790)	6,029,287
Purchase of property and equipment and intangible assets	(12,447,634)	6,551,790	(5,895,844)
Cash flows from investing activities	(231,107,615)	6,551,790	(224,555,825)



Management's Discussion and Analysis of Financial Condition and Results of Operations (Restated)

For the years ended December 31, 2020 and 2019

November 15, 2021

The amount of the impairment charge is calculated as the excess of the asset's carrying value over its fair value, which generally represents the discounted future cash flows from that asset or in the case of assets we expect to sell, at fair value less costs to sell.

Income Taxes

Income tax expense comprises current and deferred tax. Income tax is recognized in the consolidated statements of operations and comprehensive income (loss). Current income tax expense represents the amount of income taxes payable based on tax law that is enacted at the reporting date and is adjusted for changes in estimates of tax expense recognized in prior periods. A current tax liability or asset is recognized for income taxes payable, or paid but recoverable, in respect of all periods to date.

The Company uses the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is more likely than not that future taxable income will be available to utilize such amounts. Deferred tax assets are reviewed at each reporting date and are adjusted to the extent that it is no longer probable that the related tax benefits will be realized. When it appears more likely than not that deferred taxes will not be realized, a valuation allowance is recorded to reduce the deferred tax asset to its estimated realizable value. For net deferred tax assets, estimates of future taxable income are considered in determining whether net deferred tax assets are more likely than not to be realized. Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same tax authority and the Company intends to settle its current tax assets and liabilities on a net basis.

The Company reports a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. The Company recognizes interest and penalties, if any, related to unrecognized tax benefits in income tax expense.

Business Combinations

The Company accounts for business combinations using the acquisition accounting method. The total purchase price is allocated to the assets acquired and liabilities assumed based on fair values as at the date of acquisition. Goodwill as at the acquisition date is measured as the excess of the aggregate of the consideration transferred and the amount of any non-controlling interests in the acquired company over the net of the acquisition date fair values of the identifiable assets acquired and the liabilities assumed. Any non-controlling interests in the acquired company are measured at their fair value. Best estimates and assumptions are used in the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business combination date. These estimates and assumptions are inherently uncertain and are subject to refinement. As a result, during the measurement period, which may be up to one year from the business combination date, the Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. On conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded in the consolidated statements of operations and comprehensive income (loss) in the period in which the adjustments were determined.

Disclosure Controls and Procedures and Internal Controls Over Financial Reporting

Management is responsible for establishing and maintaining a system of disclosure controls and procedures to provide reasonable assurance that all material information relating to the Company is gathered and reported to senior management on a timely basis so that appropriate decisions can be made regarding public disclosure. Management is also responsible for establishing and maintaining adequate internal controls over financial reporting to provide reasonable

assurance regarding the reliability of financial reporting and the preparation of financial reports for external purposes in accordance with GAAP. In designing such controls, it should be recognized that due to inherent limitations, any controls, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and may not prevent or detect misstatements. Additionally, management is required to use judgment in evaluating controls and procedures.

In Q2 2021, we assessed the effectiveness of our internal control over financial reporting and disclosure controls and procedures as relates to the periods ended December 31, 2020 and December 31, 2019 using the Committee of Sponsoring Organizations of the Treadway Commission's 2013 framework. Based on their evaluation of the material weaknesses described below, the Chairman and Co-Chief Executive Officer and the Chief Financial Officer of the Company concluded the Company's disclosure controls and procedures for such periods were not effective in respect of the Company's ability to identify, process, record, and value our accounts receivable.

There were no other changes in our internal control over financial reporting that occurred during the twelve months ended December 31, 2020 or December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Identification of material weaknesses

Accounts Receivable

Historically, management used a provision matrix to determine estimated implicit price concessions based on actual experience with consideration of forward-looking information including changes to economic conditions that would have an impact on its customers. Such implicit price concessions were considered when calculating net revenue and subsequently adjusted as necessary based on the estimate. During the quarter ended June 30, 2021, in conjunction with performing its quarter-end review of accounts receivable and review of historical collection rates using its enhanced reporting and analytics tools, and inquiries from our external auditors, Akumin identified issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods. In addition, during the review the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections experience. Using additional historical data that was available together with enhanced reporting and analytics tools, management was able to more accurately estimate its historical implicit price concessions, which impacts the net realizable value of the accounts receivable. This analysis resulted in a reduction in accounts receivable with an offset to net revenue which is material to prior periods and required the consolidated financial statements to be restated.

Through the use of such improved analytical tools and the interpretation of the information produced from such tools, management was able to confirm that its period-end process and related review control, could be enhanced to provide greater accuracy in estimating the implicit price concessions for accounts receivable.

The material weakness was caused because the period-end process design, including review controls, did not effectively consider historical collection information to record write-offs and other adjustments to accounts receivable in order to accurately assess and reflect the effect of implicit price concessions in estimating net realizable value of accounts receivable. Starting in mid-2018 and continuing through 2019, 2020, and into the present, the Company made investments in its revenue cycle platform and data analytics tools. Among other benefits, these investments were intended to better integrate legacy revenue cycle information of acquired businesses into the Company's revenue cycle platform. Subsequent to December 31, 2020, these investments allowed management to perform a more comprehensive analysis of historical collection data on a consolidated basis. After applying this more comprehensive analysis to the quarter ended June 30, 2021, management consequently adopted an enhanced estimation methodology to assess net realizable value of accounts receivable. Applying this new methodology required a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020. Under ASC 250, Accounting Changes and Error Corrections ("ASC 250"), this change was considered an error and thus a restatement of the financial statements for the period ended December 31, 2020 and December 31, 2019, was required.

Capitalization Adjustments

The Capitalization Adjustments primarily relate to capitalization of components that are replaced when equipment is repaired. The Company's rationale for capitalizing these components was that most of the Company's equipment is relatively old, and the components replaced were extending the useful life of the already aged equipment. Management consistently applied this policy to capitalize such items. Based on a thorough review of the components that were replaced and considering the authoritative and non-authoritative GAAP literature, management determined that certain components that were previously capitalized prior to the fiscal year ended December 31, 2020 did not extend the life of the assets and should have been expensed to repair and maintenance rather than capitalized.

The material weakness was caused by review control design, which did not sufficiently ensure whether the nature of capital additions adhered to the Company's capitalization policy. Determinations were made in the judgment of management that certain expenditures extended the useful life of capital assets and therefore should be capitalized. However, considering authoritative and non-authoritative GAAP guidance available and conducting a detailed analysis of the nature of the expenditures, management determined these expenditures should have been recorded as repair and maintenance expenses as opposed to capital expenditures.

Applying revised judgment toward application of the Company's capitalization policy required a material change to previously capitalized medical equipment components as of January 1, 2019, December 31, 2019 and December 31, 2020. Under ASC 250, this change was considered an error and thus a restatement of the financial statements for the period ended December 31, 2020 and December 31, 2019 was required.

Remediation of material weaknesses in internal control over financial reporting

Management is committed to the planning and implementation of remediation efforts to address the material weaknesses, as well as to continuously enhance the Company's internal controls. These remediation efforts have already been made and continuous improvement efforts are underway to enhance the overall financial control environment. Investments made by the Company starting in mid-2018 through 2020 and thereafter in enhanced analytics tools and enhancements to existing information systems identified the material weakness related to implicit price concessions and are expected to continue to upgrade the quality of information available to management. As discussed above, a material weakness was identified related to the application of the Company's capitalization policy, after considering authoritative and non-authoritative guidance available in the accounting literature, and conducting a detailed analysis of the technical nature related to the capitalization of components.

For the period ended June 30, 2021, the Company made financial reporting control changes to address the material weaknesses relating to both its estimates for implicit price concessions and its process for identifying whether component parts replaced in its equipment should be classified as capital or as a repair and maintenance expense. Management enhanced its methodology that quantifies and considers the effects of implicit price concessions on the recognition of receivables and collection history on a consolidated basis. Management has also put in place controls to ensure that its procedures evaluate the appropriate accounting for component parts that are replaced when equipment is repaired. See Note 3 of the Company's restated consolidated financial statements for the year ended December 31, 2020 and December 31, 2019.

To further remediate the material weaknesses identified herein, the management team, including the Chairman and Co-CEO and CFO, have reaffirmed and re-emphasized the importance of internal control, control consciousness and a strong control environment. The Company also expects to continue to review, optimize, and enhance our financial reporting controls and procedures. These material weaknesses will not be considered remediated until the applicable remediated control operates for a sufficient period of time and management has concluded, through testing, that this control is operating effectively.

No assurance can be provided at this time that the actions and remediation efforts the Company has taken or will implement will effectively remediate the material weaknesses described above or prevent the incidence of other significant deficiencies or material weaknesses in the Company's internal controls over financial reporting in the future. The design of

any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving our stated goals under all potential future conditions.

If these remedial measures described above are insufficient to address the material weaknesses described above, or are not implemented timely, or additional deficiencies arise in the future, material misstatements in our interim or annual financial statements may occur in the future and could have the effects described in the "Risk Factors" section of this MD&A.

Risk Factors

You should carefully consider each of the following risk factors, together with all of the information set forth in the Company's public filings at www.sedar.com and www.sec.gov. The risks and uncertainties described below are not the only risks facing us. Additional risks and uncertainties that we are unaware of, or those we currently deem immaterial, may also become important and material factors that affect us. If any of the following risks and uncertainties develops into actual events, our business, financial condition, results of operations, cash flows, or prospects could be materially adversely affected and you could lose all or part of your original investment.

In addition, we are exposed to a variety of financial risks in the normal course of operations, including risks relating to cash flows from operations, liquidity, capital reserves, market rate fluctuations and internal controls over financial reporting. Our overall risk management program and business practices seek to minimize any potential adverse effects on our consolidated financial performance. Financial risk management is carried out under practices approved by our Audit Committee. This includes reviewing and making recommendations to the board of directors regarding the adequacy of our risk management policies and procedures regarding identification of the Company's principal risks, and implementation of appropriate systems and controls to manage these risks.

Significant costs have been incurred in connection with the consummation of the acquisition of Alliance and are expected to be incurred in connection with the integration of Akumin and Alliance into a combined company, including legal, accounting, financial advisory and other costs.

We expect to incur costs to achieve the expected cost-savings in connection with the Acquisition, which may be significant and may be ongoing for the foreseeable future. In addition, we expect to incur a number of non-recurring costs associated with combining our operations with those of Alliance which cannot be estimated accurately at this time. Additional unanticipated costs may be incurred as we integrate our business with that of Alliance. Although we expect that the elimination of duplicative costs, as well as the realization of other efficiencies related to the integration of our operations with those of Alliance, may offset incremental transaction and transaction-related costs over time, this net benefit may not be achieved in the near term, or at all. There can be no assurance that we will be successful in our integration efforts.

We may not realize the anticipated benefits of the Alliance acquisition.

We may not be able to successfully integrate Alliance's operations with our own, and we may not realize all or any of the expected benefits of the Alliance acquisition as and when planned. The integration of Alliance's operations with our own will be complex, costly and time-consuming. We expect that it will require significant attention from senior management and will impose substantial demands on our operations and personnel, potentially diverting attention from other important pending projects. The difficulties and risks associated with the integration of Alliance include:

- the possibility that we will fail to implement our business plans for the combined company, including as a result of legislation or regulation that affects the timing or costs associated with the operations of the combined company or our integration plan;
- possible inconsistencies in the standards, controls, procedures, policies and compensation structures of the two companies;
- limitations prior to the consummation of the acquisition on our ability to work with Alliance management to develop an integration plan;
- the increased scope and complexity of our operations;

Tab 11

FORM 51-102F3
MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Akumin Inc. ("**Akumin**")
8300 W Sunrise Blvd.
Plantation FL 33322
United States

Item 2 Date of Material Change

August 13, 2021 and August 20, 2021.

Item 3 News Release

Press releases were issued via Canada Newswire/Cision on August 15, 2021 and August 23, 2021 and subsequently filed on SEDAR.

Item 4 Summary of Material Change

On August 15, 2021, Akumin announced that the filing of its interim financial report for the quarter ended June 30, 2021, together with the related management's discussion and analysis and CEO and CFO certificates (such filings, collectively, the "Required Documents") would be delayed beyond the August 16, 2021 filing deadline and that Akumin had applied to the Ontario Securities Commission (the "OSC"), as principal regulator for Akumin, for the imposition of a management cease trade order (an "MCTO") under National Policy 12-203 – Management Cease Trade Orders ("NP 12-203") throughout the duration of the default.

Subsequently, on August 23, 2021, Akumin announced that the OSC had granted Akumin's application for the imposition of a MCTO on August 20, 2021, restricting all trading by Riadh Zine, Akumin's President and CEO, and Mohammad Saleem, Akumin's CFO, in securities of Akumin until such time as the MCTO has been revoked.

Item 5 Full Description of Material Change

On August 15, 2021, Akumin announced that the filing of the Required Documents would be delayed beyond the August 16, 2021 filing deadline as both management and its external auditors, Ernst & Young LLP, agreed that additional information and analysis is necessary to complete the Required Documents and Ernst & Young's review of such Required Documents. The additional information and analysis relates to additional credit losses against accounts receivable with respect to prior years. Akumin is continuing to work to complete the preparation of the analysis to conclude and facilitate the review of the Required Documents at the earliest possible date and currently expects to be in a position to file the Required Documents within 60 days of the original filing deadline, being October 15, 2021. In connection with the delayed filing of the Required Documents, Akumin applied to the OSC, as principal regulator for Akumin, for the imposition of a MCTO under NP 12-203 throughout the duration of the default

Subsequently, on August 23, 2021, Akumin announced that the OSC had granted Akumin's application for the imposition of a MCTO on August 20, 2021. The MCTO is to remain in place until two full business days after Akumin files the Required Documents and restricts all trading by Riadh Zine, Akumin's President and CEO, and Mohammad Saleem, Akumin's CFO, in securities of Akumin.

Akumin applied for the MCTO as an alternative to the imposition by the OSC of a full cease trade order. The MCTO prevents the officers and/or directors named in the order from trading in Akumin's securities but does not affect the ability of other shareholders, including the public, to trade in securities of Akumin.

Akumin confirms that it will satisfy the provisions of the alternative information guidelines under NP 12-203 by issuing bi-weekly default status reports in the form of news releases for so long as it remains in default of the above-noted filing requirements. The OSC may issue a general cease trade order against Akumin for failure to file the Required Documents within the prescribed time period or sooner if Akumin fails to file its status reports during the prescribed time limits.

Item 6 Reliance on subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

The name and business number of an executive officer of the Company who is knowledgeable about the material change and this report is:

Riadh Zine
President and Chief Executive Officer
Phone: (954) 320-6910

Item 9 Date of Report

This report is dated August 23, 2021.

Tab 12

NATIONAL BANK OF CANADA
FINANCIAL MARKETS

Research Flash

NBCFM Research

Endri Leno, (416) 869-8047, endri.leno@nbc.ca
Associate: Stephen Kwai, (416) 869-7571, stephen.kwai@nbc.ca
Associate: Eduardo Garcia Hubner, (416) 869-7476, eduardo.garciahubner@nbc.ca

August 16, 2021

Akumin Inc.

AKU / AKU (NASDAQ; TSX): US$2.93; C$3.73
Stock Rating: Sector Perform
Target: US$3.50

Akumin Delays Filing of Q2/2021 Financial Statements

Akumin announced, on August 15, 2021, that it will delay the filing of Q2/2021 regulatory documents, including financial statements, MD&A, etc., that were originally expected to be filed on August 16, 2021. The delay is due to Akumin and its auditor, Ernst & Young, requiring further information and analysis regarding "potential additional credit losses with respect to prior years". Akumin expects to file these documents within 60 days of August 16, 2021.

For Q2/2021, we expect revenues of US$69.9 mln (vs. US$53.6 mln in Q2/20), Adj. EBITDA US$15.1 mln (vs. US$13.7 mln in Q2/20) and Adj. EPS of US$0.01 (vs. US$0.01 in Q2/20). Consensus is looking for revenues of US$70.6 mln and EBITDA of US$16.2 mln.

Takeaways:

The credit losses, quite likely in our view, 1) are related to the attorney-payer A/R writedowns announced during Q4/2020 reporting; 2) suggest a reduced ability to securitize remaining attorney-payer A/R as discussed during Q1/2021 reporting; and 3) are not entirely surprising as AKU's DSO, regularly highlighted in our reports, has repeatedly ticked up from 60 days in Q4/2018 to 131 days in Q1/2021.

Given 1) A/R concerns; 2) the elevated leverage (~6x Net Debt to FY+1 EBITDA); and 3) the acquisition of Alliance HealthCare Services (in default in 2020, no growth in last five years, assets overall less desirable than AKU's legacy ones), we remain on the sidelines.

No change to outlook; reiterate Sector Perform rating and US$3.50 target

We maintain a Sector Perform rating and US$3.50 target, which implies 7.5x 2022e EV/EBITDA.

Disclosures

PRICE, RATING AND TARGET HISTORY: I = Initiation, OP = Outperform, SP = Sector Perform, UP = Underperform, UR = Under Review, R = Restricted; (Source: Factset, NBF)



RISKS:

Reimbursement rates: Akumin relies on private and public payors (Centers for Medicare and Medicaid Services) and reductions in reimbursement rates will have a negative impact on the company.

Access to capital: Akumin's ability to execute on acquisitions depends on its access to capital markets. Should this be compromised as a result of a market downturn or other economic events, the growth of the business would be materially impacted.

ADDITIONAL COMPANY RELATED DISCLOSURES

Akumin Inc.

LEGEND FOR COMPANY RELATED DISCLOSURES:

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5 National Bank Financial Inc. or an affiliate has received compensation for investment banking services from this issuer within the past 12 months.

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15 A redacted draft version of this report has been shown to the issuer for fact checking purposes and changes may have been made to the report before publication.

Tab 13

MORNING NOTE

WEDNESDAY, OCTOBER 13, 2021

Kyle McPhee, CFA (416) 943-6736, kmcphee@cormark.com
Liam Dotchison, Associate (416) 943-4231, ldotchison@cormark.com

Recommendation: **Buy (S)**
Target Price: **$3.75**

Akumin Inc.

(AKU - NASDAQ)

Reporting Delays Continue

Current Price	$2.44	Shares Outstanding (MM)	
52 Wk High	$4.10	Basic	88.9
52 Wk Low	$2.10	Diluted	111.8
Net Debt (MM)	$1,123.6	Mgmt and Dir	16.3
Dividend	0.00	Mkt Cap. (MM)	$216.9
Dividend Yield	0.0%	Float (MM)	$177.0
		EV (MM)	$1,346.0

Fiscal YE Dec 31		2021E	2022E
Revenue (MM)	Q1	$66.9A	$191.4
	Q2	$67.0	$191.9
	Q3	$109.7	$192.5
	Q4	$190.9	$193.0
	FY	$434.5	$768.9
Adj. EBITDA (MM)	Q1	$13.8A	$43.3
	Q2	$12.8	$43.7
	Q3	$23.8	$44.0
	Q4	$43.7	$44.4
	FY	$94.0	$175.4
FCF (MM)		$(11.2)	$24.5
EV/EBITDA		14.3x	7.7x
FCF Yield		(5.2)%	11.3%

General: Note: Capital structure items (cash, debt, shares outstanding, dilutive securities) are all pro forma the impact of the Alliance acquisition that closed in early-September 2021.

Unless otherwise denoted, all figures shown in US$

Event: AKU released details on the accounting issues that delayed Q2/21 financials and triggered the management cease trade order (MCTO). The information has an incrementally negative impact on our outlook. AKU also confirmed it will not be filing the delayed Q2/21 financials and prior period restatements by the original October 15 deadline imposed under the MCTO. While it is not certain that the deadline will be extended by regulators (could mean a cease trade order), we think an extension is likely in this case.

Impact: Our target is now $3.75 (was $4.60), based on 2022 metrics of 8.5x 2022 EV/EBITDA and 6% FCF yield. We now rate the stock Speculative Buy (was Buy).

Commentary: The two buckets of accounting issues are as follows:

(1) As previously known from the outset of the MCTO, past results are being revisited to deal with accounting issues linked to accounts receivable and expected collections. The work is now largely complete and AKU confirmed that $26-$31 MM of the $96 MM accounts receivable balance from Q1/21 will be written-off. This will come alongside restatement of financial results for 2019, 2020, and Q1/21. While the restatement is non-cash, the revised accounting treatment for expected collections should result in a downward revenue restatement and corresponding flow through the income statement. Given AKU's past work to "true-up" the results for 2020, we expect the large majority of the restatement will impact 2019 results alongside a non-material impact on 2020 and Q1/21. More importantly on a forward-looking basis, the issue triggers two forecast changes. First, cash collection from accounts receivable drops by $9 MM (recall that we previously assumed a $20 MM accounts receivable write-off, versus the $26-$31 MM guidance we now have). Second, our revenue forecast is lowered to reflect the revised collections and price concession practices built into revenue recognition. For now, we lower AKU's pre-Alliance Healthcare revenue by 5% with the corresponding flow through the income statement. The 5% impact is our estimate in the absence of any guidance, but we do note that materially larger revisions are unlikely given the work completed with Q4/20 results that already triggered reduced assumptions for conversion of RVU (procedure volume metric) to revenue dollars.

(2) A second/new accounting issue has been identified related to treatment of AKU's imaging equipment repair/maintenance expenditures. As we currently understand, AKU will be reclassifying some expenditures from capex to opex. The reclassification has no impact on free cash flow, but it will trigger lower numbers on the operating cash flow and EBITDA lines. As a starter estimate pending the details we will eventually get in the restated financials, we assume 30% of AKU's pre-Alliance Healthcare capex will be reclassified as an operating expense. This assumption is now also reflected in our forecast.

Our revised forecast is outlined in Figure 1. Beyond the changes noted above, the only other revision relates to $16 MM of expenses in 2021 (no change) that we now count as one-time (no longer hits Adj. EBITDA). The expenses relate to the Alliance Healthcareacquisition and public debt offerings.

Investment Conclusion: We expect the stock to remain under pressure near term, but see quick re-rate potential if the accounting issues resolve as outlined in our forecast.

Company Description:

AKU owns a network of independent outpatient radiology centers in the US. It also recently acquired Alliance HealthCare, a provider of outpatient radiology and oncology services in the US. The combined company is now active in 46 US states with independent outpatient radiology centers and radiation therapy centers, alongside radiology outpatient services provided to ~1,000 hospital and health system customers.

Kyle McPhee, CFA (416) 943-6736, kmcphee@cormark.com
Liam Dotchison, Associate (416) 943-4231, ldotchison@cormark.com

Figure 1: Annual Forecast Revisions

	2021 Est.		2022 Est.	
$MMs, unless noted	**Old**	**New**	**Old**	**New**
Revenue	$443.3	$434.5	$781.0	$768.9
Akumin ex. Alliance	$282.3	$273.5	$298.0	$285.9
Alliance standalone	$161.0	$161.0	$483.0	$483.0
Adj. EBITDA	$92.0	$94.0	$195.3	$175.4
Akumin ex. Alliance	$53.0	$55.0	$78.3	$58.4
Alliance standalone	$39.0	$39.0	$117.0	$117.0
Alliance deal cost synergies	$0.0	$0.0	$0	$0
Adj. EBITDA margin	20.8%	21.6%	25.0%	22.8%
Akumin ex. Alliance	18.8%	20.1%	26.3%	20.4%
Alliance standalone	24.2%	24.2%	24.2%	24.2%
FCF (post WC)	$0.0	-$11.2	$36.9	$24.5
Net debt ex. leases	$1,113.1	$1,124.3	$1,080.2	$1,099.8
Net debt / EBITDA (PF full period Alliance)	6.5x	6.4x	5.5x	6.3x

Source: Company Reports, Cormark Securities

Kyle McPhee, CFA (416) 943-6736, kmcphee@cormark.com
Liam Dotchison, Associate (416) 943-4231, ldotchison@cormark.com

Price Chart and Disclosure Statement

Updated October 13, 2021
*Information updated monthly on or about the 5th of each month



* Cormark has this percentage of its universe assigend as the following:

Buy or Top Pick	89%
Market Perform	9%
Reduce or Tender	2%
Not Rated	0%

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Market Perform expected to perform with its peer group
Reduce expected to underperform its peer group
Tender clients are advised to tender their shares to a takeover bid
Not Rated currently restricted from publishing, or our recommendation is under review
Our ratings may be followed by "(S)" which denotes that the investment is speculative and has a higher degree of risk associated with it.
Additionally, our target prices are set based on a 12-month investment horizon.

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Each research analyst and research associate who authored this document hereby certifies that the recommendations and opinions expressed in the research report accurately reflect their personal views about the subject company (ies) and its (their) securities and that they have not been and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendation(s) in this report.

Tab 14

Akumin Inc.

Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization

AKU / AKU (NASDAQ; TSX)	STOCK RATING	TARGET	EST. TOTAL RETURN
US$1.73; C$2.18	Sector Perform (Unchanged)	US$2.00 (Was US$3.50)	15.6%

Maintain Sector Perform

Q2/21 filings delay reiterated, Q3/21 delayed to December 15, 2021

AKU reiterated that it still intends to file the delayed Q2/21 financials and restated past filings (Q1/21, annual 2020 and 2019) by November 15, 2021. Additionally, AKU announced that the filing of its Q3/21 financial results will likely be delayed to December 15, 2021 (vs. the deadline of November 15, 2021).

Impact from capitalizing instead of expensing of costs

AKU also disclosed that the capitalization (instead of expensing) of repair and maintenance costs is related to its legacy operations rather than the Alliance acquisition. The correction of these practices is expected to result in a PPE Net Book Value of ~US$60.4 mln as at Q2/21 vs. US$79.2 mln in Q1/21 (as previously reported) implying a ~US$19 mln writedown.

Takeaways

The capitalization (vs. expensing) of repair and maintenance capex is disappointing and partially explains the EBITDA margin differential between AKU (23% TTM, 20% 2020, 24% 2019) and its closest peer, Radnet (16% TTM, 11% 2020, 14% 2019). It also suggests that, alongside the writedown of the higher-margin attorney A/R, the margins of AKU legacy operations will likely decrease in the coming quarters.

Lowering target to US$2.00 (was US$3.50)

Following updates on financial filings delays, we are lowering AKU's target EV/EBITDA multiple to ~7x (vs. ~7.5x prior) to reflect the heightened uncertainty on assumptions regarding the legacy AKU business. As a result, our price target moves to US$2.00 (was US$3.50) and we maintain a Sector Perform rating.

STOCK DATA

52-Week High and Low ($)	4.10-1.71
Shares Outstanding (Mln)	87.9
Market Capitalization ($Mln)	152.1
Net Debt ($Mln)	1,181.5

NBCFM ESTIMATES & VALUATION

Fiscal Y/E December	2020E	2021E	2022E
Revenue ($Mln)	251.3	373.7	798.4
Adj. EBITDA ($Mln)	53.7	88.6	197.1
EPS ($)	0.01	0.08	0.23
EV/EBITDA (x)	8.8	15.0	6.8
P/CF (x)	8.3	8.6	3.7
P/E (x)	344.5	22.5	7.6
Total Cash ($Mln)[1]		95.9	
Net Debt to FY+1 EBITDA (x)[2]			6.0

All figures in US$ unless otherwise noted

Financials are proforma the Alliance acquisition which adds in 2022:

Revs of +US$483 mln, EBITDA of +US$125 mln, CFS of +US$0.23.

Pro-forma incl. Debt&Leases of +US$778 mln, and +17.7 mln of additional shares.

Source: Company reports, Bloomberg, Refinitiv and NBF

1. As of QE Q1/21 & Proforma of Alliance Acquisition
2. Net Debt as of Q1/21 & Proforma of Alliance Acquisition

STOCK PERFORMANCE *(Source: FactSet)*



COMPANY PROFILE

Akumin is a provider of freestanding, fixed-site outpatient diagnostic imaging services in the United States with a network of owned and/or operated imaging centres located in Florida, Texas, Pennsylvania, Delaware, Illinois and Kansas. Through its centres, Akumin provides physicians with imaging capabilities to facilitate the diagnosis and treatment of diseases and various medical disorders. The imaging procedures include MRI, CT, positron emission tomography (PET), ultrasound, diagnostic radiology (X-ray), mammography and other interventional procedures.

Analyst **Endri Leno, MSc, MBA, CFA** • (416) 869-8047 • endri.leno@nbc.ca
Associate **Stephen Kwai** • (416) 869-7571 • stephen.kwai@nbc.ca
Associate **Eduardo Garcia Hubner** • (416) 869-7476 • eduardo.garciahubner@nbc.ca

For required disclosures, please refer to the end of the document.

Figure 1: **Adjusted EBITDA margins for Akumin vs. Radnet**

	Adj. EBITDA Margin			
	2019	2020	TTM	2021e Guidance
Akumin	**24.2%**	**19.7%**	**23.2%**	**-**
Radnet	**14.2%**	**10.6%**	**16.1%**	**16.2%**

Source: Company Reports, NBF | Note: EBITDA adjusted to remove gov't stimulus.

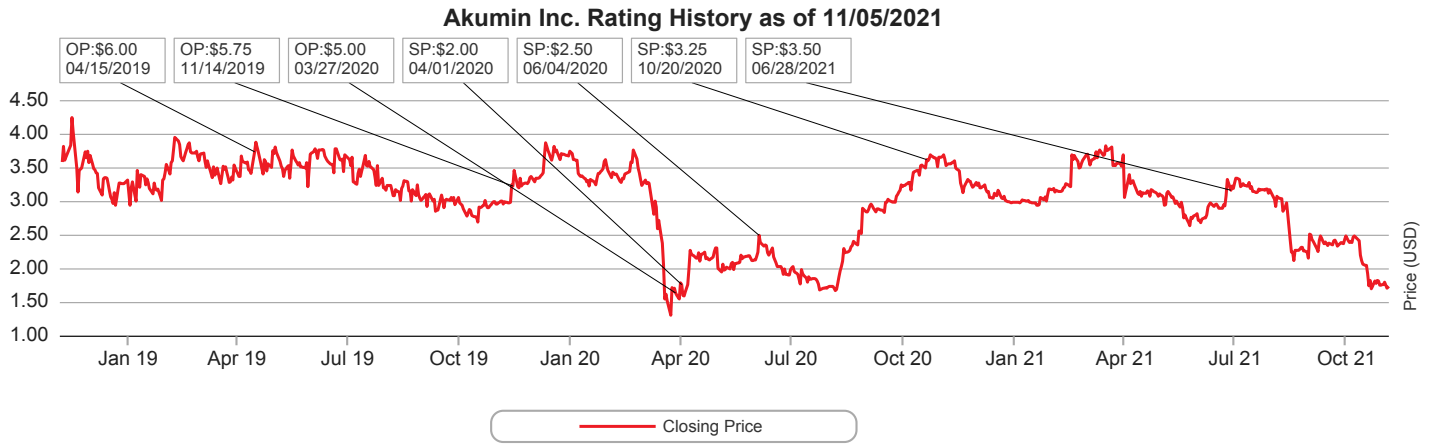
Figure 2: **Comparable Companies Analysis**

Company	Ticker	Price	Market Cap ($MLN)	EV ($MLN)	Net Debt / FY+1 EBITDA	FY+1 EV/EBITDA	FY+1 P/E
Encompass Health	EHC us	$64.79	US$6,447	US$10,011	2.8x	9.1x	14.3x
HCA Healthcare	HCA us	$245.95	US$78,739	US$112,506	2.4x	8.7x	13.2x
Medical Facilities	DR cn	C$9.61	C$299	US$373	1.9x	6.3x	7.5x
MEDNAX	MD us	$28.46	US$2,460	US$3,009	2.0x	11.0x	16.3x
Select Medical	SEM us	$34.73	US$4,674	US$8,006	2.9x	8.8x	12.4x
Surgery Partners	SGRY us	$46.90	US$3,868	US$7,334	6.5x	20.1x	-
Tenet Healthcare	THC us	$75.08	US$8,043	US$22,846	3.6x	6.9x	12.3x
Universal Health Services	UHS us	$127.28	US$10,581	US$14,244	1.8x	7.3x	10.4x
Average	**-**	**-**	**-**	**-**	**3.0x**	**9.8x**	**12.3x**
RadNet	RDNT us	$33.78	US$1,795	US$2,516	2.8x	11.5x	43.0x
Akumin	**AKU cn/us**	**$1.73**	**US$152**	**US$1334**	**6.0x**	**6.8x**	**7.6x**

Source: Bloomberg, Company Reports, NBF

Disclosures

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6 National Bank Financial Inc. or an affiliate has a non-investment banking services related relationship during the past 12 months.
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9 As of the end of the month immediately preceding the date of publication of this research report (or the end of the second most recent month if the publication date is less than 10 calendar days after the end of the most recent month), National Bank Financial Inc. or an affiliate beneficially own 1% or more of any class of common equity securities of this issuer.
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15 A redacted draft version of this report has been shown to the issuer for fact checking purposes and changes may have been made to the report before publication.

RATING DISTRIBUTION

	Outperform	Sector Perform	Underperform
Coverage Universe Ratings Distribution	64%	34%	0%
Investment Banking Distribution	73%	68%	100%

DISCLOSURES

Ratings And What They Mean: PRIMARY STOCK RATING: NBF has a three-tiered rating system that is relative to the coverage universe of the particular analyst. Here is a brief description of each: Outperform (OP) – The stock is expected to outperform the analyst's coverage universe over the next 12 months; Sector Perform (SP) – The stock is projected to perform in line with the sector over the next 12 months; Underperform (UP) – The stock is expected to underperform the sector over the next 12 months. **SECONDARY STOCK RATING:** Under Review (UR) − Our analyst has withdrawn the rating because of insufficient information and is awaiting more information and/or clarification; Tender (T) − Our analyst is recommending that investors tender to a specific offering for the company's stock; Restricted (R) − Because of ongoing investment banking transactions or because of other circumstances, NBF policy and/or laws or regulations preclude our analyst from rating a company's stock. **INDUSTRY RATING:** NBF has an Industry Weighting system that reflects the view of our Economics & Strategy Group, using its sector rotation strategy. The three-tiered system rates industries as

Overweight, Market Weight and Underweight, depending on the sector's projected performance against broader market averages over the next 12 months. **RISK RATING:** As of June 30, 2020, National Bank Financial discontinued its Below Average, Average and Above Average risk ratings. We continue to use the **Speculative** risk rating which reflects higher financial and/or operational risk.

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Tab 15

Akumin Inc.

Filing of Delayed Q2/2021 Financials Provides Some Clarity

AKU / AKU (NASDAQ; TSX) US$2.15; C$2.68	STOCK RATING	TARGET	EST. TOTAL RETURN
	Sector Perform (Unchanged)	US$2.00 (Unchanged)	(7.0)%

Q2/21 Review

Mixed results: Volumes beat, revenues in line, EBITDA miss

AKU reported (delayed) Q2/21 results that were overall mixed (volumes ahead, revs in line, EBITDA / EPS miss) versus our and consensus estimates. Overall volumes of 1,659k RVUs were ~8% ahead of our 1,534k est., while organic volumes of 1,582k were +45% y/y and have largely recovered to pre-pandemic levels. Revenues were US$69.5 mln (vs. US$69.9 mln est. and US $69.6 mln consensus), adj. EBITDA was US$11.7 mln (vs. US$15.1 mln est. and US$14.9 mln consensus) and adj. EPS was -US$0.02 (vs. our US$0.01).

Other Q2/21 updates

Include: 1) AKU has yet to be impacted by labour tightness despite other industry players' headwinds - if labour tightness were to materialize for AKU in 2022 we would not be surprised; 2) CMS changes will have a minor impact of US$2-US$3 mln (~0.5% of 2022 revenue).

Impact from A/R writedowns and improper capitalizations

Alongside Q2/21 results, AKU re-stated financials for Q1/21, 2020 and 2019 with writedowns and/or reductions related to A/R as well as the improper capitalization of PPE expenses. Apart from the negative impression associated with improper accounting, the resulting financial impacts are mostly negative and include: 1) legacy AKU EBITDA margins are now expected, per mgmt, in the higher teens vs. low to mid-20% prior; 2) lower EBITDA results in Net Debt to FY+1 EBITDA ticking up to ~6.5x (vs. 6x prior). The silver lining is that DSO improves to 89 days (vs. 92/131 days in Q1/21 post/pre re-statements)

Maintain Sector Perform rating and US$2.00 target

Following Q2/21 results, we are updating our forecasts to reflect the impact of the restatements (primarily lower EPS, EBITDA and margins). However, the filing of re-stated financials provides clarity (on receivables, costs, margins) for which we tick our target EV/EBITDA multiple up to 7.5x (was 7x) resulting in an unchanged target price of US$2.00. The very elevated leverage and concerns regarding the Alliance acquisition prompt a Sector Perform rating.

STOCK DATA

52-Week High and Low ($)	4.10-1.69
Shares Outstanding (Mln)	89.0
Market Capitalization ($Mln)	191.4
Net Debt ($Mln)	1,184.7

NBCFM ESTIMATES & VALUATION

Fiscal Y/E December	2020A	2021E	2022E
Revenue ($Mln)	251.3	378.7	782.3
Adj. EBITDA ($Mln)	53.7	81.3	184.0
EPS ($)	0.01	0.05	0.20
EV/EBITDA (x)	9.6	16.9	7.5
P/CF (x)	10.3	10.2	6.0
P/E (x)		42.6	10.9
Total Cash ($Mln)[1]		78.4	
Net Debt to FY+1 EBITDA (x)[2]			6.4

All figures in US$ unless otherwise noted

Financials are proforma the Alliance acquisition which adds in 2022:

Revs of +US$483 mln, EBITDA of +US$125 mln, CFS of +US$0.23.

Pro-forma incl. Debt&Leases of +US$778 mln, and +17.7 mln of additional shares.

Source: Company reports, Bloomberg, Refinitiv and NBF

1. As of QE Q2/21 & Proforma of Alliance Acquisition
2. Net Debt as of Q2/21 & Proforma of Alliance Acquisition

STOCK PERFORMANCE *(Source: FactSet)*



COMPANY PROFILE

Akumin is a provider of freestanding, fixed-site outpatient diagnostic imaging services in the United States with a network of owned and/or operated imaging centres located in Florida, Texas, Pennsylvania, Delaware, Illinois and Kansas. Through its centres, Akumin provides physicians with imaging capabilities to facilitate the diagnosis and treatment of diseases and various medical disorders. The imaging procedures include MRI, CT, positron emission tomography (PET), ultrasound, diagnostic radiology (X-ray), mammography and other interventional procedures.

Analyst Endri Leno, MSc, MBA, CFA • (416) 869-8047 • endri.leno@nbc.ca
Associate Stephen Kwai • (416) 869-7571 • stephen.kwai@nbc.ca
Associate Eduardo Garcia Hubner • (416) 869-7476 • eduardo.garciahubner@nbc.ca

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Figure 1: **Akumin's re-statement impact on select financials and metrics**

	2019			2020			Q1/2021		
	Prior	Re-Stated	Δ	Prior	Re-Stated	Δ	Prior	Re-Stated	Δ
Revenues (US$ mln)	$247.4	$221.0	-11%	$251.3	$245.6	-2%	$66.9	$64.0	-4%
Adj. EBITDA (US$ mln)	$59.8	$28.5	-52%	$53.7	$40.4	-25%	$13.8	$8.9	-35%
Margin	24.2%	12.9%	-1,129 bps	21.4%	16.4%	-494 bps	20.6%	13.9%	-666 bps
Adj. EPS ($)	$0.26	-$0.07	-	$0.01	-$0.10	-	$0.00	-$0.04	-
A/R (US$ mln)	$82.9	$53.3	-36%	$91.1	$62.3	-32%	$95.9	$64.2	-33%
Days Sales Outsdtanding	122	88	-28%	132	93	-30%	131	92	-30%
PPE (US$ mln)	$75.9	$64.2	-15%	$79.9	$63.7	-20%	$79.2	$61.6	-22%

Source: Company Reports, NBF

Figure 2: **Quarterly results for Akumin**

	Q2/21	NBFe	Δ%	Q2/20	Δ%
Revenue (US$ mln)	$69.5	$69.9	-1%	$47.4	47%
Adj. EBITDA (US$ mln)	$11.7	$15.1	-23%	$5.6	107%
Adj. EBITDA Margin	17%	22%		12%	
Adj. EPS (US$)	-$0.02	$0.01	-	-$0.07	-
Other					
Overall RVUs (000's)	1,659	1,534	8%	1,094	52%
Rev / RVU (US$)	$41.9	$45.6	-8%	$49.0	-15%

Source: Company Reports, NBF

Figure 3: **Forecast Revisions**

	2021e			2022e		
	Previous	Current	Δ%	Previous	Current	Δ%
Revenue (US$ mln)	$373.7	**$378.7**	1%	$798.4	**$782.3**	-2%
Adj. EBITDA (US$ mln)	$88.6	**$81.3**	-8%	$197.1	**$184.0**	-7%
Adj. EBITDA Margin (%)	24%	**21%**		25%	**24%**	
Adj. EPS (US$)	$0.08	**$0.05**	-34%	$0.23	**$0.20**	-13%

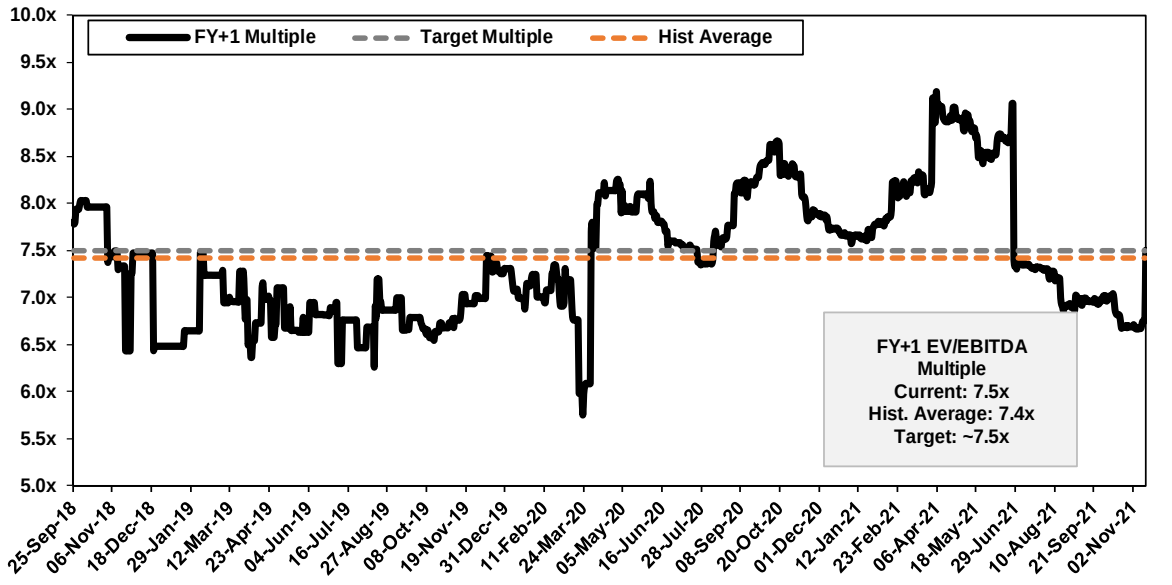
Source: Company Reports, NBF

Figure 4: **Comparable Company Analysis**

Company	Ticker	Price	Market Cap ($MLN)	EV ($MLN)	Net Debt / FY+1 EBITDA	FY+1 EV/EBITDA	FY+1 P/E
Encompass Health	EHC us	$62.61	US$6,229	US$9,793	2.9x	9.0x	14.0x
HCA Healthcare	HCA us	$243.87	US$75,849	US$109,641	2.4x	8.5x	13.1x
Medical Facilities	DR cn	C$8.50	C$264	US$345	2.0x	6.1x	7.2x
MEDNAX	MD us	$28.23	US$2,441	US$2,989	2.0x	11.0x	16.1x
Select Medical	SEM us	$33.71	US$4,522	US$8,023	2.9x	8.7x	11.5x
Surgery Partners	SGRY us	$51.20	US$4,528	US$8,155	6.8x	22.0x	-
Tenet Healthcare	THC us	$80.40	US$8,613	US$23,416	3.5x	7.0x	12.6x
Universal Health Services	UHS us	$129.03	US$10,371	US$14,034	1.8x	7.2x	10.6x
Average	**-**	**-**	**-**	**-**	**3.0x**	**9.9x**	**12.2x**
RadNet	RDNT us	$31.30	US$1,673	US$2,393	2.8x	10.9x	42.4x
Akumin	**AKU cn/us**	**$2.15**	**US$191**	**US$1,376**	**6.4x**	**7.5x**	**10.9x**

Source: Bloomberg, Company Reports, NBF

Figure 5: **FY+1 EV/EBITDA Historical Multiple for AKU**



Source: Bloomberg, Company Reports, NBF

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Tab 16

Canaccord Genuity Capital Markets

Lowering Target Price

Akumin Inc

Healthcare Services

Canadian Equity Research
18 November 2021

Rating	Price Target
BUY *unchanged*	**US$5.00↓** *from US$5.75*
AKU-NASDAQ **AKU-TSX**	Price **US$1.87**

Market Data

52-Week Range (US$) :	1.72 - 3.84
Avg Daily Vol (000s) :	109
Market Cap (US$M) :	166.5
Shares Out. (M) :	89.0
Implied Return to Target (%) :	167.4
Net Debt (Cash) (US$M) :	1,154.1
Enterprise Value (US$M) :	1,321

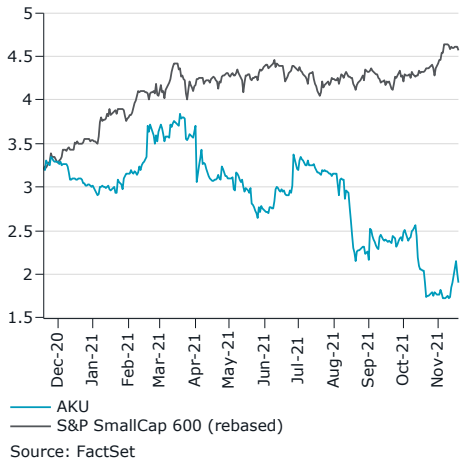
Note: All figures are in USD unless stated otherwise

FYE Dec	2020A	2021E	2022E	2023E
Sales (US$M)	245.6	436.3↓	775.7↓	791.8
Previous	-	*449.2*	*785.1*	-
EBITDA[1] Adj (US$M)	40.4	82.9↓	179.1↓	191.7
Previous	-	*102.4*	*203.7*	-
EPS Dil (US$)	(0.52)	(0.87)↓	(0.70)↓	(0.32)
Previous	-	*(0.49)*	*(0.45)*	-
EV/EBITDA (x)	32.7	15.9	7.0	6.2

[1] : EBITDA and EPS are to common shareholders

Quarterly Sales	Q1	Q2	Q3	Q4
2020A	68.2	47.4	63.2	66.9
2021E	64.0A	69.5A	109.9	192.9
2022E	190.4	193.4	195.0	197.0
2023E	194.9	197.9	198.5	200.5

Quarterly EBITDA Adj	Q1	Q2	Q3	Q4
2020A	9.9	5.6	11.7	13.1
2021E	8.9A	11.7A	21.4	40.9
2022E	41.5	43.9	45.5	48.2
2023E	46.7	47.8	48.0	49.2



Source: FactSet

Priced as of close of business 18 November 2021

Tania Gonsalves, CFA | Analyst | Canaccord Genuity Corp. (Canada) | tgonsalves@cgf.com | 1.416.687.6300

Q2/21: Restatements impact pricing and margin

After months of delay, earlier this week AKU released Q2/21 financials results. This came alongside restated 2019, 2020 and Q1/21 numbers. For the purpose of this note, we focus on Q2 results.

Strong volume beat offset by lower pricing

Revenue grew 47% Y/Y to $69.5M. This only modestly missed our $71.0M forecast and was in line with consensus, despite AKU's new framework for calculating price concessions. Volume beat our estimates, amounting to 1.7M RVUs in Q2 versus our 1.6M forecast. This was up 52% Y/Y (45% Y/Y on an organic basis), off a comparative period that was heavily impacted by COVID-19 restrictions. We back-calculate the conversion factor to be $41.14. This missed our $43.25 estimate, which was based on 2020 pricing that did not include sufficient price concessions.

Sizable adjusted EBITDA miss

Adjusted EBITDA of $11.7M (17% margin) missed our $14.8M (21% margin) and consensus of $14.1M. This was largely due to ~$2.1M/quarter in repair and maintenance costs, that were previously being capitalized, now flowing through the income statement under third-party and professional fees. Adjusting for this, adjusted EBITDA would have been ~$13.8M, much closer to consensus estimates. The offset is a decline in CAPEX from ~5.5% of revenue to ~2% of revenue.

Receivables written down to more manageable level

Accounts receivable were $67.6M at quarter-end. This is down from the pre-restated balance of $95.9M at Q1/21. Note, however, that the majority of write-downs were taken in 2019, not in recent quarters. DSOs are now a much more manageable 89 days versus the well over 100 days they were trending at prior to the restatements.

Balance sheet remains stretched

AKU exited Q2 with $74.4M of cash and $483.0M of debt. This equates to a net debt of $408.7M and a 9.0x leverage ratio. Subsequent to quarter-end, AKU closed the acquisition of Alliance Healthcare for $734.7M in cash and $30.9M in equity. Cash consideration was funded via $715.0M (gross) of new debt, $10.0M in net proceeds from common shares issued to Stonepeak and $30.4M of cash on hand. Accordingly, we estimate AKU's net debt has increased to $1.2B post close of the deal (~6.5-7.0x pro forma adjusted EBITDA).

Changes to our financial forecast

We have made a number of changes to our forecast based on the restatements. We're holding the conversion factor steady at Q2 levels of $41.14, down from our previous estimate of $43.25. Given the now lower revenue run-rate (ex-Alliance), we're also taking reading fees up from 14.5% to 16.0% of revenue, administrative fees up from 4.8% to 5.0% of revenue, and third party and professional fees up from 8.5% to 12.0% of revenue. Conversely, we've reduced our CAPEX forecast from 6% to 2% of revenue (ex-fixed spend associated with the men's health roll-out). Together, this results in our 2022 adjusted EBITDA forecast declining from $203.7M to $179.1M.

Taking our PT down to C$5.00/sh from C$5.75/sh

As we approach the end of the year, we're rolling onto 2023 estimates to value the stock. Our 2023 adjusted EBITDA forecast of $191.7M includes the full $24.0M in forecast cost synergies from Alliance's integration. Continuing to use a 9.0x multiple results in our price target falling to $5.00/sh from $5.75/sh. With an implied ~170% of upside from current levels, we reiterate our BUY rating.

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Overview of restatements

There were two key items affected by the restatements:

- **Accounts receivable:** Previous estimates of collection rates were not reflective of the actual cash being collected. Using additional data and enhanced reporting and analytics tools, AKU is now more accurately estimating historical implicit price concessions. This resulted in a reduction to the net realizable value of accounts receivable and goodwill by $31.7M and $9.6M, respectively, in Q1/21. It also reduced net revenue by $26.4M in 2019, $5.7M in 2020 and $2.9M in Q1/21.
- **Repairs and maintenance:** Certain repair costs associated with replacement components on equipment were previously being capitalized and recorded in P&E; however, should have been expensed as repairs and maintenance. This resulted in a reduction to the carrying value of P&E by $17.6M in Q1/21. It also reduced depreciation and loss on disposal of P&E by a combined $2.1M, $3.6M, and $1.1M in 2019, 2020 and Q1/21 respectively, and increased operating expenses by $6.6M $8.5M and $2.1M in 2019, 2020 and Q1/21, respectively. The cumulative impact of these items was a decrease in shareholders' equity of $58.2M at Q1/21.

Strong volume beat offset by lower pricing

Q2 revenue grew 47% Y/Y to $69.5M (Figure 1). This only modestly missed our $71.0M forecast and was in line with consensus, despite AKU's new framework for calculating price concessions. Volume beat our estimates, amounting to 1.7M relative value units (RVUs) in Q2 versus our 1.6M forecast (back to pre-pandemic levels in most regions). This was up 52% Y/Y (45% Y/Y on an organic basis), off a comparative period that was heavily impacted by COVID-19 restrictions. Payors reimburse based on a conversion factor multiplied by the total RVUs attributed to a procedure. We back-calculate the conversion factor to be $41.14. This missed our $43.25 estimate, which was based on 2020 pricing that did not include sufficient price concessions. This miss was not significant, indicating the majority of receivables write-downs related to pre-2020 periods.

Figure 1: Q2/21 summary results

US$000s (except per share)	Q2/21E	Q2/21A	Delta	Q1/21A	Q/Q %	Q2/20A	Y/Y %
Total Revenue	70,970	69,496	-2.1%	63,963	8.7%	47,365	46.7%
Operating Expenses	56,244	57,768	2.7%	55,142	4.8%	43,207	33.7%
Adj. EBITDA to S/H	14,776	11,685	-20.9%	8,897	31.3%	5,636	107.3%
Adj. EBITDA Margin	20.8%	16.8%	-401 bps	13.9%	290 bps	11.9%	491 bps
Net Income to S/H	(1,468)	(7,356)	nmf	(2,877)	nmf	(7,937)	nmf
Diluted EPS to S/H	($0.02)	($0.10)	nmf	($0.04)	nmf	($0.11)	nmf
ROE to S/H	-16.8%	-33.1%	-1629 bps	-29.3%	-378 bps	-6.6%	-2264 bps
BVPS	$1.95	$1.05	-46.0%	$1.12	-6.0%	$2.23	-52.9%
Net Debt/LTM Adj. EBITDA	6.5x	9.0x	--	9.2x	--	7.6x	--

Source: Company Reports, Canaccord Genuity estimates

Change in accounting of repair and maintenance costs produces sizable adjusted EBITDA miss

Operating expenses of $57.8M were above our forecast of $56.2M. This produced adjusted EBITDA of $11.7M (+107% Y/Y), which missed our $14.8M and consensus of $14.1M. Adjusted EBITDA margin of 17% also missed our 21% forecast but was up Y/Y from 12%. The miss versus our numbers was largely due to ~$2.1M/quarter in repair and maintenance costs, that were previously being capitalized, now flowing through the income statement under third-party and professional fees. Adjusting for this, adjusted EBITDA would have actually been ~$13.8M, much closer to consensus

estimates. The offset is a decline in CAPEX from to ~5.5% of revenue to ~2% of revenue.

Receivables written down to more manageable level

Accounts receivable were $67.6M at quarter-end. This is down from the pre-restated balance of $95.9M at Q1/21. Note however that the majority of write-downs were taken in 2019, not in recent quarters. DSOs are now a much more manageable 89 days versus the well over 100 days they were trending at prior to the restatements. In Q2, 43% of receivables were more than 180 days old (flat Q/Q). These lengthy receivables are all attributable to auto/attorney revenue, which takes longer to collect. Roughly 10% of Q2 service fee revenue was earned from attorney payors, up from ~9% Y/Y.

Balance sheet remains stretched

AKU exited Q2 with $74.4M of cash and $483.0M of debt (excludes operating leases which are offset by RoU assets). This equates to a net debt of $408.7M and a 9.0x leverage ratio. Subsequent to quarter-end, on September 1, AKU closed the acquisition of Alliance Healthcare for $734.7M in cash and $30.9M in equity. Cash consideration was funded via $375.0M ($367.2M net) of new senior secured notes, $340.0M ($327.1M net) of unsecured notes issued to Stonepeak, $10.0M in net proceeds from common shares issued to Stonepeak and $30.4M of cash on hand. Accordingly, we estimate AKU's net debt has increased to a staggering $1.2B post-close of the deal. This equates to ~6.5-7.0x pro forma adjusted EBITDA.

Changes to our financial forecast

We have made a number of changes to our forecast based on the restatements. We're holding the conversion factor steady at Q2 levels of $41.14, down from our previous estimate of $43.25. Given the now lower revenue run-rate this implies (ex-Alliance), we're also taking reading fees up from 14.5% to 16.0% of AKU revenue, administrative fees up from 4.8% to 5.0% of AKU revenue, and third party and professional fees up from 8.5% to 12.0% of AKU revenue (the latter includes replacement component expenses). Conversely, we've reduced our CAPEX forecast from 6% to 2% of AKU revenue (ex-fixed spend associated with the men's health roll out). Together, this results in our 2022 adjusted EBITDA forecast declining from $203.7M to $179.1M (Figure 2).

Figure 2: Changes to our annual forecast

	2021E			2022E			2023E
US$000s (except per share)	Old	New	Delta	Old	New	Delta	New
Total Revenue	449,229	436,304	-2.9%	785,132	775,724	-1.2%	791,760
Operating Expenses	342,912	347,095	1.2%	569,540	577,497	1.4%	580,980
Adj. EBITDA to S/H	102,414	82,911	-19.0%	203,661	179,134	-12.0%	191,688
Adj. EBITDA Margin	22.8%	19.0%	-379 bps	25.9%	23.1%	-285 bps	24.2%
Net Income to S/H	(38,612)	(67,740)	nmf	(40,838)	(62,356)	nmf	(28,127)
Diluted EPS	($0.49)	($0.87)	nmf	($0.45)	($0.70)	nmf	($0.32)
ROE to S/H	-26.4%	-90.1%	-6367 bps	-30.5%	-229.5%	-19900 bps	224.2%
BVPS	$1.74	$0.67	-61.4%	$1.32	$0.02	-98.8%	($0.26)
Net Debt/LTM Adj. EBITDA	11.4x	13.9x	--	5.5x	6.1x	--	5.3x

Source: Canaccord Genuity estimates

Taking our PT down from C$5.75/sh to C$5.00/sh

As we approach the end of the year, we're also opting to roll onto 2023 estimates to value the stock. Our 2023 adjusted EBITDA forecast of $191.7M includes the full $24.0M in forecast cost synergies from Alliance's integration. Continuing to use a 9.0x multiple to value the stock results in our price target falling from $5.75/sh to $5.00/sh (Figure 3). With an implied ~170% of upside from current levels, we

reiterate our BUY rating. We now patiently await Q3 results, which will include Alliance, expected on or before December 15.

Figure 3: Canaccord Genuity's per share valuation

$000s (except per share)	2023E
Adj. EBITDA	191,688
EV/EBITDA Multiple	9.0x
Implied EV	1,725,190
Plus: Cash	43,962
Less: Debt	(1,198,042)
Implied Equity Value	**571,110**
Fully Diluted S/O	112,600
Per Share Target - Diluted	**$5.07**

Source: Company Reports, Canaccord Genuity estimates

Appendix: Important Disclosures

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Investment Recommendation

Date and time of first dissemination: November 18, 2021, 11:21 ET

Date and time of production: November 18, 2021, 11:21 ET

Target Price / Valuation Methodology:

Akumin Inc - AKU

Our one-year price target is equivalent to 9.0x our 2023 EV/EBITDA estimate.

Risks to achieving Target Price / Valuation:

Akumin Inc - AKU

Strategic risk

A key component of AKU's growth strategy is the continued acquisition of diagnostic imaging centres. Risks include the ability to locate new centres that are attractive and complement the business as well as the ability to acquire these centres at attractive prices. Further, AKU may be unable to obtain future financing for new acquisitions on acceptable terms. The inability to complete acquisitions could limit overall growth of the business.

Integration risk

AKU may never realize expected synergies, business opportunities and growth prospects in connection with acquisitions. For example, as was witnessed at Preferred Medical Imaging, any significant reduction in physician referrals could have a negative impact on revenue. Any issues with respect to integrating the operations of an acquisition successfully and on a timely basis, could impact future results.

Reimbursement risk

One of the principal objectives of HMOs and preferred provider organizations is to control the cost of healthcare services. The expansion of these organizations within the geographic areas covered by AKU could have a negative impact on procedure volumes and pricing. The current US President and other US lawmakers have made repeated efforts to repeal or materially modify the ACA. Further, CMS and other payers are seeking to shift from a primarily fee-for-service reimbursement paradigm to a more value-based model. Any changes to the manner in which healthcare services in the US are paid for and reimbursed could adversely impact AKU's business.

Receivables risk

Receivables have moved up significantly over the past few years. This is owing to AKU's rapid pace of M&A, where billing systems take time to integrate, and the onboarding of ADG's personal injury business. Although bad debt as a percent of revenue has been stable at 4-5%, high receivables may be an indicator of future collection issues.

Key man risk

Riadh Zine, CEO, has played a fundamental role in building AKU. He is responsible for locating the majority of takeout candidates, negotiating the recent debt financing package and providing the strategic vision to deploy technology across the radiology process workflow. If he were to depart, our outlook for the company would change materially.

Labour shortage risk

At times, there has been a shortage of qualified radiologists in some markets. Although AKU keeps a running list of radiologists with which it can work, if a significant number of radiologists terminate their relationships with AKU's contracted radiology practices and those practices cannot recruit sufficient qualified radiologists to fulfill their obligations, AKU's ability to maximize the use of its diagnostic imaging centres would be adversely affected.

Distribution of Ratings:

Global Stock Ratings (as of 11/18/21)

Rating	Coverage Universe		IB Clients
	#	%	%
Buy	643	68.48%	44.95%
Hold	140	14.91%	26.43%
Sell	10	1.06%	30.00%
Speculative Buy	141	15.02%	60.99%
	939*	100.0%	

*Total includes stocks that are Under Review

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HOLD: The stock is expected to generate risk-adjusted returns of 0-10% during the next 12 months.

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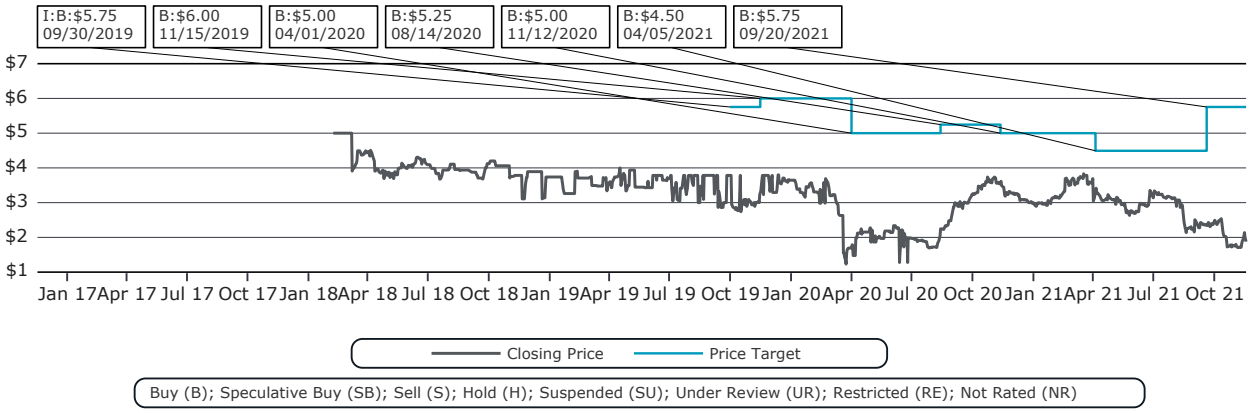
12-Month Recommendation History (as of date same as the **Global Stock Ratings** table)

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Akumin Inc Rating History as of 11/17/2021



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Tab 17

Court File No. CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

TERRY LONGAIR

Plaintiff

and

AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP

Defendants

Proceeding under the *Class Proceedings Act, 1992*

Expert Report
of
Sunita Surana, Ph.D.

February 17, 2023

TABLE OF CONTENTS

I. INTRODUCTION AND SUMMARY OF OPINIONS 1

II. QUALIFICATIONS, COMPENSATION AND MATERIALS CONSIDERED 5

- **A. Qualifications and Compensation 5**
- **B. Materials Considered 6**

III. ASSUMPTIONS AND SUMMARY OF ALLEGED MISREPRESENTATIONS 7

IV. BACKGROUND AND RELEVANT INFORMATION ABOUT AKUMIN 9

- **A. Akumin's Business and Acquisition of Alliance Healthcare 9**
- **B. Akumin's Common Stock 10**
- **C. Akumin's Notes 11**
- **D. Accounts Receivable and Revenue, Property and Equipment, and Total Shareholders' Equity 12**

V. ACADEMIC LITERATURE RELATED TO EARNINGS DISCLOSURES AND RESTATEMENTS OF HISTORIC FINANCIAL STATEMENTS INDICATES THAT THE ALLEGED MISREPRESENTATIONS WOULD BE EXPECTED TO HAVE AN EFFECT ON THE MARKET PRICE OF AKUMIN'S STOCK 14

VI. ANALYST COMMENTARY DURING THE CLASS PERIOD INDICATES THAT THE ALLEGED MISREPRESENTATIONS WERE EXPECTED TO HAVE AN EFFECT ON THE MARKET PRICE OF AKUMIN'S STOCK 19

VII. THE EVENT STUDY METHODOLOGY AND ITS USE IN SECURITIES LITIGATION 27

- **A. Widespread Use of Event Studies in Academic Literature and in Securities Litigation 27**
- **B. Important Factors Considered When Applying Event Studies to Securities Litigation 31**
  - **i) Complex Information and Partial Disclosures 31**
  - **ii) Event Window 32**
  - **iii) Confounding Information 34**
  - **iv) Truth-on-the-Market 35**
- **C. Event Study: Econometric Analysis 36**
  - **i) Estimating a Market Model 37**
  - **ii) Calculating the Excess Returns 41**
  - **iii) Analyzing the Excess Returns 42**

VIII. ANALYSES OF ALLEGED PUBLIC CORRECTIONS 44

- **A. Analysis of the August 15, 2021 Disclosure 45**
  - **i) August 15, 2021 Event 45**

ii) Economic Analysis of the August 15, 2021 Disclosure 46
iii) Summary and Opinion 51
B. Analysis of the October 12, 2021 Disclosure 54
i) October 12, 2021 Event 54
ii) Economic Analysis of the October 12, 2021 Disclosure 57
iii) Summary and Opinion 63
C. Analysis of the November 8, 2021 Disclosure 68
i) November 8, 2021 Event 68
ii) Economic Analysis of the November 8, 2021 Disclosure 70
iii) Summary and Opinion 73
D. Analysis of the November 15, 2021 Disclosure 74
i) November 15, 2021 Event 74
ii) Economic Analysis of the November 15, 2021 Disclosure 76
iii) Summary and Opinion 84

IX. CONCLUSION ON THE ALLEGED PUBLIC CORRECTIONS 85

I. INTRODUCTION AND SUMMARY OF OPINIONS

1. I have been retained by counsel for the Plaintiff, Kalloghlian Myers LLP ("**Counsel**"), in the above-captioned proceeding. For this report, I have been asked to:

(a) Provide my opinion on whether analyst commentary and academic research indicate that the alleged misrepresentations made by Akumin Inc. ("**Akumin**" or the "**Company**") concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim,[1] would be expected to have an effect on the market price of Akumin's common stock.

(b) Calculate the 10-day volume weighted average common stock price after each public correction alleged in the Statement of Claim.

(c) Provide my opinion on whether the public corrections, as alleged in the Statement of Claim, had an effect on the price of Akumin's common stock. In so doing, explain whether the alleged public corrections corresponded to Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim.

2. Counsel has advised me that my report will be used to support the Plaintiff's motion for leave to proceed under Part XXIII.1 of the Ontario *Securities Act* ("***OSA***"), specifically as

[1] Amended Statement of Claim in the above captioned proceeding, dated February 17, 2023 ("**Statement of Claim**"). The Class Period is defined as the period from May 15, 2019 at 7:46 am ET to November 15, 2021 at 7:04 am ET. Statement of Claim, ¶ 2.

evidence to support the Plaintiff's argument that Akumin's Class Period misrepresentations were material, as that term is used in claims brought under Part XXIII.1 of the *OSA*.

3. I summarize my opinions in the subparagraphs below and provide detailed explanations and bases for these opinions in the sections that follow:

(a) In my opinion, analyst commentary and academic research indicate that Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, would be expected to have an effect on the market price of Akumin's common stock. Put another way, based on analyst commentary and academic research, had Akumin told the truth in respect of its misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, in my opinion, Akumin's common stock price would have declined. My opinion is based on:

(i) commentary by security analysts during the Class Period illustrating their reliance on Akumin's historical results and management guidance as well as their focus on the Company's accounts receivable and operating expenses; and

(ii) the academic literature on the importance of unanticipated earnings disclosures and restatements of historic financials.

(b) Akumin's 10-day volume weighted average common stock price:

(i) after the alleged public correction on August 15, 2021 was $2.90 per share, $0.83 per share or 22.1% lower than the closing price of $3.73 per share prior to the disclosure;

(ii) after the alleged public correction on October 12, 2021 was $2.34 per share, $0.76 per share or 24.5% lower than the closing price of $3.10 per share prior to the disclosure;

(iii) after the alleged public correction on November 8, 2021 was $2.37 per share, $0.21 per share or 9.7% higher than the closing price of $2.16 per share prior to the disclosure; and

(iii) after the alleged public correction on November 15, 2021 was $2.30 per share, $0.02 per share or 0.7% lower than the closing price of $2.32 per share prior to the disclosure.

(c) The public corrections on August 15, 2021 and October 12, 2021, as alleged in the Statement of Claim, caused statistically significant declines (at the 5% level) in the price of Akumin's common stock amid higher-than-normal trading volume. Commentary by security analysts and financial press reporting contemporaneously with the alleged public corrections underscores the significance of these alleged public corrections to Akumin's common stock.

The alleged public corrections on November 8, 2021 and November 15, 2021 (including follow-on analyst commentary) did not result in statistically significant declines in the price of Akumin's common stock. The lack of a statistically significant stock price response following these disclosures is consistent with the market having generally anticipated the information from these disclosures after the August 15, 2021 and October 12, 2021 disclosures.

(d) The alleged public corrections corresponded with Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and

equipment, and total shareholders' equity, as alleged in the Statement of Claim.

4. The analyses presented in this report apply generally-accepted and widely-used economic, financial and statistical analyses and are based upon my professional knowledge and experience, as well as on a review of documents and information relevant to this matter.[2]

5. My opinions are based on information available to me as of the date of this report. I reserve the right to amend my conclusions to reflect new information available to me, information provided by other experts in the litigation, future rulings from the court in this action or any motions and trial proceedings.

6. This report is organized as follows. In Section II, I present my qualifications, compensation and materials considered. In Section III, I state the assumptions for my analyses and briefly present the allegations in this case. In Section IV, I provide a summary of information about Akumin. In Section V, I discuss academic literature on the importance of unanticipated earnings disclosures and restatements of prior financial statements to investors. In Section VI, I discuss analyst commentary during the Class Period. In Section VII, I discuss the event study methodology. In Section VIII, I present the results of my event studies of the alleged public corrections. In Section IX, I provide a conclusion of my opinions concerning the alleged public corrections.

[2] In this report, unless otherwise specified, the currency is in Canadian dollars, stock prices are Canadian composite prices retrieved from Bloomberg and time stamps reflect Eastern Time.

7. I have prepared this report having regard to the duty set out in Rule 4.1 of the *Ontario Rules of Civil Procedure*. A signed acknowledgment of the expert's duty is attached as **Exhibit 1**.

II. QUALIFICATIONS, COMPENSATION AND MATERIALS CONSIDERED

A. Qualifications and Compensation

8. I am a Vice President and Senior Economist at Forensic Economics, Inc., an economic consulting firm specializing in the application of economics and finance to legal issues, including issues such as those addressed in this report.

9. For over the last 12 years, I have applied financial economics and econometrics to dozens of securities class action matters in the U.S., Canada and Australia. In these cases, I have analyzed issues of materiality, economic correspondence, market efficiency, loss causation and damages. To make assessments concerning these issues, I have, among other analyses, conducted dozens of event studies.

10. Recently, my opinions related to materiality and negative causation, based on an event study analysis, on behalf of the Defendants, were accepted and cited with approval in Senior United States District Judge for the Southern District of New York, Hon. Denise L. Cote's opinion and order in *Alpha Capital Anstalt v. Intellipharmaceutics International Inc. et al*.[3]

[3] "In support of their negative loss causation defense, the Defendants rely largely on the expert report of Dr. Sunita Surana, an economist. Dr. Surana conducted an event study … In sum, Dr. Surana's report indicates that the IPCI stock price decrease – and any resulting loss to Alpha – that followed the disclosure of Patient's departure was statistically indistinguishable from normal daily fluctuations in the value of IPCI's stock that occurred because of broader market developments or developments related to IPCI that Alpha does not allege to be related to Patient-

11. I have authored articles on the subject of market efficiency that have been published in the *University of Illinois Law Review Online*.

12. I hold a Ph.D. and an M.A. in Economics from the University of Southern California, where I received the Outstanding Academic Achievement Award, the LAS Dissertation Fellowship and the Merit Fellowship. I also hold an M.A. in Economics from the Jawaharlal Nehru University (New Delhi, India), where I received the Ford Foundation Scholarship. I have taught or co-taught courses in undergraduate Econometrics (at the University of Southern California) and Microeconomics (at the Rochester Institute of Technology). My resume is attached as **Exhibit 2**.

13. Compensation to Forensic Economics is based on the number of hours worked plus any out-of-pocket expenses. Forensic Economics is compensated at an hourly rate of US$520 for my work in this matter. To assist me in this assignment, I have used employees of Forensic Economics who worked under my supervision and direction. My compensation is in no way contingent or based on the opinions expressed in this report or the outcome of this or any other matter. All the opinions in this report are my own.

B. Materials Considered

14. In the course of my assignment in this action, I (or employees of Forensic Economics acting under my supervision) reviewed public documents, including Akumin common stock's trading prices and volume, the Company's filings with SEDAR and the U.S. Securities and

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related omissions in the Registration Statement… The Defendants have set forth compelling evidence …" *Alpha Capital Anstalt, v. Intellipharmaceutics International Inc. et al.*, in the United States District Court, Southern District of New York, Case No. 19-cv-09270 (DLC).

Exchange Commission ("**SEC**"),[4] press releases, news articles, analyst reports, academic articles and books, and certain other materials. A review of such materials is necessary to complete my assignment for this report. I have cited in the text of this report specific documents and information that I relied upon in reaching my conclusions. A complete list of documents I considered in forming my opinions is provided in **Exhibit 3**.

15. Unless otherwise stated, I have assumed the accuracy and completeness of the materials relied on for this report and its accompanying exhibits and appendix.

III. ASSUMPTIONS AND SUMMARY OF ALLEGED MISREPRESENTATIONS

16. For the purpose of my analyses, I assume that the Plaintiff will ultimately prevail in establishing that Akumin made untrue statements relating to accounts receivable, revenue, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim. This assumption is standard when using the financial economics and econometrics methodology I employ in this report.

17. In brief, according to the Statement of Claim, Akumin made the following untrue statements during the Class Period relating to accounts receivable, revenue, property and equipment, and total shareholders' equity:[5]

[4] SEDAR, an acronym for the System for Electronic Document Analysis and Retrieval, "is the system used for electronically filing most securities related information with the Canadian securities regulatory authorities." The filings are available at https://www.sedar.com. *See also* https://www.sedar.com/sedar/background_on_sedar_en.htm. The SEC filings are available at https://www.sec.gov/edgar/searchedgar/companysearch.html.

[5] The detailed allegations are contained in the Statement of Claim, ¶¶ 43-57.

Accounts Receivable and Revenue Misrepresentations

> During the Class Period, Akumin purported to report its accounts receivable on a net realizable value based on the amount expected to be collected from customers, which considered historical implicit price concessions and expected collection rates. Akumin did not accurately calculate its historical implicit price concessions. This caused Akumin to overstate its accounts receivable and revenue in its in its public disclosures …[6]

Costs Associated with Repairs and Maintenance Misrepresentations

> During the Class Period, Akumin improperly capitalized costs associated with replacement components when it repaired and recorded these costs in property and equipment. The cost of these replacement components should have been expensed as repairs and maintenance rather than capitalized and recorded as costs in property and equipment. This resulted in Akumin materially overstating its property and equipment, net …[7]

Shareholders' Equity Misrepresentations

> The cumulative impact of these misrepresentations caused Akumin to overstate its total shareholders' equity during the Class Period …[8]

18. The Statement of Claim describes what Akumin should have publicly disclosed instead of its alleged untrue statements concerning accounts receivable, revenue, property and equipment, and total shareholders' equity.[9] For the purposes of this opinion, I have assumed that these allegations are true.

[6] Statement of Claim, ¶ 43.

[7] Statement of Claim, ¶ 50.

[8] Statement of Claim, ¶ 55.

[9] Statement of Claim, ¶¶ 43-57.

IV. BACKGROUND AND RELEVANT INFORMATION ABOUT AKUMIN

A. Akumin's Business and Acquisition of Alliance Healthcare

19. Akumin is a corporation existing under the Ontario *Business Corporations Act* (the "*OBCA*").[10] The Company was formed on August 12, 2015 through an amalgamation of two companies incorporated under the *OBCA*.[11] In its Annual Information Form filed on March 31, 2021, Akumin described its business as follows:

> Akumin is a leading provider of outpatient diagnostic imaging services in the United States, with freestanding centers located in Florida, Texas, Pennsylvania, Delaware, Georgia, Illinois and Kansas. Our centers provide physicians with imaging capabilities to facilitate the diagnosis and treatment of diseases and disorders, thereby reducing the need for unnecessary invasive procedures and contributing to lower costs and better outcomes for patients. Our imaging procedures include magnetic resonance imaging (MRI), computerized tomography (CT), positron emission tomography (PET), ultrasound, X-ray, mammography and other diagnostic or interventional radiology procedures.[12]

20. As of December 31, 2020, Akumin operated 127 outpatient diagnostic imaging centers in the United States spread across seven states and had approximately 1,527 employees.[13]

21. On June 25, 2021, Akumin announced that it had entered into an agreement to acquire Alliance HealthCare Services, Inc. ("**Alliance**"), a provider of radiology and oncology

[10] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, filed March 31, 2021, p. 5. *See also* Akumin Inc. Form 10-K for the Fiscal Year Ended December 31, 2021, filed March 16, 2022, p. 2.

[11] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, filed March 31, 2021, p. 5.

[12] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, filed March 31, 2021, p. 8.

[13] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, filed March 31, 2021, pp. 9, 11.

solutions to hospitals, health systems and physician groups.[14] The total purchase price for the acquisition was approximately US$820 million.[15] The acquisition was completed on September 1, 2021.[16]

22. After the acquisition of Alliance, Akumin operated across 46 states in the U.S., had approximately 3,859 employees as of March 16, 2022 and described its business as follows:

> With the Alliance Acquisition, we provide fixed-site outpatient diagnostic imaging services through a network of approximately 200 owned and/or operated imaging locations; and outpatient radiology and oncology services and solutions to approximately 1,000 hospitals and health systems across 46 states. Our imaging procedures include magnetic resonance imaging ("MRI"), computerized tomography ("CT"), positron emission tomography ("PET" and "PET/CT"), ultrasound, diagnostic radiology (X-ray), mammography, and other related procedures. Akumin's cancer care services include a full suite of radiation therapy and related offerings.[17]

B. Akumin's Common Stock

23. During the Class Period, the Company's shares were listed on the Toronto Stock Exchange ("**TSX**") in Canadian dollar denomination under the ticker symbol "**AKU**" and in U.S. dollar denomination under the ticker symbol "AKU.U".[18] Effective September 3, 2020, the Company's shares were listed in the U.S. on the Nasdaq Capital Market Exchange in U.S. dollar

[14] "Akumin Announces Agreement to Acquire Alliance Healthcare Services," *Canada NewsWire*, June 25, 2021, 7:00 am.

[15] Akumin Inc. Form 10-K for the Fiscal Year Ended December 31, 2021, filed March 16, 2022, p. 2.

[16] Akumin Inc. Form 10-K for the Fiscal Year Ended December 31, 2021, filed March 16, 2022, p. 2.

[17] Akumin Inc. Form 10-K for the Fiscal Year Ended December 31, 2021, filed March 16, 2022, p. 3.

[18] Source: Bloomberg.

denomination under the ticker symbol "AKU", and the "AKU.U" shares listed on the TSX in U.S. dollar denomination were delisted effective September 8, 2020.[19]

24. As of December 31, 2020, Akumin had 70,178,428 shares issued and outstanding.[20] Upon closing of the Alliance acquisition, Akumin had 89,026,997 shares issued and outstanding, including the shares issued as part of the acquisition.[21]

C. Akumin's Notes

25. During the Class Period, Akumin completed offerings of certain notes:

(a) On November 2, 2020, Akumin completed an offering of $400 million of aggregate principal amount of 7.00% senior secured notes due November 1, 2025.[22]

(b) On February 11, 2021, Akumin completed a private offering of $75 million aggregate principal amount of additional 7.00% senior secured notes due November 2025.[23]

[19] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, filed March 31, 2021, p. 8.

[20] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, filed March 31, 2021, p. 29.

[21] "Akumin Announces Closing of Acquisition of Alliance HealthCare Services and Related Financing," *Canada NewsWire*, September 1, 2021, 3:17pm.

[22] Akumin Inc. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three-Month and Six-Month Periods Ended June 30, 2021 and 2020, filed on November 15, 2021, p. 10.

[23] Akumin Inc. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three-Month and Six-Month Periods Ended June 30, 2021 and 2020, filed on November 15, 2021, p. 11.

(c) On August 9, 2021, Akumin completed an offering of $375 million of aggregate principal amount of 7.5% senior secured notes due August 1, 2028.[24]

26. Akumin's 7.00% senior secured notes and 7.5% senior secured notes traded on the secondary market during the Class Period.[25]

D. Accounts Receivable and Revenue, Property and Equipment, and Total Shareholders' Equity

27. In Akumin's financial statements, the Company reported among other financial metrics, its accounts receivable, revenue, property and equipment, and total shareholders' equity. For Q1 2019 to Q1 2021, each of these items is an alleged misrepresentation.

Accounts Receivable and Revenue

28. In its audited annual financial statements for FY 2020, Akumin described accounts receivable, allowance for credit losses and reduction to revenue and accounts receivable balance as follows:

> Accounts receivable are generally non-interest bearing, unsecured obligations due from patients and third-party payers. They are recognized initially at net realizable value and are subsequently measured at amortized cost less loss allowances. In addition to the implicit price concessions considered and recorded when the service

[24] Akumin Inc. Management's Discussion and Analysis of Financial Condition and Results of Operations for the Three-Month and Six-Month Periods Ended June 30, 2021 and 2020, filed on November 15, 2021, p. 12.

[25] Source: TRACE data via Bloomberg. "TRACE® - Trade Reporting and Compliance Engine® - is the Financial Industry Regulatory Authority's (FINRA) fixed income market real-time price reporting and dissemination service." *See* https://www.finra.org/sites/default/files/TRACE_Overview.pdf. FINRA is a U.S. government-authorized not-for-profit organization that oversees U.S. broker-dealers. *See* https://www.finra.org/about.

> was performed, at each reporting period, the Company estimates the ***expected credit losses*** based on a combination of probability-weighted historic and actual bad debts experience with consideration of forward-looking information including changes to economic conditions that would impact its customers (such as unemployment rate and general economic environment for non-individual payors). During the period affected by the COVID-19 pandemic, management's consideration of those changes to economic conditions included the impact of the COVID-19 pandemic.
>
> Accounts receivable are considered to be in default when customers have failed to make the contractually required payments when due. Implicit price concessions are recorded as ***a reduction in revenue with an offsetting amount reducing the carrying value of the receivable***. When a receivable is considered uncollectible, the receivable is written off against the allowance for bad debts account.[26]

Property and Equipment and Operating Expenses

29. In its audited annual financial statements, Akumin stated that "[p]roperty and equipment are recorded at cost and are depreciated over their estimated useful lives …" and "[e]xpenditures for maintenance and repairs are charged to operations as incurred. Operating lease

[26] Akumin Inc. Consolidated Financial Statements for year ended December 31, 2020, filed March 31, 2021, p. 15 (emphasis added). A similar description is provided in Akumin's audited annual financial statements for FY 2019: "Accounts receivable are recognized initially at net realizable value and are subsequently measured at amortized cost less loss allowances. During the year ended December 31, 2019 and 2018, the Company applied the simplified approach to measure expected credit losses, permitted by IFRS 9, which uses a lifetime expected loss allowance for all accounts receivable. Accounts receivable are considered to be in default when customers have failed to make the contractually required payments when due. A provision for credit losses is recorded as a reduction in revenue with an offsetting amount recorded as an allowance for credit losses, reducing the carrying value of the receivable. When a receivable is considered uncollectible, the receivable is written off against the allowance for credit losses account." Akumin Inc. Consolidated Financial Statements for year ended December 31, 2019, filed March 31, 2020, pp. 19-20.

right-of-use equipment buyouts and significant upgrades are capitalized."[27] Property and equipment are classified as assets on a company's balance sheets.[28]

Total Shareholders' Equity

30. Total shareholders' equity in a company is a residual interest, *i.e.*, the owners' claim on all assets not required to meet the claims of the creditors. Therefore, the difference between the value of total assets and total liabilities recorded on the balance sheet equals total shareholders' equity. Accordingly, if assets are overstated, whether due to an overstatement of accounts receivable or property and equipment, then all else being equal, the total shareholder' equity will be overstated as well.

V. ACADEMIC LITERATURE RELATED TO EARNINGS DISCLOSURES AND RESTATEMENTS OF HISTORIC FINANCIAL STATEMENTS INDICATES THAT THE ALLEGED MISREPRESENTATIONS WOULD BE EXPECTED TO HAVE AN EFFECT ON THE MARKET PRICE OF AKUMIN'S STOCK

31. Academic literature related to unexpected earnings disclosures and restatements of historic financial statements indicates that Akumin's Class Period misrepresentations regarding accounts receivable, revenue, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, would be expected to have an effect on the market price of Akumin's common stock. Put another way, based on this academic literature, had Akumin told the truth in respect of its misrepresentations concerning revenue, accounts receivable, property and equipment,

[27] Akumin Inc. Consolidated Financial Statements for year ended December 31, 2020, filed March 31, 2021, p. 9; Akumin Inc. Consolidated Financial Statements for year ended December 31, 2019, filed March 31, 2020, p. 10.

[28] Akumin Inc. Consolidated Financial Statements for year ended December 31, 2020, filed March 31, 2021, p. 3; Akumin Inc. Consolidated Financial Statements for year ended December 31, 2019, filed March 31, 2020, p. 5.

and total shareholders' equity, as alleged in the Statement of Claim, in my opinion, Akumin's common stock price would have declined.

32. A company's reported financial results are among the most important considerations investors utilize in valuing a company's stock. Over a half century ago, in their seminal work, Ball and Brown (1968) demonstrated the statistical association between unexpected earnings disclosures and stock price reactions illustrating that accounting earnings convey important information to the market.[29] Since then, a substantial literature has further documented this relationship. Strong emphasis on reported earnings in business news stories and in analysts' reports is also evidence of the importance of earnings information to investors.

33. Academic research has demonstrated that stock prices, on average, are not only highly correlated with actual accounting earnings but also with security analysts' forecasts of future earnings.[30] In general, analysts' reports are concentrated around corporate news events, particularly corporate earnings disclosures, indicating that such disclosures contain important information used by securities analysts.[31] When forecasting future earnings, analysts base their evaluation in part on the quality of the firm's earnings in previous financial reports. As Penman (2014) explains: "We use current earnings, and entire financial statements, to help us forecast future earnings. The current financial statements are of poor quality if they mislead us in

[29] *See*, *e.g.*, Ray Ball and Phillip Brown, "An Empirical Evaluation of Accounting Income Numbers," *The Journal of Accounting Research* 6(2), Autumn 1968, 159-178.

[30] *See*, *e.g.*, Kent L. Womack, "Do Brokerage Analysts' Recommendations Have Investment Value?" *The Journal of Finance* 51(1), March 1996, 137-167; Paul Asquith, Michael B. Mikhail, and Andrea S. Au, "Information content of equity analyst reports," *Journal of Financial Economics* 75, 2005, 245-282.

[31] Scott E. Stickel, "The Timing of and Incentives for Annual Earnings Forecasts Near Earnings Announcements," *Journal of Accounting and Economics* 11, 1989, 275-292.

forecasting. So, if current earnings are not a good indicator of future earnings, the investor would say that the earnings quality is poor … [L]ow-quality accounting leads to low-quality forecasts and low-quality valuations."[32]

34. Palepu and Healy (2013) explain that external "[a]uditing improves the quality and credibility of accounting data by limiting a firm's ability to distort financial statements to suit its own purpose."[33] Indeed, researchers caution analysts to carefully review the audit report and determine whether it is qualified or unqualified.[34] Thus, academic literature underscores the significance of the external audit to investors.

35. The significance of a company's financial disclosures is also evident from studies demonstrating that "restatements of financial statements result in a substantial loss of market value."[35] This literature shows that stock prices for companies that announce downward restatements of previously reported financial figures result in statistically significant negative excess returns on average. Analyzing two-day market-adjusted excess returns, Palmrose *et al.* (2004) document statistically significant negative mean and median market reactions to restatements of annual and quarterly financial statements.[36] The authors also document a

[32] Stephen H. Penman, Financial Statement Analysis and Security Valuation, Fourth Edition, McGraw Hill, 2014, pp. 607-608 (original emphasis removed).

[33] Krishna G. Palepu and Paul M. Healy, Business Analysis & Valuation: Using Financial Statements, Fifth Edition, South-Western, Cengage Learning, 2013, p. 3-6.

[34] Gerald I. White, Ashwinpaul C. Sondhi, and Dov Fried, The Analysis and Use of Financial Statements, John Wiley & Sons, Inc., 1994, pp. 22-27.

[35] Paul Hribar and Nicole Thorne Jenkins, "The Effect of Accounting Restatements on Earnings Revisions and the Estimated Cost of Capital," *Review of Accounting Studies* 9, 2004, 337-356, at 337.

[36] Zoe-Vonna Palmrose, Vernon J. Richardson, and Susan Scholz, "Determinants of Market Reactions to Restatement Announcements," *Journal of Accounting and Economics* 37, 2004, 59–89.

significant downward revision in earnings forecasts by analysts following the restatements.[37] Hribar and Jenkins (2004) show that accounting restatements lead not only to decreases in expected future earnings forecasts but also the firm's cost of capital and thus the discount rate investors assign (*i.e.*, the risk of attaining the forecasted earnings) to the expected future cash flows:

> By their nature, accounting restatements often lead to downward revisions in future expected earnings because the restatement affects the past time series of earnings, thereby affecting projections based on these figures. Thus, firm value tends to decrease simply because the expected stream of future cash flows is lower. What is not evident, however, is how much (if any) of the downward price revision is attributable to an increase in the discount rate that investors assign to future cash flows because of the restatement. We use analyst forecast revisions following an accounting restatement to proxy for the effect of the restatement on expected future cash flows. Combined with a valuation model, this allows us to estimate empirically the change in the firm's cost of capital following a restatement, and examine whether the perceived risk of the firm going forward is affected by the restatement.
>
> Our results show that reductions in expected future earnings and increases in cost of capital both contribute to the significant loss in market value.[38]

36. The implication of lower earnings on stock valuations can also be understood in the context of the principles of relative valuation, commonly known as the "multiples analysis." A multiples analysis is based on the financial theory that similar assets should sell for a similar price. Under this approach to valuation, a current measure of performance or a single forecast of

[37] Zoe-Vonna Palmrose, Vernon J. Richardson, and Susan Scholz, "Determinants of Market Reactions to Restatement Announcements," *Journal of Accounting and Economics* 37, 2004, 59–89.

[38] Paul Hribar and Nicole Thorne Jenkins, "The Effect of Accounting Restatements on Earnings Revisions and the Estimated Cost of Capital," *Review of Accounting Studies* 9, 2004, 337-356, at 337-338 (emphasis added).

performance is converted into value by applying an appropriate multiple derived from the value of comparable firms to the subject company to obtain an implied value for the subject company.[39] Commonly used multiples or financial ratios include EV (enterprise value, calculated as market capitalization of equity plus outstanding debt, less available cash) to EBITDA (earnings before interest, taxes, depreciation, and amortization) ratio (EV/EBITDA) or price to earnings ratio (P/E).

37. The following simple illustrative example using the EV/EBITDA multiple shows how lower earnings, whether from lower revenue or higher expenses or both, can impact stock valuations. Assume the relevant EV/EBITDA ratio obtained from comparable companies to be 10x, the subject company's number of shares outstanding to be 10 million, the net debt (computed as debt less cash) to be $50 million and the current period EBITDA to be $30 million. Using the current period EBITDA and an EV/EBITDA multiple of 10x would imply a stock value of $25 per share.[40] If, however, the current period revenue is lower or the costs are higher or both and the EBITDA is revised down to $20 million, the resulting stock valuation would be $15 per share. A similar illustration can be performed with a downward revision to a future period EBITDA.

38. The discussion in this section illustrates the importance of unexpected earnings-related disclosures and restatements of historic financials to the stock price of a company and indicates that Akumin's Class Period misrepresentations regarding accounts receivable, revenue, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, were expected to have an effect on the market price of Akumin's common stock. Based on this academic literature, in my opinion, had Akumin told the truth in respect of its misrepresentations concerning

[39] Krishna G. Palepu and Paul M. Healy, Business Analysis & Valuation: Using Financial Statements, Fifth Edition, South-Western, Cengage Learning, 2013, p. 7-1.

[40] Calculated as [(multiple*EBITDA – net debt) / number of shares].

revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, Akumin's common stock price would have declined.

VI. ANALYST COMMENTARY DURING THE CLASS PERIOD INDICATES THAT THE ALLEGED MISREPRESENTATIONS WERE EXPECTED TO HAVE AN EFFECT ON THE MARKET PRICE OF AKUMIN'S STOCK

39. Analyst commentary during the Class Period indicates that Akumin's Class Period misrepresentations regarding accounts receivable, revenue, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, were expected to have an effect on the market price of Akumin's common stock, and in my opinion, had Akumin told the truth in respect of these misrepresentations, Akumin's common stock price would have declined.

40. Securities analysts are important information intermediaries in capital markets. They collect information on specific companies, and in conjunction with their research and assessment of relevant industry and market conditions, publish research reports that contain discussions of recent company-specific events, their projections for future earnings, price targets, and Buy/Hold/Sell investment recommendations.[41] A broad array of investors routinely use analysts' reports to assist them in their valuation of securities traded in public markets.

41. It is well-documented in the financial economic literature that securities analysts play an important role in the interpretation of company-specific information and that investment recommendations and forecasts contained in their research reports, in general, provide valuable

[41] "The majority of these reports include three key summary measures: an earnings forecast, a stock recommendation-such as buy, sell, or hold-and a price target. In addition, these reports frequently present extensive quantitative and qualitative analysis supporting the summary measures." Paul Asquith, Michael B. Mikhail and Andrea S. Au, "Information content of equity analyst reports," *Journal of Financial Economics* 75, 2005, 245-282, at 246.

information to investors and, as such, can significantly influence stock prices. For example, Asquith *et al.* (2005) show that "changes in summary earnings forecasts, stock recommendations, and price targets all provide independent information to the capital markets" and "the strength of the written arguments made to support an analyst's opinion, is also significant."[42]

42. The following aspects of Akumin's Class Period analyst commentary indicate that the Class Period misrepresentations regarding accounts receivable, revenue, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, would be expected to have an effect on the market price of Akumin's common stock:

(a) analysts considered Akumin's disclosures about its quarterly revenue, accounts receivable and operating expenses (financial metrics that have been alleged to be misrepresented) to convey important information;

(b) analyst valuations and price targets were based in part on the Company's reported quarterly results and management guidance related to revenue and earnings (which are affected by both revenue and operating expenses);

(c) accounts receivable was considered as a key risk to analyst valuations; and

(d) analysts' questions during earnings calls related to, among other things, accounts receivable and profit margins (which are adversely affected by operating expenses).

[42] Paul Asquith, Michael B. Mikhail and Andrea S. Au, "Information content of equity analyst reports," *Journal of Financial Economics* 75, 2005, 245-282, at 246.

43. *First*, analyst commentary during the Class Period shows that research analysts considered Akumin's disclosures about its accounts receivable and related revenue offsets to convey important information. Some examples include the following commentary:

> **Receivables jump back up**
>
> One metric we make sure to keep an eye on every quarter is DSOs [Days Sales Outstanding, a measure of the average number of days it takes a company to collect payment after a sale has been made or a service has been rendered]. In Q1, this jumped to 108 days versus 98 days in Q4. Excluding receivables due from auto/attorney payers, which inherently take longer to pay due to the claims process, DSOs were 74 days, up from 66 days at 2019 year-end. The increase in DSOs was due to a mix of seasonally lower collections, billing integration of acquisitions (e.g. certain bills for the three centres in West Palm Beach were purposefully held) and COVID-19. As newly acquired centers are integrated onto AKU's technology-driven billing and collections platform, we expect DSOs (ex-personal injury) to normalize down to 50-60 days.[43]
>
> ***
>
> **Receivables risk**
>
> Receivables have moved up from 53 to 92 days of sales outstanding (DSO) over the last year. This is owing to AKU's rapid pace of M&A, where billing systems take time to integrate, and the onboarding of ADG's personal injury business, excluding which DSOs would have been closer to 69. Although bad debt as a percent of revenue has been stable at 4-5%, high receivables may be an indicator of future collection issues.[44]
>
> ***
>
> **Days sales outstanding (DSO)**: AKU's DSO increased to 81 days (vs. our 55 days est. and 60 days in Q4/18) mainly due to increased business with attorney/auto payors that have a longer revenue cycle. DSO would have been 65 days after excluding auto/attorney payors,

[43] "Q1/20: Sales beat and covenant relief send stock up," Canaccord Genuity research report, June 5, 2020 (emphasis in original and added).

[44] "Q3/19 first look: Top line small beat, net income small miss," Canaccord Genuity research report, November 14, 2019 (emphasis in original and added).

> whose DSO we estimate at ~180-190 days in Q1. As the recent ADG acquisition (announced on April 15 here) has a larger focus on personal injury cases, we expect DSO to tick up over the next couple of quarters. Although not a major concern at the moment, we will monitor this metric going forward and expect diagnostic imaging DSO (ex. auto/attorney payors) to stabilize in the 60-70 days range and the auto/personal injury DSO in the 180-190 days range.[45]
>
> ***
>
> Last week, AKU released Q4 results. Revenue of $58.2M (-24% Y/Y) fell short of our $68.0M forecast and consensus of $68.2M. Volumes were in line at 1.5M RVUs (-3% Y/Y) as AKU had pre-released an estimate in February. The miss stemmed from a $9.2M provision related to a change in the implicit price concessions on receivables that is better aligned with AKU's historical collections experience. This is despite the fact that it recently moved onto a new and improved billing system. This was a one-time event and is not expected to impact future revenues. Adjusted EBITDA of $15.9M (-22% Y/Y) also missed our $16.9M forecast and consensus of $16.6M, but by a lesser margin than revenue as the provision was added back. The reason for the add back was because the provision related to full year 2020 but was all taken in Q4. This produced a 27% adjusted EBITDA margin.[46]

44. Analyst commentary during the Class Period consistently focused on the Company's quarterly results, including revenue. Some examples include:

> Revenue of $47.6 MM was up 42% Y/Y and in line with our forecast. Adjusted EBITDA to shareholders of $9.3 MM, however, fell short of our $10.8 MM estimate…[47]
>
> ***

[45] "Healthcare / Biotechnology: Q1 2019 Earnings Recap," National Bank of Canada research report, May 15, 2019 (emphasis in original and added).

[46] "Q4/20: Spring cleaning the dust out," Canaccord Genuity research report, April 5, 2021 (emphasis added).

[47] "Q1/19: Gotta' Have A Little Faith," Cormark Securities research report, May 17, 2019.

> **ADG Fuels Healthy Q2/19 Results:** Yesterday, AKU reported a strong set of Q2 results. Revenue of $54.0 MM was up 47% Y/Y and in line with our forecast.[48]
>
> ***
>
> **Q4/19 big top-line beat:** Revenue of $77.0M was up 70% Y/Y, coming in well ahead of us at $69.9M and consensus at $67.5M….[49]
>
> ***
>
> On Wednesday evening, Akumin reported a very strong set of Q2 results. The stock was up 10% yesterday in response to this.
>
> **Revenue beats on volume and pricing** Revenue of $53.6M was well ahead of both our $48.1M and the Street's $45.5M forecast. The beat is attributable to better-than-expected pricing and volumes.[50]
>
> ***
>
> **Q1/21 results highlights**
>
> This morning, AKU released a mixed set of Q1 results. Revenue of $66.9M was down 6% Y/Y but ahead of our $63.7M forecast and consensus of $64.8M.[51]

45. Analyst research reports published during the Class Period also show that analysts considered Akumin's disclosures about the Company's management of operating expenses to convey financial information important for the Company's stock valuation. Some examples include:

[48] "Q2/19: If You Build It, They Will Come," Cormark Securities research report, August 15, 2019 (emphasis in original).

[49] "Thesis playing out, but in the shadow of COVID-19," Canaccord Genuity research report, April 1, 2020 (emphasis in original).

[50] "Q2/20: Cost containment on display," Canaccord Genuity research report, August 14, 2020 (emphasis in original).

[51] "Healthy Q1; looking forward to decline in DSOs and men's health roll-out this year," Canaccord Genuity research report, May 17, 2021 (emphasis in original).

Expense management will be key to turnaround

Figure 2 provides a breakdown of AKU's cost structure in 2019. Roughly 40% of total operating expenses are variable, meaning they will move in parallel with sales. The remaining 60% is fixed. These will need to be materially cut in order for AKU to protect its EBITDA margin.[52]

***

Expenses weigh on profitability

Operating expenses of $51.1M were significantly above the $42.9M we had forecast. While the miss was broadspread across every expense line item, on an absolute basis, employee compensation and third party and professional fees had the largest discrepancy compared to our estimates. As a result, we didn't get the EBITDA margin expansion we were looking for. Adjusted EBITDA to shareholders was $15.0M compared to our $17.1M and the Street's $15.4M. This equates to a margin of 21%, up from 19% Y/Y, but below the 26% we've seen over the last two quarters and were expecting would continue.[53]

***

AKU's accelerating expansion across Florida has been a key growth driver but also a meaningful source of margin pressure. Market share growth in the state fueled organic volume growth of 8% Y/Y in Q1. However, we saw adjusted EBITDA margins contract from 20% to 19% Y/Y, despite AKU's operating efficiencies. We believe the addition of ADG's high margin personal injury business and Georgia volumes will offer significant reprieve.[54]

[52] "Thesis playing out, but in the shadow of COVID-19," Canaccord Genuity research report, April 1, 2020 (emphasis in original and added).

[53] "Q1/20: Sales beat and covenant relief send stock up," Canaccord Genuity research report, June 5, 2020 (emphasis in original and added).

[54] "Q1/19: Gotta' Have A Little Faith," Cormark Securities research report, May 17, 2019 (emphasis added).

46. *Second*, research reports issued during the Class Period show that analysts analyzed Akumin's disclosures and provided valuations and share price forecasts based on the Company's quarterly results and management guidance for future results:

> **Valuation**
>
> Our numbers have shifted based on Q3 results and the Q4 acquisition.[55]
>
> ***
>
> Alongside Q4 results, AKU provided annual guidance for 2021:
> • Volume of 6.25-6.45M RVUs, assuming no M&A;
> • Revenue of $270.0-279.0M based on a stable ~$43 conversion factor; and
> • Adjusted EBITDA of $65.0-70.0M, assuming margins rebound to 24-25%.
> We've updated our 2021 forecast to align with the midpoint of guidance.[56]
>
> ***
>
> The update triggers a negative forecast revision linked to new guidance for volume/RVU conversion to revenue dollars.[57]

47. *Third*, another indicator is that accounts receivable was identified as one of Akumin's risks to achieving the target price and valuation. Canaccord analysts identified several risks for Akumin, including a risk relating to receivables:

> **Risks to achieving Target Price / Valuation:** […] **Receivables risk** Receivables have moved up from 53 to 92 days of sales outstanding (DSO) over the last year. This is owing to AKU's rapid

[55] "Q3/19: No surprises here," Canaccord Genuity research report, November 15, 2019 (emphasis in original and added).

[56] "Q4/20: Spring cleaning the dust out," Canaccord Genuity research report, April 5, 2021 (emphasis added).

[57] "Noisy End To 2020; 2021 Guidance Falls Short," Cormark Securities research report, April 5, 2021 (emphasis added).

> pace of M&A, where billing systems take time to integrate, and the onboarding of ADG's personal injury business, excluding which DSOs would have been closer to 69. Although bad debt as a percent of revenue has been stable at 4-5%, high receivables may be an indicator of future collection issues.[58]

48. *Fourth*, analysts' participation in Akumin's quarterly earnings calls shows that analysts focused on, among other things, the Company's accounts receivable[59] and EBITDA margins (which would be adversely affected if expenses are understated as is alleged here).[60] This indicates that these disclosures were important to analysts' evaluation of Akumin.

49. For these reasons, analysts' commentary indicates that Akumin's Class Period misrepresentations regarding accounts receivable, revenue, property and equipment and total shareholders' equity, as alleged in the Statement of Claim, would be expected to have an effect on the market price of Akumin's common stock, and in my opinion, had Akumin told the truth in respect of these misrepresentations, Akumin's common stock price would have declined.

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[58] "$75.0M debt deal and Q4/20 preview," Canaccord Genuity research report, February 11, 2021 (emphasis in original).

[59] *See*, *e.g.*, Akumin Inc. Q2 2019 Earnings Call, Bloomberg Transcript, August 14, 2019, p. 5; "Q1 2020 Earnings Akumin Inc Earnings Call – Final," CQ FD Disclosure, June 4, 2020, p. 5; Akumin Inc. Q3 2020 Earnings Call, Bloomberg Transcript, November 12, 2020, p. 9; Akumin Inc. Q4 2020 Earnings Call, Bloomberg Transcript, April 1, 2021, pp. 13-14; Akumin Inc. Q1 2021 Earnings Call, Bloomberg Transcript, May 17, 2021, pp. 5-6.

[60] *See*, *e.g.*, Akumin Inc. Q2 2019 Earnings Call, Bloomberg Transcript, August 14, 2019, p. 7; Akumin Inc. Q3 2019 Earnings Call, Bloomberg Transcript, November 14, 2019, p. 9; Akumin Inc. Q3 2020 Earnings Call, Bloomberg Transcript, November 12, 2020, p. 7; Akumin Inc. Q1 2021 Earnings Call, Bloomberg Transcript, May 17, 2021, p. 9.

VII. THE EVENT STUDY METHODOLOGY AND ITS USE IN SECURITIES LITIGATION

50. In this section, I describe the event study methodology and its application in securities litigation. In the next section, I conduct event studies of the public disclosures that allegedly corrected the misrepresentations as alleged in the Statement of Claim.

A. Widespread Use of Event Studies in Academic Literature and in Securities Litigation

51. Modern finance theory holds that the market price of a stock reflects the present value of expected future cash flows to the stockholder.[61] As such, new information that causes the market to alter its expectations of future cash flows will cause a re-pricing of the security to reflect the new information.[62] The event study methodology, described in detail below, provides an empirical framework to measure the effect on security prices of the new information.[63]

52. While the first event study was conducted in the 1930s,[64] the methodology introduced in the 1969 seminal paper by Fama, Fisher, Jensen and Roll[65] underlies the modern event study analysis. The event study approach has many applications and, as such, its use is

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[61] Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance, 8th Edition, McGraw Hill, 1996, p. 61-62.

[62] *See*, *e.g.*, Eugene F. Fama, "Efficient Capital Markets: II," *Journal of Finance* 46(5), December 1991, 1575-1617; Eugene F. Fama, "Two Pillars of Asset Pricing," *American Economic Review* 104(6), 2014, 1467-85.

[63] Frank Torchio, "Proper Event Study Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 161.

[64] A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35(1), March 1997, 13-39, citing James Clay Dolley, "Characteristics and Procedure of Common Stock Split-Ups," *Harvard Business Review* 11, 1933, 316-26. *See also* James Clay Dolley, "Common-Stock Split-Ups - Motives and Effects," *Harvard Business Review* 12(1), 1933, 70-81.

[65] Eugene F. Fama, Lawrence Fisher, Michael C. Jensen and Richard Roll, "The Adjustment of Stock Prices to New Information," *International Economic Review* 10(1), 1969, 1-21.

abundant.[66] For the past several decades, economists have used the event study methodology to measure the effect on stock prices of different forms of new information relevant to a company's stock valuation.[67] For example, events studies have been applied to corporate events such as earnings announcements, mergers and acquisitions, stock splits, and issues of new equity or debt, to name a few.[68] In the field of law and economics, event studies have been used to study the impact of changes in regulatory environment.[69]

53. The use of event studies in securities litigation also has a long history.[70] For over two decades, event studies have been employed in securities litigation to provide objective

[66] For a review of the widespread use of event studies in academic scholarship and a comprehensive discussion of the event study methodology, *see* John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, 149-180; A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35(1), 1997, 13-39.

[67] I show in **Appendix A** that Akumin common stock traded in an informationally efficient market (*i.e.*, the stock price reflected all publicly available information) at the time the corrective disclosures were made. Specifically, I present statistics over the time period spanning June 25, 2021, when Akumin made the announcement to acquire Alliance, to November 19, 2021, the end of the week after the final corrective disclosure on November 15, 2021. In published academic research, event studies are conducted for different types of securities, including stocks that trade on the Over-the-Counter ("**OTC**") market and securities that do not trade every day. *See*, *e.g.*, Stephen F. Borde, Anthony K. Byrd and Stanley M. Atkinson, "Stock Price Reaction to Dividend Increases in the Hotel and Restaurant Sector," *Journal of Hospitality & Tourism Research* 23(1), February 1999, 40-52; and Laurentius Marais, Katherine Schipper and Abbie Smith, "Wealth Effects of Going Private for Senior Securities." *Journal of Financial Economics* 23, 1989, 155-191.

[68] *See*, *e.g.*, William H. Beaver, "The Information Content of Annual Earnings Announcements," *Journal of Accounting Research* 6, 1968, 67-92.

[69] G. William Schwert, "Using Financial Data to Measure Effects of Regulation," *The Journal of Law and Economics* 24(1), 1981, 121-158.

[70] *See*, *e.g.*, Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, p. 545 (emphasis added) ("Litigants, including the Securities and Exchange Commission (SEC), increasingly have applied modern financial economics in securities fraud cases… An event study, a technique developed and refined by financial economists, can be very useful in securities fraud cases."); Frank Torchio, "Proper Event Study

scientific assessments that can be used in making inferences regarding materiality, loss causation, artificial inflation and damages.[71,72] In general, the effect on share price from disclosure failures (*i.e.*, misrepresentations) is measured as this conduct is actually revealed through disclosures that eventually cause the disclosure failures and their economic effects to come to light (*i.e.*, public corrections).[73] Such a disclosure is often called a "corrective disclosure" and refers to an identified event in a securities context wherein the information conveyed in that disclosure has economic correspondence or a connection to the information that is alleged to have been misrepresented or

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Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 159 ("For over two decades, event studies have been prominently used as a valuation technique in various litigation matters including securities litigation.").

[71] *See*, *e.g.*, Frank Torchio, "Proper Event Study Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 163 (emphasis added and footnotes omitted) ("Event study methodology has been widely used in fraud-on-the-market cases to assess the effect on market prices of disclosures of false and misleading information. The results of event study analysis have been used as economic evidence of materiality, loss causation, and artificial inflation.").

[72] Artificial inflation is generally defined as the difference between the actual share price and the "true value" of the share on each day in a relevant period, where the true value reflects the absence of the valuation effects from the alleged misrepresentations and omissions.

[73] *See*, *e.g.*, Frank Torchio, "Proper Event Study Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 163 (emphasis added) ("The focus of event studies in securities class actions has been predominantly on disclosures that correct prior misrepresentations. Statistically significant and negative price reactions to corrective disclosures can provide economic evidence of materiality and loss causation. The stock price change caused by a corrective disclosure generally is the best estimate of the change in the amount of artificial inflation present in the security on the date of the disclosure because the corrective disclosure removes artificial inflation from the market price of the stock."); David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.3 (emphasis added, footnote omitted) ("Event studies can also measure the size of a stock price movement as the basis for a damages calculation. For example, in cases of securities fraud, experts commonly measure changes in the alleged inflation in a stock price by the movement in that stock price in the wake of a corrective disclosure, after controlling for market, industry, and other company-specific influences. This results from the disclosure's removing the inflation, and an event study measures the change in inflation in the stock at the time of the disclosure.").

omitted. The share price reaction following the corrective disclosure thereby provides a measure of the value of the previously undisclosed information (*i.e.*, the artificial inflation).

54. Using well-accepted and widely-used techniques, event studies of disclosures can be used to measure the component of the security's price change that is attributed to new company-specific information revealed in a disclosure (after possibly eliminating price changes caused by general market and/or industry movements) which is referred to as an "excess return," as described further below. In addition, an event study is used to assess the probability or likelihood that the security's price movement is caused by the new information disclosed on a particular date rather than because of chance.[74]

55. To conduct an event study, economists use financial market data and generally accepted econometric techniques to determine the effect of the disclosure on a company's share price. The details of the econometric analysis used to make these assessments are discussed below.

56. Along with conducting the econometric analysis, there are several important factors that an economic expert often considers when conducting an event study of a disclosure in securities litigation, as explained in detail below. These factors are widely discussed in the economic literature related to securities litigation.

[74] *See*, *e.g.*, Frank Torchio, "Proper Event Study Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 161 ("Event studies also assess the probability that a stock price movement was due to news disclosed about a particular event, and not due to chance.").

B. Important Factors Considered When Applying Event Studies to Securities Litigation

i) Complex Information and Partial Disclosures

57. In my experience, it is rare to encounter language in a corrective disclosure (the "event") that is identical to or a "mirror-image" of the language describing the alleged misrepresentations or omissions. In such circumstances, the financial economist conducts an evaluation of the economic content and substance of the disclosure and how investors, analysts and the financial press evaluate the language of the disclosure and the financial consequences thereof for the company to determine whether the information in the alleged corrective disclosure corresponds to the alleged misrepresentations. That is, an evaluation of a disclosure requires consideration as to how the market processes the information contained in the disclosure.

58. While the market may quickly react to newly disclosed information, the full economic effects from the dissemination of particularly complex information often requires the release of subsequent, related or follow-on disclosures, such as commentary by research analysts and the financial press, allowing the market to process, and the stock price to fully reflect the impact of the initially disclosed information and its economic consequences.[75] Economic

[75] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.10 ("For example, if a stock drops by a large amount on the day of an announcement, the one-day reaction may be significant. However, a rebound on the next day may cause the two-day price reaction to be not material, while another drop on the third day may cause the three-day price reaction to regain its status as a material event. In general, one needs to look at why the level of materiality changes over the price reaction window. If new information comes into the market that is not relevant to the instant case, then the analysis should remove the effects of this new information in considering the materiality of the event under examination. In addition, one would want to see whether the changes in materiality result from the market's reevaluating the importance of the initial event or information, something that one can often deduce from contemporaneous news stories or analyst reports.").

consequences, for example, can include financial implications for the company from reduced sales and diminished growth prospects, time and resources expended in conducting internal investigations and cooperating with investigations by outside regulatory agencies, costs associated with restating historical financial statements, among others.

59. In cases involving complex misrepresentations, there often are several partial corrective disclosures. This is because the full revelation of the misrepresentations is often made in more than one disclosure before the misrepresentations are completely corrected and the share price is no longer artificially inflated by a company's untrue statements. Accordingly, when the results of event studies are used to make assessments of whether the alleged public corrections had an effect on the price of a security, all the partial corrective disclosures that reveal new information about previously misrepresented must be included in the analysis.

60. Finally, corrective information is not always revealed by the company itself and can emanate from third party sources such as regulators, whistle-blowers, security analysts, rating agencies and the news media.

ii) Event Window

61. Another important consideration when conducting an event study is the length of the event window to measure the full effect on the stock price of new information.[76] The determination of the appropriate length of an event window depends on case-specific

[76] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, p. 558 ("The event window is the period when information about the event becomes available to the stock market and thus may affect the relevant company's stock price.").

circumstances such as the complexity of the disclosure, the extent of the distribution and dissemination of the information, as well as the degree to which additional information from security analysts and other commentators is forthcoming in subsequent hours or days that clarifies or provides financial implications of the disclosure.

62. It is commonplace to use event windows of one or two days depending on the information disclosed. In certain circumstances, an event window of more than two days may be appropriate.[77] To determine the appropriate length of the event window, an economist considers the market's assessment of the disclosed information in terms of contemporaneous commentary by the financial press and analysts and the stock price reaction to the new information. If information unrelated to the event is released on the same day as the disclosure is made but at a different time of the day, an intraday analysis of the stock price and a shorter event window may be appropriate, as discussed further below.

[77] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.4 (footnote omitted) ("In securities fraud cases, many experts have adopted the convention of looking at one-day, two-day, or five-day periods following an announcement. The most recent academic pronouncement expresses support for the shorter, one-day or two-day window, though it recognizes that in practice, analysts often use longer windows. Occasionally, there is another news announcement, or confounding event, within the event window. When this occurs, the event window is often cut short so that it does not include the effects of the confounding effect."). Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, p. 558 ("Because the efficient markets hypothesis, supported by considerable empirical evidence, suggests that stock prices react quickly to the release of new information, in many cases the event window will relatively short, sometimes as short as one trading day. In determining the length of an event window, an important tradeoff exists. The longer event window, the more likely the window includes the period during which all the new information about the event is released. The tradeoff, however, is that long event windows may include noise and information from other events, making it difficult to isolate the impact of the relevant event.").

iii) Confounding Information

63. Confounding information refers to other economically important information unrelated to the event under consideration which enters the market during the same event window as the disclosure. Such unrelated news can have a simultaneous, "confounding" effect on the stock price.

64. Because the market model (discussed below) is designed to eliminate from the subject company's stock returns the effects of simultaneous movements in the market and/or the industry, the excess return is designed to be largely free from confounding macroeconomic and industry-specific news on that day. If, however, important company-specific confounding information is disclosed during the event window, several analyses can be performed to understand the significance of such potentially confounding information.[78] For example, if the confounding information is disclosed at a different time of day than the event under consideration, intraday price movements may be used to assess the price responses to each piece of information. As another example, if the event under consideration is limited to a certain business division or geographic region but is disclosed along with information about the entire company, an analysis of the company's financials and/or contemporaneous assessments by analysts of the valuation consequences of all the disclosed information can be used to assess the relative importance of the different pieces of information disclosed.

[78] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.6 ("Finally, note that the abnormal return would include the effects of the event being studied as well as any other company-specific news or events (if any) that occur in the event window. Whenever possible, the analysis should disentangle the effects of these events.").

65. Whether confounding information is important to investors can oftentimes be discerned from an analysis of contemporaneous commentary by security analysts and the financial press. The economist should also determine if the confounding information was previously fully or partially disclosed to the market. If the confounding information has been already fully disclosed and incorporated into the stock price, then such confounding information cannot have caused stock-price changes measured during the event window of the corrective disclosure.

66. It is important to recognize that market participants may react differently to the new information. Trading based on these disparate views and the forces of supply and demand determine the market price. While the resulting market price may diverge from any particular investor's view of the future prospects for the company, it reflects the overall consensus view of the market participants.

iv) Truth-on-the-Market

67. "Truth-on-the-market" means that effectively all of the information identified in a disclosure has been previously publicly disclosed and, therefore, is already in the total mix of publicly available information and is fully incorporated in the company's stock price.[79] If the

[79] *See*, *e.g.*, Frank Torchio, "Proper Event Study Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 164 ("In conducting an event study, the economic expert must always be concerned with circumstances in which the information being studied is already in the marketplace."); David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.2 (emphasis added) ("Consequently, the stock price impacts of an event can reveal the effects of the event on future cash flows if the following four conditions are present:

1. The event is a well-defined news item or series of items.
2. The times that the news reaches the market are known.
3. There is no reason to believe that the market anticipated the news.

information in a disclosure has already been fully impounded in the stock price, then the same information disclosed again cannot later have caused stock-price losses because of that disclosure.

68. A proper analysis of truth-on-the-market requires that the new information be analyzed not only with regard to the specific language of a disclosure, but also with regard to the relevant economic context and circumstances of the disclosure, including any information already known by the market at the time of the disclosure being analyzed. The economic context is comprised of the relevant facts and circumstances that surround the disclosure as well as the source of the disclosure, which allows the economist to determine the likely interpretation of the disclosure by the market.

C. Event Study: Econometric Analysis

69. As discussed above, in determining whether an alleged public correction caused the price of an issuer's security to change, the event study methodology allows the researcher to isolate the firm-specific effect of an event from other factors such as market and industry effects that may cause a change in the security's price.[80] To separate the firm-specific effect from non-firm-specific market and industry factors, a market model is used. The market model allows for the estimation of the typical or normal relationship between the returns of the security and the returns of the overall market and industry factors.[81]

4. It is possible to isolate the effect of the news from market, industry, and other firm-specific factors simultaneously affecting the firm's stock price.").

[80] For an excellent discussion of the event study methodology, *see* John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, 149-180.

[81] *See*, *e.g.*, Frank Torchio, "Proper Event Study Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 160 (footnotes omitted) ("Event study

70. When new information about a company is disclosed to the market, the estimated normal relationship based on the market model is used to determine the component of the security return that would have been expected based on the market and industry factors (*i.e.*, the predicted or expected return). The remaining component of the security return (that which cannot be explained by the market and industry factors), *i.e.*, the excess return (also called the abnormal or residual return), may be attributable to either the new company-specific information or to the normal volatility of the excess returns. If the disclosure of the company-specific information is accompanied by an excess return that is outside of its normal volatility range (as measured by the market model), *i.e.*, above the threshold for normal volatility, then the excess return is said to be "statistically significant." Below, I describe in detail the steps involved in the econometric analysis.

i) Estimating a Market Model

a) Overview

71. The use of a "market model" to measure the impact of an event is pervasive in securities litigation.[82] The market model describes the typical or normal relationship between a security's return and the return on the market and possibly also the industry. Generally, a broad-

analysis compares the day-to-day percentage change in the market price of a company's common stock (known as a "return") to the return predicted by a market model that uses a market index, such as the S&P 500 Index or the NASDAQ Composite Index, and possibly an industry index. The market model describes the normal relation between the return on the company's common stock and the return on the market and industry indexes.").

[82] *See*, *e.g.*, David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.19, footnote 22 ("A regression is a statistical tool used to estimate the relation between one or more variables (here, the market and/or industry index) and another variable (the stock price of a particular company).").

based market index such as the S&P TSX Total Return Index is used as a proxy for the market in Canada and a broad-based index such as the S&P 500 Total Return Index is used as a proxy for the market in the U.S. As a proxy for the industry, an industry index comprising of stocks of companies that are considered to be similar to the company of interest is generally used. In addition, because Akumin conducted its business in the U.S. and the Company's stock price used in the market model is measured in Canadian dollars (C$), I also included the percentage change in the exchange rate between US$ and C$ as an explanatory variable to account for any potential effects of exchange rate fluctuations.

72. The linear relationship between the security return and the market and industry returns and the percentage change in exchange rate can be expressed as follows:

$$R_t = \alpha + \beta_M R_{Mt} + \beta_I R_{It} + \beta_C R_{Et} + \varepsilon_t$$

where, R_t is the security return at time *t*,[83] R_{Mt} is the return on the market index measured at time *t*, R_{It} is the return on the industry index measured at time *t*, R_{Et} is the percentage change in the exchange rate of C$ per US$ measured at time *t*, and ε_t is the error term. The parameter α is the intercept of the market model and represents the mean value of the security return during the estimation period when the market and industry returns and the change in exchange rate are zero. The parameter β_M measures the sensitivity of the security return to the return on the market: *e.g.*, a market beta of 1.2 implies that the security is expected to increase by 1.2 percent for each one

[83] A one-period simple return for the security is calculated as $R_t = \frac{P_t + D_t}{P_{t-1}} - 1$, where P_t is the price in period *t*, P_{t-1} is the price in period *t*-1, and D_t is the dividend in period *t*. Akumin did not pay any dividends during the Class Period. To account for specific pieces of news released at different times in the day, market models can be estimated and event studies can be conducted using intraday data.

percent increase in the market return, holding all else equal. The parameter β_I measures the sensitivity of the security return to the return on the industry. The parameter β_E measures the sensitivity of the security return to the change in currency exchange rate.

b) Proxies for the Market and the Industry and the Estimation Period for the Akumin Market Model

73. For Akumin common stock, I selected the S&P/TSX Composite Total Return Index as the proxy for the market.[84,85] The S&P/TSX Composite Index "has provided investors with a premier indicator of market activity for Canadian equity markets since its launch in 1977. With approximately 95% coverage of the Canadian equities market, it is the primary gauge for Canadian-based, TSX-listed companies."[86] I selected the S&P 600 Health Care Total Return Index as the proxy for the industry.[87,88,89] Because Akumin conducts business in the U.S., as discussed

[84] The S&P/TSX Composite Total Return Index (Bloomberg Ticker: 0000AR) is the total return version of the S&P/TSX Composite Index.

[85] As discussed below, I also conducted robustness checks using the S&P 500 Total Return Index as the proxy for the market (Bloomberg Ticker: SPTR). The S&P 500 Total Return Index is "widely regarded as the best single gauge of large-cap U.S. equities… The Index includes 500 leading companies and captures approximately 80% coverage of available market capitalization." Source: Bloomberg.

[86] Source: https://www.tsx.com/listings/tsx-and-tsxv-issuer-resources/tsx-issuer-resources/sp-tsx-index-eligibility (last visited May 9, 2022).

[87] The S&P 600 Health Care Total Return Index (Bloomberg Ticker: SP6THLTH) is the total return version of the S&P 600 Health Care Sector Index. This index includes companies in the S&P 600 Index, which is considered a U.S.-based "small cap" index. The industry index return is measured net of the market return. I note that measuring a variable net of another does not affect the adjusted R-squared of the model, the predicted return, the excess return or the statistical significance of the excess return.

[88] I also considered the S&P/TSX Smallcap Health Care (Sector) Total Return Index (Bloomberg Ticker: STSXSHCT) as a proxy for the industry. Akumin was not a member of either of these indexes.

[89] After considering the S&P/TSX Smallcap Health Care (Sector) Total Return Index, I selected the S&P 600 Health Care Total Return Index as the proxy for the industry because this specification had a higher explanatory power as measured by the adjusted R-squared statistic. The

above, I also included an exchange rate variable to account for effects of any currency fluctuations on Akumin's stock price.[90]

74. The time period over which the market model is estimated is called the estimation period. In the context of securities litigation, a market model regression is often estimated using stock prices during a time period before the public corrections are made because the returns during this time period are unaffected by the disclosures correcting the alleged misrepresentations and omissions.[91] Another consideration when selecting an estimation period is that the estimated relationships between the security return and the explanatory variables should be representative of the relationships during the period when the predicted returns are estimated.[92] In this case, as

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R-squared statistic measures how well the variations in the independent variables explain the variation in the day-to-day stock price returns. The adjusted R-squared makes an adjustment to the R-squared statistic to account for the number of independent variables in the model. *See* Jeffrey M. Wooldridge, Introductory Econometrics, A Modern Approach, 5th ed., Thomson South-Western, 2013, p. 202. *See also* Sudipto Dasgupta, Jie Gan and Ning Gao, "Transparency, Price Informativeness, and Stock Return Synchronicity: Theory and Evidence," *Journal of Financial and Quantitative Analysis* 45(5), 2010, 1189-1220, Table 1 (reporting average (median) R-squared of 13.0% (8.2%) for U.S. firms during the sample period of 1976-2004 with IPO age of at least 4 years old; average (median) R-squared of 10.4% (6.3%) for firms with IPO age of less than 12 years old; and average (median) R-squared of 10.0% (5.4%) for single segment firms).

[90] I included the daily percent change in the worth of one US$ in terms of C$ (Bloomberg Ticker: USDCAD Curncy).

[91] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, p. 567 ("The methodology for this adjustment is the market model and requires an estimation of the relation between the stock returns of the individual firm and the returns of the overall market index during a comparison period (also known as the estimation period) which typically precedes the event window.").

[92] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.5 (footnotes omitted) ("In regard to the first question, one would typically like to use an estimation window close to the event because the relation between the company's stock and an index changes over time. Therefore, the closer the estimation window is to the event, the more relevant the estimated relation will be. Three general choices for the placement of an estimation

discussed above, on June 25, 2021, Akumin announced that it had entered into an agreement to acquire Alliance in a deal with an enterprise value of US$820 million.[93] The acquisition was completed on September 1, 2021.[94] Because the alleged corrective disclosures occurred either after the announcement of the Alliance acquisition or after the deal closed, I considered 120 trading days starting from June 25, 2021, the date of the announcement of the acquisition to December 15, 2021 for the estimation of the market model. This is a period that is representative of the relationships between the Akumin stock returns and the explanatory variables during the period when the public corrections were made. In addition, in order to ensure that the estimated market model parameters are not impacted by the corrective disclosures made during the estimation period, I excluded five trading days after each disclosure, including the day of the disclosure from the estimation period. As discussed below, the first price impact date of the four corrective disclosures are August 16, 2021, October 12, 2021, November 8, 2021 and November 15, 2021. The results of the market model are presented in **Exhibit 4**.

ii) Calculating the Excess Returns

75. The estimated coefficients from the market model are then used to calculate the daily returns predicted by the market model based on the security's relationship with the market,

window are before the event window, surrounding the event window, and after the event window. The most common choice places the estimation window before the event. Analysts sometimes place the estimation window after the event windows or split the estimation window to cover periods before and after the event window. When the analysis studies multiple events, the estimation window may cover the periods around the event windows, including the period(s) between event windows. The estimation window is often placed at one of these locations rather than before the event window because of a lack of relevant prior trading history (for example, because the event window comes shortly after an IPO or change in regulatory environment).").

[93] "Akumin Announces Agreement to Acquire Alliance Healthcare Services," *Canada NewsWire*, June 25, 2021, 7:00 am.

[94] "Akumin Announces Closing of Acquisition of Alliance HealthCare Services and Related Financing," *Canada NewsWire*, September 1, 2021, 3:17pm.

the industry and the exchange rate.[95] The predicted return is equal to the estimated intercept or constant term from the market model regression, plus the sum of the estimated β_M times the return on the market index, the estimated β_I times the industry return,[96] and the estimated β_E times the percentage change in the currency exchange rate.

76. The difference between the actual return and the predicted return is called the excess return. The excess return isolates the firm-specific effect of the event after accounting for market, industry and exchange rate effects.

iii) Analyzing the Excess Returns

77. In the final step of the econometric analysis, the statistical significance of the excess return is evaluated, *i.e.*, whether the estimated effect of the event falls outside the range that would be expected given the normal variation of the security returns. If the event is accompanied by a security return that is outside of the security's normal volatility range, then the security price movement is attributed to the event and not to chance.

78. To analyze the statistical significance, a test statistic is computed and compared to its distribution under the null hypothesis that the excess return equals zero.[97] The null hypothesis

[95] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, p. 567 ("The performance of the firm's stock during the event window is then compared to the predicted performance during the event window. The predicted performance is based on the firm's stock price relationship with the market over the control period.").

[96] The industry return is measured net of the market return.

[97] Jonathan R. Macey, Geoffrey P. Miller, Mark L. Mitchell, and Jeffry M. Netter, "Lessons from Financial Economics: Materiality, Reliance, and Extending the Reach of *Basic v. Levinson*," *Virginia Law Review* 77, 1991, 1017-1049, p. 1036 ("Statistical testing is used to determine the probability that a return differs from the normal return, or stated alternatively, that an abnormal return is significantly different from zero.").

is rejected if the test statistic exceeds a critical value corresponding to a given level of significance.[98] The threshold for statistical significance generally considered is that of the 95% confidence level.[99]

79. A standard test statistic is calculated by dividing the excess return by the standard error of the regression.[100] The standard error of the regression represents the typical or normal

[98] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.9 ("For example, if an event is material at the 5 percent level, this means that there is only a 5% likelihood that the abnormal return (or the stock price movement once one controls for market, industry, and other effects) could have been caused by the stock's normal random price fluctuations. Alternatively, we can say that we are 95 percent confident that the abnormal return is greater than what would be expected based on the stock's normal random price fluctuations.").

[99] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.9 ("It is not clear what level of statistical significance corresponds to a legal definition of materiality. As Mitchell and Netter point out, the 95 percent confidence level is commonly used, while the 90 percent and 99 percent levels are also options."); David H. Kaye and David A. Freedman, "Reference Guide on Statistics," in Reference Manual on Scientific Evidence, Third Edition, National Academies Press, 2011, 211-302 at 251 ("In practice, statistical analysts typically use levels of 5% and 1%. The 5% level is the most common in social science, and an analyst who speaks of significant results without specifying the threshold probably is using this figure." (footnote omitted)). Significance levels in statistics are closely related to confidence levels. For instance, a 5% significance level is equivalent to a 95% confidence level (confidence level = 1 – significance level). *See* David S. Moore and George P. McCabe, Introduction to the Practice of Statistics, Fourth Edition, W. H. Freeman and Company, 2003, 442-452.

[100] Frank Torchio, "Proper Event Study Analysis in Securities Litigation," *The Journal of Corporation Law* 35(1), 2009, 159-168, p. 162, footnote 18 ("The actual returns generally deviate from the predicted returns even when no observable disclosure or event has occurred. Accordingly, the event study methodology requires a determination of whether an excess return is likely attributable to chance. This is done by testing the excess return for statistical significance. The statistical significance of the daily excess returns is indicated by the 't-statistic.'" "The t-statistic is equal to the excess return divided by the standard error of the market model regression.").

volatility of the excess returns of the stock.[101] Akumin daily stock returns, predicted returns, excess returns and t-statistics are shown in **Exhibit 5**.[102]

VIII. ANALYSES OF ALLEGED PUBLIC CORRECTIONS

80. The Statement of Claim alleges that the disclosures on August 15, 2021; October 12, 2021; November 8, 2021; and November 15, 2021, publicly corrected the alleged misrepresentations.

81. In the following sub-sections, I present the results from my event studies of these disclosures. My analyses demonstrate that the August 15, 2021 and the October 12, 2021 public corrections, as alleged in the Statement of Claim, resulted in statistically significant excess price

[101] Jonathan R. Macey, Geoffrey P. Miller, Mark L. Mitchell, and Jeffry M. Netter, "Lessons from Financial Economics: Materiality, Reliance, and Extending the Reach of *Basic v. Levinson*," *Virginia Law Review* 77, 1991, 1017-1049, pp. 1036-37 ("A common method of assessing the statistical significance of an abnormal stock return around an event is to compare the return during the event period to returns during a control period different from the event period. The control period is used to determine both the normal return and volatility of the security. The test of statistical significance assigns a probability that the abnormal return occurred by chance, based on the comparison with the control period.").

[102] I also conducted robustness checks by considering three alternative market model specifications. In the first alternate specification, I used the S&P 500 Total Return Index as a proxy for the market (the other explanatory variables and the estimation period are the same as in the market model selected above). In the second alternative specification, I changed the estimation period to 120 trading days starting on September 1, 2021, the date the Alliance acquisition closed (the explanatory variables are the same as in the market model selected above). Finally, in the third alternative specification, I used Akumin's stock prices based on the U.S. Composite ticker (Bloomberg ticker: AKU US Equity). Because the dependent variable trades in the U.S. in this specification, the daily return is computed based on days when the U.S. stock market was open. For this alternate specification, I used the S&P 500 Total Return Index as a proxy for the market and the same industry index as used in the selected market model above. Because Akumin's stock returns in this specification are measured in US$, I did not include the exchange rate variable. The estimation period is the same as in the market model selected above. I note that qualitatively the results of my event studies of the corrective disclosures discussed below are robust to these alternative market model specifications.

declines in Akumin stock. The information contained in these public corrections corresponded with the alleged misrepresentations related to accounts receivable, revenue, property and equipment, and total shareholders' equity.

82. My analyses include evaluating: (a) the observed stock-price reaction and trading volume after the alleged public corrections; and (b) contemporaneous commentary by research analysts and financial press reporting related to the public corrections.

A. Analysis of the August 15, 2021 Disclosure

i) August 15, 2021 Event

83. On Sunday, August 15, 2021, Akumin issued a press release announcing a delay in the filing of the Interim Financial Report for the second quarter of 2021 ended June 30, 2021 ("**Q2 2021**"), and the related Management's Discussion and Analysis ("**MD&A**") and CEO and CFO certificates for the financial report.[103] The press release stated that:

> … both management and its external auditors, Ernst & Young LLP, agreed that additional information and analysis is necessary to complete the interim financial report for the quarter ended June 30, 2021 and Ernst & Young's review of such report.[104]

84. The press release further stated that the additional information and analysis necessary for the completion of the financial report related to "potential additional credit losses with respect to prior years" and that the production of this additional information and analysis

[103] "Akumin Announces Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis," *Canada NewsWire*, August 15, 2021, 8:00 am (the "August 15, 2021 Press Release").

[104] August 15, 2021 Press Release.

would not be completed prior to the filing deadline of August 16, 2021.[105] Akumin announced that it expected to be in a position to file the required documents within 60 days of the original filing deadline.[106]

85. The Company further announced that it had applied to the Ontario Securities Commission (the "**OSC**"), as principal regulator for Akumin, for the imposition of a management cease trade order throughout the duration of the default and that it would issue bi-weekly default status reports in the form of news releases for so long as it remained in default of the filing requirements.[107] Finally, the press release confirmed that there were "no insolvency proceedings that Akumin is subject to and there is no other material information relating to its affairs that has not been generally disclosed."[108] Henceforth, in the report, I refer to this announcement as the "**August 15, 2021 Disclosure**."

ii) Economic Analysis of the August 15, 2021 Disclosure

a) Reaction of Research Analysts and the Financial Press

86. After the publication of the August 15, 2021 Disclosure, in an article titled, "MT Newswires Canada Weekend Stocks To Watch: Akumin; Cameco; Teck Resources," *MT Newswires Live Briefs INVESTOR Canada* reported:

> Akumin Inc. (NASDAQ: AKU and TSX: AKU), a provider of freestanding, fixed-site outpatient diagnostic imaging services in the

[105] August 15, 2021 Press Release.

[106] August 15, 2021 Press Release.

[107] August 15, 2021 Press Release. On August 23, 2021, Akumin announced that the OSC on August 20, 2021 had granted Akumin's application for the imposition of a management cease trade order. "Akumin Announces Acceptance of its Management Cease Trade Order Application," *Canada NewsWire*, August 23, 2021, 7:00 am.

[108] August 15, 2021 Press Release.

> United States, announced over the weekend that both management and its external auditors agreed that additional information and analysis is necessary to complete the interim financial report for the quarter ended June 30, 2021 and Ernst & Young's review of such report. A statement said the additional information and analysis relates to potential additional credit losses with respect to prior years. It added the production of this additional information and analysis will not be completed prior to the filing deadline of August 16, 2021. As a result, Akumin will not file such financial report, or the related management's discussion and analysis and CEO and CFO certificates before the August 16, 2021 deadline.[109]

87. The August 15, 2021 Disclosure was also covered by several other news media outlets including *Dow Jones Institutional News*, *Reuters News*, *Public Companies News and Documents via PUBT* and *Market News Publishing*.[110]

88. On Monday, August 16, 2021, in a news article titled, "Stocks That Hit 52-Week Lows On Monday," *Benzinga.com* listed Akumin among "[s]tocks dropping to new 52-week lows as of 10 a.m. ET on Monday [August 16, 2021]."[111]

89. On August 16, 2021, analysts at National Bank of Canada published a report discussing Akumin's announcement concerning the delay of filing Q2 2021 financials "due to Akumin and its auditor, Ernst & Young, requiring further information and analysis regarding

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[109] "MT Newswires Canada Weekend Stocks To Watch: Akumin; Cameco; Teck Resources," *MT Newswires Live Briefs INVESTOR Canada*, August 15, 2021, 8:01 pm.

[110] "Press Release: Akumin Announces Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis," *Dow Jones Institutional News*, August 15, 2021, 8:00 am; "BRIEF - Akumin Announces Delay In Filing 2021 Q2 Interim Financial Report," *Reuters News*, August 15, 2021, 8:05 am; "Akumin Inc. - Akumin Announces Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis," *Public Companies News and Documents via PUBT*, August 15, 2021; "Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis," *Market News Publishing*, August 16, 2021, 11:47 am.

[111] "Stocks That Hit 52-Week Lows On Monday," *Benzinga.com*, August 16, 2021, 10:12 am.

'potential additional credit losses with respect to prior years.'"[112] Expressing their "concerns" related to the accounts receivable disclosure in conjunction with the previously announced acquisition of Alliance and related elevated leverage, the analysts "remain[ed] on the sidelines":

> The credit losses, quite likely in our view, 1) are related to the attorney-payer A/R writedowns announced during Q4/2020 reporting; 2) suggest a reduced ability to securitize remaining attorney-payer A/R as discussed during Q1/2021 reporting; and 3) are not entirely surprising as AKU's DSO, regularly highlighted in our reports, has repeatedly ticked up from 60 days in Q4/2018 to 131 days in Q1/2021.
>
> Given 1) A/R concerns; 2) the elevated leverage (~6x Net Debt to FY+1 EBITDA); and 3) the acquisition of Alliance HealthCare Services (in default in 2020, no growth in last five years, assets overall less desirable than AKU's legacy ones), we remain on the sidelines.[113]

90. In an article published the next day before the market opened on August 17, 2021, *Benzinga.com* reported:

> Akumin Inc. (NASDAQ: AKU) dipped 16% to settle at [US]$2.46. Akumin reported a delay in filing 2021 Q2 interim financial report.[114]

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[112] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank of Canada research report, August 16, 2021.

[113] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank of Canada research report, August 16, 2021. I note that although National Bank of Canada analysts suggested that the credit losses in their view were related to the attorney-payer group, the restatements on November 15, 2021 showed revenue revisions for other payer groups as well. *See*, *e.g.*, Akumin Inc. Consolidated Financial Statements December 31, 2020, filed March 31, 2021, p. 50; Akumin Inc. Consolidated Financial Statements (Restated) December 31, 2020, filed November 15, 2021, p. 54. After the filing of the restated financial statements, analysts at National Bank of Canada lowered their EBITDA, EBITDA margin and EPS forecasts. *See* "Filing of Delayed Q2/2021 Financials Provides Some Clarity," National Bank of Canada research report, November 15, 2021 ("Following Q2/21 results, we are updating our forecasts to reflect the impact of the restatements (primarily lower EPS, EBITDA and margins).").

[114] "60 Biggest Movers From Yesterday," *Benzinga.com*, August 17, 2021, 5:12 am.

b) Stock-Price Reaction

91. On Friday, August 13, 2021, the trading day before the August 15, 2021 Disclosure, Akumin's stock price closed at $3.73 per share. On Monday, August 16, 2021, the stock closed at $3.05 per share, down $0.68 per share, or -18.2%, from the previous day's closing price. The excess stock price return, after accounting for market, industry and exchange rate factors, was -18.5% and is statistically significant at the 1% level. The combined daily trading volume in Canada and the U.S. of 487,519 shares on August 16, 2021 was 3.3 times the average daily trading volume of 147,761 shares during the period after the announcement of the agreement to acquire Alliance (June 25, 2021) through the date prior to the August 15, 2021 Disclosure ("**Pre-Disclosure Period**").[115] Increased trading volume immediately following a disclosure is an indication that the investors consider the disclosed information to be important.[116]

92. The next day, the trading volume remained elevated, again 3.3 times the average daily trading volume during the Pre-Disclosure Period. The stock price fell as well, closing at $2.84 per share on August 17, 2021, down $0.21 per share, or -6.9%, from the previous day's closing price. The excess stock price return, after accounting for market, industry and exchange rate factors, was -6.6% and is not statistically significant at the 5% level but is significant at the 10% level. I note that the two-day excess return over August 16-17, 2021 of -23.9% is statistically

[115] The average daily trading volume is computed using Canadian trading days and includes reported volume in both Canada and the U.S.

[116] Days with important news tend to correspond with greater than normal trading volume as different investors alter positions in accordance with their differing valuation views. *See* Jonathan M. Karpoff, "The Relation Between Price Changes and Trading Volume: A Survey," *Journal of Financial and Quantitative Analysis* 22(1), 1987, 109-126.

significant at the 1% level. *See* **Exhibit 5**. I did not find any other new company-specific information disclosed on either August 16, 2021 or August 17, 2021.

93. The 10-day volume weighted average price after the August 15, 2021 Disclosure was $2.90 per share, $0.83 per share or 22.1% lower than the closing price of $3.73 per share prior to the disclosure.

c) Truth-on-the-Market

94. In its financial report for the fiscal year ended 2020 ("**FY 2020**") filed on March 31, 2021, Akumin had reported that there had been "an increase in cumulative implicit price concessions for outstanding receivables of approximately [US]$12 million when compared to fiscal 2019."[117] As discussed above in paragraph 28, the Company recorded accounts receivable on the basis of net realizable value after accounting for any additional credit losses at each reporting period. Accordingly, analysts noted that the increase in cumulative implicit price concessions were essentially a write-down of Akumin's accounts receivable balance.[118]

95. The August 15, 2021 Disclosure informed the market that the Company was conducting analyses related to potential *additional* credit losses with respect to prior years. Based on my review, I am unaware of any indication that prior to August 15, 2021, the market was aware of the information contained in the August 15, 2021 Disclosure. Furthermore, the large statistically

[117] "Akumin Inc. Announces Fourth Quarter and Releases 2021 Financial Guidance," *Canada NewsWire*, March 31, 2021, 8:59 pm.

[118] *See*, *e.g.*, "Quarter Below Forecasts; A/R and Leverage Remain Concerns," National Bank of Canada research report, April 1, 2021; "Noisy End To 2020; 2021 Guidance Falls Short," Cormark Securities research report, April 5, 2021.

significant stock-price decline on August 16, 2021 amid higher-than-normal trading volume, indicates that the August 15, 2021 Disclosure was new information to the market.

d) Confounding News

96. I did not find any other new negative company-specific information unrelated to the August 15, 2021 Disclosure that would change my conclusion that this disclosure was the cause for the decline in Akumin's stock price on Monday, August 16, 2021. This is based on my review of news articles and analyst reports around the time when the announcement was made by the Company.

iii) Summary and Opinion

97. The August 15, 2021 Disclosure informed the market that Akumin would not file its financial statements and related documents for Q2 2021 prior to the filing deadline of August 16, 2021 because the Company and its external auditor, Ernst & Young, had determined that further information and analysis related to potential additional credit losses with respect to prior years were necessary to complete the interim financial report. The press release also informed the market that Akumin had applied to the OSC for the imposition of a management cease trade order throughout the duration of the default.

98. Although the full details concerning the accounting error were not disclosed on August 15, 2021, the information revealed in the August 15, 2021 Disclosure informed the market that the Company and its external auditor were reviewing historical filings for potential additional credit losses, putting the market on notice regarding potential adjustments to previously reported accounts receivable for at least two prior years (*i.e.*, 2019 and 2020) ("*potential additional credit losses with respect to prior years*"). As discussed above in paragraphs 28-30, any potential

reduction to the accounts receivable balance would correspond with a decrease in revenue on the income statement and a decrease in the total shareholders' equity on the balance sheet. The August 15, 2021 Disclosure, therefore, corresponds with the alleged misrepresentations concerning Akumin's overstatement of accounts receivable, revenue and relatedly the total shareholders' equity.

99. In my opinion, the disclosure of this information was the cause of the large statistically significant decline of -18.5%, net of market, industry, and exchange rate movements, in Akumin's stock price amid higher-than-normal trading activity on August 16, 2021.[119] Following the August 15, 2021 Disclosure, investors were faced with considerable uncertainty about the full implications of the potential accounts receivable overstatement related to prior years identified by Akumin and its external auditor. The stock price reaction was the market's consensus estimate of the share price consequence of the accounting issue disclosed on August 15, 2021.

100. As discussed below, on October 12, 2021, Akumin provided information on the expected magnitude of the overstatement of its accounts receivable balance (in conjunction with identifying a second type of accounting error). The stock price reacted negatively to this news. The lack of a reversal of the stock price decline indicates that the stock price decline and associated increase of riskiness that resulted from the August 15, 2021 Disclosure did not abate on October 12, 2021 when more details about the magnitude of the overstatement of the accounts receivable balance were disclosed to the market. In other words, the market's unbiased estimate of the share price consequences from the information in the August 15, 2021 Disclosure was not reversed when

[119] I also conducted robustness checks for the statistical significance of the excess return on August 16, 2021 and found it to be statistically significant at the 5% level under each of the three alternative market model specifications described in footnote 102.

further details about the accounting error were revealed on October 12, 2021 (when a second type of accounting error was revealed as well).

101. The large statistically significant stock price reaction and higher-than-normal trading activity in response to the August 15, 2021 Disclosure demonstrate the importance of the disclosure to investors. Further, contemporaneous commentary by security analysts at National Bank of Canada and financial press reporting also underscore the importance of the August 15, 2021 Disclosure to the market.

102. The large stock price reaction amid increased trading following the August 15, 2021 Disclosure is consistent with the academic literature that discusses the importance of unexpected earnings disclosures to investors discussed above in Section V and with the focus of analyst commentary on the Company's accounts receivable during the Class Period as discussed above in Section VI.

103. Moreover, the disclosure that additional information and analysis related to credit losses in prior years was required suggested that the Company would have to expend time and resources for the completion of the analysis. The diversion of management's time and attention from the day-to-day management of the Company's business for regulatory compliance can have a negative effect on the business as was acknowledged in Akumin's prior regulatory filings.[120]

104. Therefore, in my opinion, based on the discussion above, the new firm-specific information revealed in the August 15, 2021 Disclosure corresponded with the alleged misrepresentations relating to accounts receivable, revenue and total shareholders' equity. The

[120] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, filed March 31, 2021, p. 28.

statistically significant negative stock price response amid higher-than-normal trading, analyst commentary contemporaneous to the disclosure as well the academic literature related to earnings-related disclosures, all provide economic evidence of the significance of the August 15, 2021 Disclosure to Akumin's common stock.

B. Analysis of the October 12, 2021 Disclosure

i) October 12, 2021 Event

105. Before the market opened on Tuesday, October 12, 2021, Akumin filed a press release providing an update on the status of the management cease trade order granted by the OSC on August 20, 2021.[121] In the press release, the Company announced that it had identified issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods and that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections which were occurring and the Company had determined that a "material change" to historical implicit price concessions previously recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 was required.[122]

106. As a result, the press release stated that Akumin was required to restate its annual financial statements for the periods ended December 31, 2020 ("**FY 2020**") and December 31, 2019 ("**FY 2019**"), and its interim financial statements for the period ended March 31, 2021 ("**Q1 2021**").[123] The press release further noted that the financial restatements would also include the

[121] "Akumin Provides Bi-weekly MCTO Status Update," *Canada NewsWire*, October 12, 2021, 7:00 am (the "October 12, 2021 Press Release").

[122] October 12, 2021 Press Release.

[123] October 12, 2021 Press Release.

tax effects of the identified errors, other items impacted by the correction of the error and certain other previous immaterial misstatements.[124] Specifically, the press release stated:

> For the period ended June 30, 2021, in conjunction with performing its period-end review of accounts receivable and performing additional review of historical collection rates using its enhanced reporting and analytics tools, Akumin identified issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods. In addition, during the review the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections which were occurring and Akumin has determined that a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 is required. Under ASC 250, Accounting Changes and Error Corrections, this change is considered an error for accounting purposes and thus a restatement of (i) Akumin's annual financial statements for the period ended December 31, 2020 and December 31, 2019, and (ii) Akumin's interim financial statements for the period ended March 31, 2021, in each case together with their related management's discussion and analysis (collectively, the "Restated Filings"), will be required, which Restated Filings will also account for certain adjustments for the tax impact of these changes, previously uncorrected immaterial misstatements, and other items impacted by the correction of the error.[125]

107. The press release added that while the magnitude of the adjustments was still being finalized, the Company expected that the restatements would "result in an accounts receivable balance as at June 30, 2021 of between [US]$65.0 million and [US]$70.0 million as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of [US]$95.9 million."[126]

[124] October 12, 2021 Press Release.

[125] October 12, 2021 Press Release.

[126] October 12, 2021 Press Release.

108. In other words, assuming no change in accounts receivable between March 31, 2021 and June 30, 2021, the Company expected a reduction in the accounts receivable balance as of March 31, 2021 of between US$25.9 million and US$30.9 million, or 27.0% to 32.2% of the balance.

109. In addition, the press release revealed for the first time another accounting error, stating that the restatement of the financial statements would also contain any further adjustments related to prior improper capitalization of expenses related to repair and maintenance:

> In addition to the foregoing, while integrating the accounting policies and procedures of Akumin and Alliance HealthCare Services Inc. ("Alliance") in connection with Akumin's acquisition of Alliance on September 1, 2021, Akumin has identified certain differences in recording the capitalization, as opposed to the repair and maintenance expense, of components that are replaced when equipment is repaired. As Akumin remains in the process of finalizing the Required Reports and Restated Filings, Akumin also intends to reflect any further adjustments resulting from the review of the accounting treatment of these components prior to being in a position to file the Required Reports and Restated Filings, which work remains ongoing. Although Akumin's review of the impact of these changes remains preliminary, any adjustments related to such review would be expected to be reflected as an adjustment to the net book value of property and equipment and additional repairs and maintenance costs which are included in operating expenses (any such adjustments, "Capitalization Adjustments").[127]

110. Finally, "given the additional review and analysis required to finalize the impact, if any, of the Capitalization Adjustments on the Required Reports and Restated Filings," the Company further delayed its filings, stating "Akumin no longer expects to be able to file the Required Reports and Restated Filings by October 15, 2021."[128] The Company anticipated "filing

[127] October 12, 2021 Press Release.

[128] October 12, 2021 Press Release.

the Required Reports and Restated Filings prior to November 15, 2021, being the filing deadline for its Q3 interim financial statements and its business acquisition report related to the Alliance acquisition."[129] Henceforth, in the report, I refer to this announcement as the "**October 12, 2021 Disclosure**."

ii) Economic Analysis of the October 12, 2021 Disclosure

a) Reaction of Research Analysts and the Financial Press

111. The October 12, 2021 Disclosure was published in *Canada NewsWire* and was also covered by several other news media outlets including *Dow Jones Institutional News*, *Contify Life Science News*, *Public Companies News and Documents via PUBT* and *Market News Publishing*.[130]

112. On October 12, 2021, analysts at National Bank of Canada published a report discussing Akumin's October 12, 2021 Disclosure.[131] The analysts discussed the anticipated write-down of the accounts receivable and cautioned that the higher operating expenses related to the disclosed improper capitalization of expenses would "impact profitability."[132] The National Bank analysts reaffirmed their investment rating and stock price target.

[129] October 12, 2021 Press Release.

[130] "Press Release: Akumin Provides Bi-weekly MCTO Status Update," *Dow Jones Institutional News*, October 12, 2021, 7:00 am; "Akumin Provides Bi-weekly MCTO Status Update," *Contify Life Science News*, October 12, 2021; "Akumin Provides Bi-weekly MCTO Status Update," *Public Companies News and Documents via PUBT*, October 12, 2021; "Provides Bi weekly MCTO Status Update," *Market News Publishing*, October 12, 2021, 8:39 am.

[131] "Filing of Q2/2021 financials delayed to November with a writedown of up to 32% of A/R," National Bank of Canada research report, October 12, 2021.

[132] "Filing of Q2/2021 financials delayed to November with a writedown of up to 32% of A/R," National Bank of Canada research report, October 12, 2021.

113. The following day, on Wednesday, October 13, 2021, before the market opened,[133] analysts at Cormark Securities ("**Cormark**") issued a report cautioning investors that the information contained in the October 12, 2021 Disclosure had "an incrementally negative impact on our outlook."[134] Discussing the "two buckets of accounting issues," the analysts lowered their price target for Akumin's stock from US$4.60 per share to US$3.75 per share (or -18.5%) and their investment rating from "Buy" to "Speculative Buy."[135]

114. Regarding the overstatement of accounts receivable, the Cormark analysts noted that while the issue was "known from the outset of the MCTO," the magnitude of the expected restatement was larger than [US]$20 million anticipated by the analysts prior to the guidance provided by the Company on October 12, 2021.[136] The analysts noted that "$26-$31 MM of the $96 MM accounts receivable balance from Q1/21 will be written-off" and that this would "come alongside restatement of financial results for 2019, 2020, and Q1/21."[137]

115. The analysts explained that "the revised accounting treatment for expected collections should result in a downward revenue restatement and corresponding flow through the income statement."[138] The analysts cautioned that on a forward-looking basis, the October 12, 2021 Disclosure "trigger[ed] two forecast changes." First, the analysts lowered their estimate of

[133] While the time of release of the research report is not available to me, a news story in *Bloomberg First Word* indicates that the report was available prior to open on October 13, 2021. *See* "Akumin Cut to Speculative Buy at Cormark Securities; PT C$4.66," *Bloomberg First Word*, October 13, 2021, 7:32 am.

[134] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[135] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[136] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[137] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[138] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

cash collections to reflect the accounts receivable write-down guidance provided by the Company in the October 12, 2021 Disclosure. Second, the analysts lowered their future revenue forecast "to reflect the revised collections and price concession practices built into revenue recognition."[139] Given the Company's accounts receivable write-off in Q4 2020, the analysts expected the majority of the restatement related to receivables to impact FY 2019.[140]

116. Regarding the disclosed improper capitalization of expenses, the Cormark analysts noted that it would impact operating cash flow and earnings before interest, taxes, depreciation, and amortization (EBITDA). In light of a lack of guidance from the Company concerning the magnitude of the improper capitalization, Cormark analysts assumed that "30% of AKU's pre-Alliance Healthcare capex will be reclassified as an operating expense."[141, 142] The analysts accordingly lowered their EBITDA forecasts for the Company. The ratings cut and lowered price target by Cormark Securities were reported by *Bloomberg First Word*.[143]

117. On Thursday, October 14, 2021, after the close of market, the credit ratings agency Moody's issued a press release stating that Akumin's "announcement of the continued

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[139] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[140] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[141] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021 ("As a starter estimate pending the details we will eventually get in the restated financials, we assume 30% of AKU's pre-Alliance Healthcare capex will be reclassified as an operating expense. This assumption is now also reflected in our forecast."). Subsequently, the analysts noted that this assumption was an under-estimation of the magnitude of the improper capitalization. "High Torque Equity Requires Execution," Cormark Securities research report, November 17, 2021 ("the proper classification was underestimated in our prior 'best guess'").

[142] The analysts also noted that "[b]eyond the changes noted above, the only other revision relates to [US]$16 MM of expenses in 2021 (no change) that we now count as one-time (no longer hits Adj. EBITDA). The expenses relate to the Alliance Healthcare acquisition and public debt offerings." This change would increase adjusted EBITDA by US$16 million.

[143] "Akumin Cut to Speculative Buy at Cormark Securities; PT C$4.66," *Bloomberg First Word*, October 13, 2021, 7:32 am.

postponement of Q2 2021 filings to as late as November 15, 2021 and disclosure of an additional accounting review is credit negative."[144] The press release further stated that "[t]he developments signal elevated governance risks and further damage the company's financial reporting track record. Akumin's prolonged focus on reviewing and restating prior reporting periods is also an untimely distraction that heightens integration risks surrounding the recent acquisition of Alliance Healthcare Services, Inc."[145]

118. Throughout the day on October 14, 2021, several news articles published by *Dow Jones Institutional News* listed Akumin stock among stocks declining to "New Lows."[146]

b) Stock-Price Reaction

119. On Friday, October 8, 2021, the trading day before the October 12, 2021 Disclosure,[147] Akumin's stock price closed at $3.10 per share. On Tuesday, October 12, 2021, the stock closed at $3.01 per share, down $0.09 per share, or -2.9%, from the previous day's closing price. The excess stock price return, after accounting for market, industry and exchange rate factors, was -2.6% and is not statistically significant at the 5% level. The combined daily trading volume in Canada and the U.S. of 171,561 shares on October 12, 2021 was 1.2 times the average daily trading volume of 147,761 shares during the Pre-Disclosure Period. On October 13, 2021,

[144] "Moody's says Akumin's filing delay and accounting review are credit negative," Moody's Investors Service, October 14, 2021; "Moody's Says Akumin's Filing Delay And Accounting Review Are Credit Negative," Dow Jones Institutional News, October 14, 2021, 6:48 pm.

[145] "Moody's says Akumin's filing delay and accounting review are credit negative," Moody's Investors Service, October 14, 2021.

[146] The news articles published on October 14, 2021 in *Dow Jones Institutional News* were titled "NASDAQ New 52-Week Highs And Lows" and were published at 11:19 am, 12:19 pm, 1:19 pm, 2:20 pm, 3:19 pm, 4:20 pm and 5:37 pm. Several similar articles were published in *Dow Jones Newswires Chinese (English)*.

[147] Monday, October 11, 2021 was not a trading day in Canada. Source: Bloomberg.

after the publication of the Cormark report detailing the implications of the disclosure on future profitability and as the market continued to digest the information contained in the October 12, 2021 Disclosure, Akumin's stock price continued falling. On Wednesday, October 13, 2021, the stock closed at $2.74 per share, down $0.27 per share, or -9.0%, from the previous day's closing price. The excess stock price return, after accounting for market, industry and exchange rate factors, was -9.2% and is statistically significant at the 5% level. The combined daily trading volume in Canada and the U.S. of 368,987 shares on October 13, 2021 was 2.5 times the average daily trading volume of 147,761 shares during the Pre-Disclosure Period. The two-day cumulative excess return over October 12-13, 2021 was -11.5% and is statistically significant at the 5% level.

120. The stock price fell further on October 14, 2021 to $2.62 per share and after the Moody's press release to $2.55 per share on October 15, 2021. The excess stock price returns on these days were -4.5% and -2.4%, respectively, and were not individually significant at the 5% level. I note that the excess stock price return over the October 12-15, 2021 event window was -17.5% and this four-day cumulative excess return is statistically significant at the 5% level. The average daily combined trading volume in Canada and the U.S. of 211,046 shares during October 12-15, 2021 was 1.4 times the volume in the Pre-Disclosure Period. *See* **Exhibit 5**. During this time period, I did not find any other company-specific news.

121. The 10-day volume weighted average price after the October 12, 2021 Disclosure was $2.34 per share, $0.76 per share or 24.5% lower than the closing price of $3.10 per share prior to the disclosure.

c) Truth-on-the-Market

122. While the August 15, 2021 Disclosure informed the market that Akumin would delay the filing of Q2 2021 results due to potential additional credit losses with respect to prior years, the information contained in the October 12, 2021 Disclosure confirmed that Akumin had "determined that a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 is required."[148] Further, the press release informed the market for the first time that the restated filings would result in an accounts receivable balance as at June 30, 2021 of between $65.0 million and $70.0 million as compared to previously reported March 31, 2021 accounts receivable balance of $95.9 million.[149] The market also learned for the first time about another accounting error related to improper capitalization of certain expenses. Finally, the Company further delayed its Q2 2021 filings, as it no longer expected to be able to file the required reports by October 15, 2021, instead anticipating filing prior to November 15, 2021. Based on my review, I am unaware of any indication that, prior to October 12, 2021, the market was aware of these new pieces of information contained in the October 12, 2021 Disclosure. Furthermore, the commentary by research analysts and the response from the ratings agency Moody's, and the statistically significant excess return over the October 12-13, 2021 event window (as follow-on information from Cormark analysts was released) amid higher-than-normal trading volume indicate that the October 12, 2021 Disclosure contained information that was new to the market.

[148] October 12, 2021 Press Release.

[149] While the Cormark analysts had previously attempted to estimate the magnitude of the overstated accounts receivable, the October 12, 2021 Disclosure informed the market about the magnitude of the overstatement expected by the Company which was higher than that previously estimated by the Cormark analysts. *See* ¶ 114.

d) Confounding News

123. I did not find any other new negative company-specific information unrelated to the October 12, 2021 Disclosure that would change my conclusion that this disclosure was the cause for the stock price decline in the days following the disclosure as follow-on commentary from Cormark analysts detailing the implications of the disclosure was published. This is based on my review of news articles and analyst reports around the time when the announcement was made by the Company.

iii) Summary and Opinion

124. The October 12, 2021 Disclosure informed the market that Akumin had determined that a "material change" to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 was required and the Company accordingly would restate its previously filed financial statements for these periods. While the market was put on notice about potential additional credit losses on August 15, 2021, the October 12, 2021 Disclosure revealed the magnitude of the overstatement of the accounts receivable balance, informing the market that that the restated filings would result in an accounts receivable balance as at June 30, 2021 of between $65.0 million and $70.0 million as compared to previously reported March 31, 2021 accounts receivable balance of $95.9 million. The October 12, 2021 Disclosure also informed the market about a second accounting error related to improper capitalization of components that were replaced when equipment was repaired, as opposed to expensing the repair and maintenance costs. The October 12, 2021 Disclosure alerted the market that the restated filings correcting for the accounts receivable error would "reflect any further adjustments resulting from

the review of the accounting treatment of these components."[150] Finally, the Company disclosed that the required filings for Q2 2021 would be further delayed, as it no longer expected to be able to file the required reports by October 15, 2021, instead anticipating filing prior to November 15, 2021.

125. As discussed in paragraphs 28-30 above, because a decrease in the accounts receivable balance would correspond with a decrease in revenue on the income statement and a decrease in the total shareholders' equity on the balance sheet, this disclosure corresponds to the alleged misrepresentations concerning Akumin's overstatement of accounts receivable, revenue and relatedly the total shareholders' equity in its financial statements. This disclosure also corresponds to the allegations concerning the improper capitalization of repair and maintenance expenses.

126. After an initial report issued by analysts at National Bank of Canada on October 12, 2021, analysts at Cormark issued a report the next day, on October 13, 2021, detailing the impact of the two types of accounting errors on the future financial prospects for the Company. To account for the disclosure concerning the overstatement of the accounts receivable, analysts at Cormark lowered their forecasts for cash collection and future revenue. Additionally, to account for the improper capitalization of expenses, the analysts lowered their forecasts for future operating cash flows and EBITDA. Warning that the disclosure had "an incrementally negative impact on [their] outlook,"[151] Cormark analysts lowered their recommendation for Akumin stock and also their price target. The following day, Moody's warned that the Company's continued

[150] October 12, 2021 Press Release.

[151] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

postponement of Q2 2021 filings to as late as November 15, 2021 (three months after the filing deadline) and the disclosure of an additional accounting review were credit negative. The ratings agency also cautioned that the developments signaled "elevated governance risks" and were an "untimely distraction that heighten[ed] integration risks" related to the recent acquisition of Alliance.[152]

127. On October 12, 2021, the excess stock price return, after accounting for market, industry and exchange rate factors, was -2.6% and is not statistically significant at the 5% level. However, after the release of the Cormark research report describing the impact of the October 12, 2021 Disclosure on the future profitability of the Company,[153] Akumin's stock price continued to decline, experiencing a statistically significant excess stock-price return of -9.2% on October 13, 2021.[154] The stock price continued to fall on October 14, 2021, and after the release of Moody's assessment of the disclosure, further declined on October 15, 2021, amid higher-than-normal trading volume.

[152] "Moody's says Akumin's filing delay and accounting review are credit negative," Moody's Investors Service, October 14, 2021.

[153] Academic research has shown that it is not unusual that a given per share earnings surprise will result in a greater per share price change. For example, one such paper concludes that, "[t]the resulting estimated earnings response coefficient magnitudes suggest that the capital market, on average, views earnings changes to be largely permanent." *See* S.P. Kothari and Richard G. Sloan, "Information in Prices about Future Earnings: Implications for Earnings Response Coefficients," *Journal of Accounting and Economics* 15, 1992, 143-171, p. 143.

[154] In economic research, it is widely documented and accepted that security analysts play an important role in the interpretation and dissemination of company-specific information. Academic research has shown that investment recommendations, forecasts and the strength of the written arguments made to support an analyst's opinion contained in research reports, in general, provide valuable information to investors, and as such, can significantly influence stock prices. *See*, *e.g.*, Paul Asquith, Michael B. Mikhail and Andrea S. Au, "Information content of equity analyst reports," *Journal of Financial Economics* 75, 2005, 245-282.

128. In my view, the statistically significant stock price decline on October 13, 2021 was in response to the Cormark report detailing the future economic consequences for Akumin related to the October 12, 2021 Disclosure. The average daily combined trading volume in Canada and the U.S. of 270,274 shares during October 12-13, 2021 was 1.8 times the volume in the Pre-Disclosure Period. The two-day excess return of -11.5% over October 12-13, 2021 is statistically significant at the 5% level.[155] It is not uncommon to consider event widows that are longer than one day in length.[156] As discussed above in Section VII. B. ii), there are a number of factors that bear on the proper length of the event window. In this case, while there was not a statistically significant price reaction on October 12, 2021, as the market continued to digest the follow-on analyst commentary and interpretation, Akumin's stock price impounded the information,

[155] I also conducted robustness checks for the statistical significance of the cumulative excess return during October 12-13, 2021 and found it to be statistically significant at the 5% level under each of the three alternative market model specifications described in footnote 102.

[156] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.4 (emphasis added; footnote omitted) ("In securities fraud cases, many experts have adopted the convention of looking at one-day, two-day, or five-day periods following an announcement. The most recent academic pronouncement expresses support for the shorter, one-day or two-day window, though it recognizes that in practice, analysts often use longer windows. Occasionally, there is another news announcement, or confounding event, within the event window. When this occurs, the event window is often cut short so that it does not include the effects of the confounding effect."); A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35(1), March 1997, 13-39, pp. 14-15 (emphasis added) ("The initial task of conducting an event study is to define the event of interest and identify the period over which the security prices of the firms involved in this event will be examined-the event window. For example, if one is looking at the information content of an earnings with daily data, the event will be the earnings announcement and the event window will include the one day of the announcement. It is customary to define the event window to be larger than the specific period of interest. This permits examination of periods surrounding the event. In practice, the period of interest is often expanded to multiple days, including at least the day of the announcement and the day after the announcement. This captures the price effects of announcements which occur after the stock market closes on the announcement day. The periods prior to and after the event may also be of interest.").

resulting in a statistically significant excess stock price return over the October 12-13, 2021 event window.

129. The large statistically significant stock price reaction over the October 12-13, 2021 event window and higher-than-normal trading activity in response to the October 12, 2021 Disclosure demonstrate the importance of the alleged public correction.

130. Furthermore, as discussed above, the negative stock price reaction to the August 15, 2021 Disclosure, which created considerable uncertainty about the Company's overstated accounts receivable balance, was not reversed after the October 12, 2021 Disclosure which quantified the magnitude of the overstatement. The lack of a reversal of the stock price indicates that the stock price decline and associated increase of riskiness that resulted from the August 15, 2021 Disclosure did not abate on October 12, 2021 (when a second accounting error was revealed as well).

131. The large stock price reaction amid increased trading in response to the October 12, 2021 Disclosure is consistent with the academic literature that discusses the importance of unexpected earnings disclosures and the literature on restatements that demonstrates that historical accounting figures are important to the market's valuation of a company. *See* Section V. The market response to the October 12, 2021 Disclosure is also consistent with the Class Period focus of analyst commentary on Akumin's historical results and guidance for expected future results as the basis for their forecasts, the Company's accounts receivable and related revenue offsets, and its management of operating expenses during the Class Period as discussed above in Section VI.

132. Moreover, the disclosure that restatements to historical financial statements were required suggested that the Company would have to expend time and resources for the completion

of the restatements. The diversion of management's time and attention from the day-to-day management of the Company's business for regulatory compliance can have a negative effect on the business as was acknowledged in Akumin's prior regulatory filings. This is also consistent with Moody's warning that the October 12, 2021 Disclosure created an "untimely distraction that heighten[ed] integration risks surrounding the recent acquisition of Alliance."[157]

133. Therefore, in my opinion, based on the discussion above, the new firm-specific information revealed in the October 12, 2021 Disclosure corresponded with the alleged misrepresentations relating to accounts receivable, revenue, property and equipment, and total shareholders' equity. The statistically significant negative stock price response amid higher-than-normal trading, analyst commentary contemporaneous to the disclosure as well as the academic literature related to earnings-related disclosures and restatements all provide economic evidence of the significance of the October 12, 2021 Disclosure to Akumin's common stock.

C. Analysis of the November 8, 2021 Disclosure

i) November 8, 2021 Event

134. Before the market opened on Monday, November 8, 2021, Akumin filed a press release providing another update on the status of the management cease trade order granted by the OSC on August 20, 2021.[158] While the October 12, 2021 Disclosure indicated to the market that the restatement of prior financial statements for FY 2019, FY 2020 and Q1 2021 would also contain any further adjustments related to prior improper capitalization of certain expenses (in

[157] "Moody's says Akumin's filing delay and accounting review are credit negative," Moody's Investors Service, October 14, 2021.

[158] "Akumin Provides Bi-weekly MCTO Status Update," *Canada NewsWire*, November 8, 2021, 7:00 am (the "November 8, 2021 Press Release").

addition to corrections related to the accounts receivable error), the November 8, 2021 press release confirmed Akumin's announcement made on October 12, 2021 that certain costs that were previously capitalized should more accurately have been expensed as repair and maintenance costs.[159] While the figures were still being finalized, Akumin announced that it expected that the changes would result in a net book value of property and equipment as at June 30, 2021 of US$60.4 million as compared to previously reported March 31, 2021 net book value of property and equipment of US$79.2 million.[160] In other words, assuming no change in net book value of property and equipment between March 31, 2021 and June 30, 2021, US$18.8 million in expenses had been improperly capitalized. Specifically, the press release stated:

> Akumin now confirms that, while in the process of integrating the accounting policies and procedures of the Company and Alliance HealthCare Services, Inc. ("Alliance") in connection with Akumin's acquisition of Alliance on September 1, 2021, management identified certain costs that were capitalized by Akumin under a process that differed from the processes applied by Alliance. Because of these differing processes, Akumin instigated a review of these capitalized expenditures and consulted the limited authoritative GAAP literature, as well as related non-authoritative accounting guidance, with respect to capitalization of property and equipment. While the review is ongoing, Akumin has determined that certain costs that were previously capitalized for the fiscal years ended December 31, 2020 and 2019, and for the quarter ended March 31, 2021, should more accurately be expensed as repair and maintenance. Under ASC 250, Accounting Changes and Error Corrections, this change is considered an error for accounting purposes. Although the quantum of the change is still being finalized, it is currently expected that the changes from the Restated Filings will result in a net book value of property and equipment as at June 30, 2021 of [US]$60.4 million as compared to Akumin's previously reported March 31, 2021 net book value of property and equipment of [US]$79.2 million.[161]

[159] November 8, 2021 Press Release.

[160] November 8, 2021 Press Release.

[161] November 8, 2021 Press Release.

135. Akumin also reiterated its announcement made on October 12, 2021 that it would be restating its annual financial statements for FY 2019 and FY 2020 and its interim financial statements for Q1 2021 and each of their related management's discussion and analysis and CEO and CFO certificates. Also as announced on October 12, 2021, Akumin anticipated completing these filings as well as its filings related to Q2 2021 financial results by November 15, 2021.[162] Finally, the Company announced that the preparation of the restatement filings had delayed its interim financial statements for the quarter ended September 30, 2021 ("**Q3 2021**") which it anticipated not being able to file by the reporting deadline of November 15, 2021 but instead by December 15, 2021.[163] Henceforth, in the report, I refer to this announcement as the "**November 8, 2021 Disclosure**."

ii) Economic Analysis of the November 8, 2021 Disclosure

a) Reaction of Research Analysts and the Financial Press

136. The November 8, 2021 Disclosure was published in *Canada NewsWire* and was covered by several other news media outlets including *Dow Jones Institutional News*, *Contify Life Science News* and *Market News Publishing*.[164]

137. On November 8, 2021, analysts at National Bank of Canada issued a report discussing the Company's November 8, 2021 Disclosure. The analysts noted that the improper accounting of expenses related to repair and maintenance partially explained the EBITDA margin

[162] November 8, 2021 Press Release.

[163] November 8, 2021 Press Release.

[164] "Press Release: Akumin Provides Bi-Weekly MCTO Status Update," *Dow Jones Institutional News*, November 8, 2021, 7:00 am; "Akumin Provides Bi-weekly MCTO Status Update," *Contify Life Science News*, November 8, 2021; "Provides Bi Weekly MCTO Status Update," *Market News Publishing*, October 12, 2021, 8:39 am.

differential between Akumin and its closest peer, Radnet, and that the margin would "likely decrease in the coming quarters."[165] The analysts lowered their price target for Akumin stock from US$3.50 per share to US$2.00 per share but maintained their "Sector Perform" investment rating.[166]

138. On November 9, 2021, National Bank of Canada's investment rating and price target for Akumin stock were reported by *Dow Jones Institutional News* while *Reuters News* reported the new price target.[167] Throughout the day on November 9, 2021, several news articles published by *Dow Jones Institutional News* listed Akumin stock among stocks declining to "New Lows."[168]

b) Stock-Price Reaction

139. On Friday, November 5, 2021, the trading day before the November 8, 2021 Disclosure, Akumin's stock price closed at $2.16 per share. On Monday, November 8, 2021, the stock closed at $2.19 per share, up $0.03 per share, or 1.4%, from the previous day's closing price. The excess stock price return, after accounting for market, industry and exchange rate factors, was 1.1% and is not statistically significant at the 5% level. The combined daily trading volume in

[165] "Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization," National Bank of Canada research report, November 8, 2021.

[166] "Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization," National Bank of Canada research report, November 8, 2021.

[167] "Akumin Inc. Is Maintained at Sector Perform by National Bank," *Dow Jones Institutional News*, November 9, 2021, 12:17 pm; "U.S. RESEARCH ROUNDUP-Amerant Bancorp, Cinemark Holdings, Zix," *Reuters News*, November 9, 2021, 10:35 am.

[168] The news articles published on November 9, 2021 in *Dow Jones Institutional News* were titled "NASDAQ New 52-Week Highs And Lows" and were published at 11:19 am, 12:20 pm, 1:20 pm, 2:20 pm, 3:20 pm, 4:20 pm and 5:37 pm. Several similar articles were published in *Dow Jones Newswires Chinese (English)*.

Canada and the U.S. of 92,637 shares on November 8, 2021 was 0.6 times the average daily trading volume of 147,761 shares during the Pre-Disclosure Period.

140. The next day, on November 9, 2021, the stock closed at $2.14 per share, down $0.05 per share, or -2.3%, from the previous day's closing price. The excess stock price return, after accounting for market, industry and exchange rate factors, was -1.8% and is not statistically significant at the 5% level. The combined daily trading volume in Canada and the U.S. of 72,050 shares on November 9, 2021 was 0.5 times the average daily trading volume of 147,761 shares during the Pre-Disclosure Period. *See* **Exhibit 5**.

141. The 10-day volume weighted average price after the November 8, 2021 Disclosure was $2.37 per share, $0.21 per share or 9.7% higher than the closing price of $2.16 per share prior to the disclosure. I note that the 10-day period overlaps with the final disclosure on November 15, 2021 discussed below.

c) Truth-on-the-Market

142. After the October 12, 2021 Disclosure, the market was already aware that Akumin would be restating its financial filings for FY 2019, FY 2020 and Q1 2021 to correct for accounting errors related to overstated accounts receivable and improper capitalization of expenses and that such filings were delayed until November 15, 2021. The November 8, 2021 Disclosure informed the market for the first time that the changes related to improper capitalization of expenses would result in a net book value of property and equipment as at June 30, 2021 of US$60.4 million as compared to previously reported March 31, 2021 net book value of property and equipment of

US$79.2 million.[169] However, in the absence of prior guidance from the Company concerning the magnitude of improper capitalization of expenses, the market had likely already largely formed an expectation of the consequences of the October 12, 2021 Disclosure. The lack of a statistically significant stock price response to the November 8, 2021 Disclosure indicates that the negative impact of this disclosure was already incorporated into Akumin's stock price following the October 12, 2021 Disclosure.

d) Confounding News

143. I did not find any other new negative company-specific information unrelated to the November 8, 2021 Disclosure that was disclosed on November 8, 2021. This is based on my review of news articles and analyst reports around the time when the announcement was made by the Company.

iii) Summary and Opinion

144. The November 8, 2021 Disclosure informed the market about the magnitude of the improper capitalization of expenses related to repair and maintenance, augmenting the October 12, 2021 Disclosure that alerted the market to the accounting error. This disclosure corresponds to the alleged misrepresentations in the Statement of Claim concerning the improper capitalization of expenses. The excess stock-price return on November 8, 2021 is not statistically significant at the 5% level[170] and the trading volume was below average, indicating that the negative impact of this

[169] November 8, 2021 Press Release.

[170] I also conducted robustness checks for the statistical significance of the excess return on November 8, 2021 and found it to be not statistically significant at the 5% level under each of the three alternative market model specifications described in footnote 102.

disclosure was already incorporated into Akumin's stock price following the October 12, 2021 Disclosure and follow-on commentary by National Bank of Canada and Cormark analysts.

D. Analysis of the November 15, 2021 Disclosure

i) November 15, 2021 Event

145. Before the market opened on Monday, November 15, 2021, Akumin filed a press release announcing its financial results for Q2 2021 as well as the refiling of its annual financial statements for FY 2019 and FY 2020 and its interim financial statements for Q1 2021 to correct for errors in implicit price concessions on historical accounts receivable and improper capitalization of certain expenses.[171] Regarding the restatements, the press release stated:

> *In accordance with the prior disclosure* in Akumin's press releases dated October 12, 2021 and November 8, 2021, the changes made in the Restated Financial Statements resulted in an accounts receivable balance as at June 30, 2021 shown in the Q2 Fiscal 2021 financial statements of [US]$67.6 million, and a restated balance as at March 31, 2021 of [US]$64.2 million, as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of [US]$95.9 million, and a net book value of property and equipment as at June 30, 2021 shown in the Q2 Fiscal 2021 financial statements of [US]$60.4 million, and a restated net book value as at March 31, 2021 of [US]$61.6 million, as compared to Akumin's previously reported March 31, 2021 net book value of property and equipment of [US]$79.2 million.[172]

[171] "Akumin Inc. Announces Second Quarter 2021 Financial Results and Filing of Restated Financial Statements," *Canada NewsWire*, November 15, 2021, 7:00 am (the "November 15, 2021 Press Release"). On November 15, 2021, Akumin filed restated Consolidated Financial Statements for FY 2019 and FY 2020, restated Condensed Consolidated Financial Statements for Q1 2021, Condensed Consolidated Financial Statements for Q2 2021, related MD&A's and CEO and CFO certificates, and Business Acquisition Report that contained Alliance financials for years ended December 31, 2020 and 2019, six months ended June 30, 2021 and 2020, as well as pro forma combined financial information.

[172] November 15, 2021 Press Release (emphasis added).

146. Thus, as of March 31, 2021, Akumin lowered its accounts receivable balance by US$31.7 million from US$95.9 million to US$64.2 million and its net book value of property and equipment by US$17.6 million from US$79.2 million to US$61.6 million. As of June 30, 2021, the accounts receivable balance was US$67.6 million, within the range of US$65 million to US$70 million announced earlier on October 12, 2021, and the net book value of property and equipment was US$60.4 million, the same as announced one week earlier on November 8, 2021.[173]

147. For Q2 2021, Akumin announced volume of 1,659,000 relative-value-units or RVUs,[174] revenue of US$69.5 million and adjusted EBITDA of US$11.7 million.[175]

148. Finally, the Company reiterated its announcement made on November 8, 2021 that the preparation of the restatement filings had delayed the preparation of its interim financial

[173] November 15, 2021 Press Release. As announced in the October 12, 2021 Disclosure, the restatements "also account[ed] for certain adjustments for the tax impact of these changes, previously uncorrected immaterial misstatements, and other items impacted by the correction of the error." *See* October 12, 2021 Press Release. Specifically, the restated filings noted that the impact of the accounts receivable error included a decrease of accounts receivable, a decrease of goodwill and a decrease of revenue. The impact of the improper capitalization error included a decrease of property and equipment, net, an increase in the cost of operations, a decrease in depreciation expense and a decrease to the loss on disposal of property and equipment. *See* Akumin Inc. Consolidated Financial Statements (Restated), December 31, 2020, filed November 15, 2021, pp. 15-16; Akumin Inc. Condensed Consolidated Financial Statements (Restated) (Unaudited), March 31, 2021, filed November 15, 2021, pp. 6-7. Because these line items were impacts from the previously identified accounting errors, based on the analyst reports available to me, I did not see any analyst commentary indicating that these impacts constituted new and material information.

[174] "The Company reports the measurement of volume of diagnostic imaging procedures at its facilities based on RVUs. RVUs are a standardized measure of value used in the United States Medicare reimbursement formula for physician services." Akumin Inc. Management's Discussion and Analysis of Financial Condition and Results of Operations, for the three-month and six-month periods ended June 30, 2021 and 2020, filed November 15, 2021, p. 16.

[175] November 15, 2021 Press Release.

statements for Q3 2021 which it anticipated filing by December 15, 2021.[176] Henceforth, in the report, I refer to this announcement as the "**November 15, 2021 Disclosure**."

ii) Economic Analysis of the November 15, 2021 Disclosure

a) Reaction of Research Analysts and the Financial Press

149. The November 15, 2021 Disclosure was published in *Canada NewsWire* and covered by several other news media outlets including *Dow Jones Institutional News*, *Contify Life Science News* and *Market News Publishing*.[177] On the same day, *Market News Publishing* reported that there was a partial removal of Akumin from the OSC Delinquent Filer List.[178]

150. The same day, on November 15, 2021, analysts at National Bank of Canada issued a report discussing both the Q2 2021 financial results as well as the impact of the restatements on the analysts' forecasts.[179] The analysts noted that the Q2 2021 results were "mixed": volume beat the consensus estimate; revenue was in line with the consensus estimate; and EBITDA missed the consensus estimate (although as explained by the Canaccord Genuity analysts discussed below,

[176] November 15, 2021 Press Release.

[177] "Akumin Inc. Announces Second Quarter 2021 Financial Results And Filing Of Restated Financial Statements," *Dow Jones Institutional News*, November 15, 2021, 7:00 am; "Akumin Announces Second Quarter 2021 Financial Results and Filing of Restated Financial Statements," *Contify Life Science News*, November 15, 2021; "Second Quarter 2021 Financial Results and Filing of Restated Financial Statements," *Market News Publishing*, November 15, 2021, 8:54 am.

[178] "AKU US: Partial Removal from OSC Delinquent Filer List," *Market News Publishing*, November 15, 2021. On November 16, 2021, *Market News Publishing* reported that Akumin was no longer on the [British Columbia Securities Commission] BCSC Delinquent filers list for their Q2 filings. See "AKU US: Removed from BCSC Delinquent Filer List," *Market News Publishing*, November 16, 2021.

[179] "Filing of Delayed Q2/2021 Financials Provides Some Clarity," National Bank of Canada research report, November 15, 2021.

the miss was largely attributable to the improper capitalization of expenses).[180] Regarding the restatements, the National Bank of Canada analysts noted "the negative impression associated with improper accounting" and their negative impact on Akumin's margins and Net Debt to EBITDA ratio:

> **Impact from A/R writedowns and improper capitalizations**
>
> Alongside Q2/21 results, AKU re-stated financials for Q1/21, 2020 and 2019 with writedowns and/or reductions related to A/R as well as the improper capitalization of PPE expenses. Apart from the negative impression associated with improper accounting, the resulting financial impacts are mostly negative and include: 1) legacy AKU EBITDA margins are now expected, per mgmt, in the higher teens vs. low to mid-20% prior; 2) lower EBITDA results in Net Debt to FY+1 EBITDA ticking up to ~6.5x (vs. 6x prior). The silver lining is that DSO improves to 89 days (vs. 92/131 days in Q1/21 post/pre re-statements).[181]

151. The analysts left their price target and rating for the stock unchanged.[182]

152. On November 16, 2021, analysts at Clarus Securities issued a research report.[183] This report is not available to me. On November 17, 2021, analysts at Cormark issued a report discussing their new outlook, while noting that "[t]he reasons for the restated financials are well

[180] I note that while the market was apprised of the magnitude of the accounting errors via the corrective disclosures discussed above, the consensus estimates likely lagged incorporating this information because not all analysts following the Company had updated their forecasts prior to the November 15, 2021 Disclosure. Based on reports available to me, the forecasts contained in the last Canaccord Genuity report prior to the November 15, 2021 Disclosure, published on September 20, 2021, did not reflect the effects of the accounting errors. "Closes acquisition of Alliance Healthcare Services," Canaccord Genuity research report, September 20, 2021.

[181] "Filing of Delayed Q2/2021 Financials Provides Some Clarity," National Bank of Canada research report, November 15, 2021.

[182] "Filing of Delayed Q2/2021 Financials Provides Some Clarity," National Bank of Canada research report, November 15, 2021.

[183] Source: Refinitiv Eikon.

documented in our prior notes and recent company filings."[184] The analysts raised their forecasts for revenue based on an assumption of higher revenue from Alliance. The restatements did not affect their new revenue forecast as their prior "best guess" regarding billing practices "proved to be accurate."[185] The restatements related to improper capitalization of expenses prompted the analysts to lower their EBITDA forecasts as their prior "best guess" for operating expenses was an underestimate.[186] A countervailing effect to this effect on EBITDA was the analysts crediting Akumin in the second half of 2022 and 2023 for its guided cost synergies from the Alliance acquisition.[187] Unrelated to the restatements, the analysts also lowered their forecasts for free cash flows to reflect cash distributions to minority interests linked to the Alliance business.[188] Cormark analysts reaffirmed their Speculative Buy rating and raised their price target for Akumin stock to US$4.25 per share from US$3.75 per share.[189]

153. On November 18, 2021, *American Banking and Market News* reported Cormark's earnings estimates for Akumin as well as investment ratings issued by analysts at the National

[184] "High Torque Equity Requires Execution," Cormark Securities research report, November 17, 2021.

[185] "High Torque Equity Requires Execution," Cormark Securities research report, November 17, 2021.

[186] Based on analyst reports available to me, Cormark's prior report was issued on October 13, 2021 (prior to the November 8, 2021 Disclosure).

[187] "High Torque Equity Requires Execution," Cormark Securities research report, November 17, 2021.

[188] "High Torque Equity Requires Execution," Cormark Securities research report, November 17, 2021 ("Of note, we use the FD equity value (all options/warrants would be ITM at our target price) and we make all appropriate adjustments for the minority interest acquired with Alliance.").

[189] "High Torque Equity Requires Execution," Cormark Securities research report, November 17, 2021.

Bank of Canada and Clarus Securities.[190] Analyst rating activity for Akumin stock was reported in other venues as well.[191]

154. On November 18, 2021, analysts at Canaccord Genuity published a report discussing the Q2 2021 results and their new forecasts.[192] Like analysts at National Bank of Canada, the Canaccord Genuity analysts noted the mixed Q2 2021 results: volume beat estimates, revenue was in line with the consensus estimate "despite AKU's new framework for calculating price concessions" and EBITDA was below consensus largely due to the improper capitalization of expenses. The analysts "made a number of changes to [their] forecast based on the restatements," lowering their revenue, capital expenditure and EBITDA forecasts.[193] The analysts lowered their price target for Akumin stock from US$5.75 per share to US$5.00 per share while maintaining their Buy rating.[194] On November 19, 2021, *Reuters News* reported Canaccord Genuity's new price target.[195]

[190] "Brokers Issue Forecasts for Akumin Inc.'s FY2023 Earnings (TSE:AKU)," *American Banking and Market News*, November 18, 2021.

[191] *See*, *e.g.*, "Akumin (TSE:AKU) Earns 'Buy' Rating from Clarus Securities," *Newstex Blogs Watchlist News*, November 19, 2021, 8:30 am.

[192] "Q2/21: Restatements impact pricing and margin," Canaccord Genuity research report, November 18, 2021.

[193] "Q2/21: Restatements impact pricing and margin," Canaccord Genuity research report, November 18, 2021.

[194] "Q2/21: Restatements impact pricing and margin," Canaccord Genuity research report, November 18, 2021.

[195] "U.S. RESEARCH ROUNDUP - Datadog, Home Depot, Walmart," *Reuters News*, November 19, 2021, 1:07 pm.

b) Stock-Price Reaction

155. On Friday, November 12, 2021, the trading day before the November 15, 2021 Disclosure,[196] Akumin's stock price closed at $2.32 per share. On Monday, November 15, 2021, the stock closed at $2.64 per share, up $0.32 per share, or 13.8%, from the previous day's closing price. The excess stock price return, after accounting for market, industry and exchange rate factors, was 15.0% and is statistically significant at the 1% level. The combined daily trading volume in Canada and the U.S. of 353,484 shares on November 15, 2021 was 2.4 times the average daily trading volume of 147,761 shares during the Pre-Disclosure Period. After the initial price reaction, as analyst commentary continued over the week, Akumin stock price declined to close at $2.33 per share on November 18, 2021, the date the last analyst report was published following the November 15, 2021 Disclosure. The cumulative excess price increase, after accounting for market, industry and exchange rate factors, over the November 15-18, 2021 event window was 2.2% and is not statistically significant at the 5% level.[197] The average daily combined trading volume in Canada and the U.S. of 157,107 shares during November 15-18, 2021 was 1.1 times the average daily volume in the Pre-Disclosure Period.

156. The 10-day volume weighted average price after the November 15, 2021 Disclosure was $2.30 per share, $0.02 per share or 0.7% lower than the closing price of $2.32 per share prior to the disclosure.

[196] Monday, October 11, 2021 was not a trading day in Canada. Source: Bloomberg.

[197] None of the individual excess stock price returns during November 16-18, 2021 were statistically significant at the 5% level.

c) Truth-on-the-Market

157. The refiling of the FY 2019, FY 2020 and Q1 2021 financial filings corrected the accounting errors related to overstated accounts receivable and improper capitalization of repair and maintenance expenses. As the November 15, 2021 Disclosure noted, the existence of the accounting errors were first revealed to the market via the August 15, 2021, October 12, 2021 and November 8, 2021 disclosures, as discussed above.[198] The amount of the accounts receivable balance reported as of June 30, 2021 was within the range of US$65 million to US$70 million announced earlier on October 12, 2021. As of June 30, 2021, the restated net book value of property and equipment was US$60.4 million and was the same as announced one week earlier on November 8, 2021.

158. Thus, the impact of the corrections of these accounting errors on accounts receivable and net property and equipment as of June 30, 2021 were in line with the August 15, 2021, October 12, 2021 and November 8, 2021 Disclosures. The historical effects of these overall corrections were reflected in the refiled financials for FY 2019, FY 2020 and Q1 2021.

159. As stated by Akumin in the October 12, 2021 Disclosure, the correction of these accounting errors would impact certain other items other than accounts receivable and net property

[198] The press release stated "*In accordance with the prior disclosure in Akumin's press releases dated October 12, 2021 and November 8, 2021*, the changes made in the Restated Financial Statements resulted in an accounts receivable balance as at June 30, 2021 shown in the Q2 Fiscal 2021 financial statements of $67.6 million, and a restated balance as at March 31, 2021 of [US]$64.2 million, as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of [US]$95.9 million, and a net book value of property and equipment as at June 30, 2021 shown in the Q2 Fiscal 2021 financial statements of [US]$60.4 million, and a restated net book value as at March 31, 2021 of [US]$61.6 million, as compared to Akumin's previously reported March 31, 2021 net book value of property and equipment of [US]$79.2 million." November 15, 2021 Press Release (emphasis added).

and equipment.[199] These other items were restated in the refiled financials on November 15, 2021, and included items such as revenue, cost of operations, depreciation expense, etc. Although the exact restated figures of these items were not previously known to the market, the market would generally have an expectation of the impact on such items based on the anticipated corrections to accounts receivables and net property and equipment disclosed on October 12, 2021 and November 8, 2021. The changes in these additional items moved in the expected direction consistent with the correction of the two accounting errors.[200] After the market processed and the stock price fully reflected the impact of the initially disclosed information in the November 15, 2021 Disclosure and the follow-on analyst commentary, the cumulative excess stock price movement over the November 15-18, 2021 window is not statistically significant at 5% level, indicating that the value-relevance of the November 15, 2021 Disclosure was already largely impounded in Akumin's stock price.

d) Confounding News

160. As discussed above, along with the refiling of its financial documents, Akumin also announced its financial results for Q2 2021. Analysts noted that the Q2 2021 results were mixed: volume was higher than the consensus estimate, revenue was in line with the consensus estimate "despite AKU's new framework for calculating price concessions,"[201] and EBITDA was below

[199] "… Restated Filings will also account for certain adjustments for the tax impact of these changes, previously uncorrected immaterial misstatements, and other items impacted by the correction of the error." "…any adjustments related to such review would be expected to be reflected as an adjustment to the net book value of property and equipment and additional repairs and maintenance costs which are included in operating expenses (any such adjustments, 'Capitalization Adjustments')." *See* October 12, 2021 Press Release.

[200] Footnote 173 mentions the other items that were impacted because of the accounts receivable and improper capitalization errors.

[201] "Q2/21: Restatements impact pricing and margin," Canaccord Genuity research report,

consensus largely due to the improper capitalization of expenses. Based on reports available to me, only the Cormark analysts stated that they made revisions to their forecasts that were unrelated to the restatements. For reasons other than the restatements, Cormark analysts raised their forecasts for revenue based on an assumption of higher revenue from Alliance, credited Akumin in the second half of 2022 and 2023 for their guided cost synergies from the Alliance acquisition and lowered their forecasts for free cash flows to reflect cash distributions to minority interests ("**MI**") linked to the Alliance business. I considered whether the information about cash distributions to MI by Alliance was material, new, negative confounding information. Akumin issued an earlier press release on July 26, 2021 providing an update on the Alliance acquisition, which included cash distributions to MI made by Alliance for the years ending December 31, 2020 and 2019 and the three months ending March 31, 2021 and 2020.[202] The information about cash distributions to MI in the July 26, 2021 filings[203] was the same information as reported in the Business Acquisition Report filed on November 15, 2021 for the years ending December 31, 2020 and 2019, although the Business Acquisition Report included updated financial information for the second quarter 2021,[204] whereas the July 26, 2021 news release only included financial

November 18, 2021. As discussed above, Canaccord Genuity had not updated its forecasts for the accounting errors prior to the November 15, 2021 Disclosure. *See* footnote 180.

[202] "Akumin Provides Updates Related to Alliance Healthcare Services Acquisition," *Canada Newswire*, July 26, 2021, 7:50 am. The press release included the following financial information regarding Alliance: (i) consolidated financial statements of Alliance for the years ended December 31, 2020 and 2019, (ii) condensed consolidated financial statements of Alliance as of March 31, 2021, (iii) unaudited pro forma combined financial information as at March 31, 2021 (after giving effect to the acquisition and related financing arrangements), and (iv) management discussion and analysis relating to items (i) and (ii) above.

[203] Alliance HealthCare Services, Inc. Consolidated Financial Statements, December 31, 2020 and 2019, filed July 26, 2021, p. 6; Alliance HealthCare Services, Inc. Condensed Consolidated Financial Statements, March 31, 2021, filed July 26, 2021, p. 5.

[204] Business Acquisition Report, November 15, 2021, Alliance HealthCare Services, Inc. Consolidated Financial Statements, December 31, 2020 and 2019, p. 6, Alliance HealthCare

information for the first quarter 2021. The cash distributions to MI were slightly higher in Q2 2021 relative to Q1 2021.[205] However, the Cormark analysts *increased* their price target for Akumin shares to US$4.25 per share from US$3.75 per share; and *increased* their EPS estimate attributable to common equity holders ("Attributable adj. dil. EPS (post NI attrib. to minority)") for FY 2021 to -US$0.14 (from -US$0.33) and for FY 2022 to -US$0.04 (from -US$0.06). The analysts also raised their forecasts for revenue based on an assumption of higher revenue from Alliance and credited Akumin in the second half of 2022 and 2023 for their guided cost synergies from the Alliance acquisition.[206] Therefore, I do not consider the information in the November 17, 2021 Cormark research report to be material, new, negative confounding information.[207] Further, I did not find any other material, new, negative confounding information.

iii) Summary and Opinion

161. On November 15, 2021, Akumin refiled its financial statements for FY 2019, FY 2020 and Q1 2021 to correct for accounting errors related to overstated historical accounts receivable and improper capitalization of certain expenses. This disclosure corresponds to the alleged misrepresentations in the Statement of Claim relating to accounts receivable, revenue, property and equipment, and total shareholders' equity.

Services, Inc. Condensed Consolidated Financial Statements, for the six months ended June 30, 2021 and 2020, p.5.

[205] The cash distributions to MI were US$7.02 million in Q1 2021 and US$7.94 million in Q2 2021. Alliance HealthCare Services, Inc. Condensed Consolidated Financial Statements, March 31, 2021, filed July 26, 2021, p. 5; Business Acquisition Report, filed November 15, 2021, Alliance HealthCare Services, Inc. Condensed Consolidated Financial Statements, for the six months ended June 30, 2021 and 2020, p. 5.

[206] "High Torque Equity Requires Execution," Cormark Securities research report, November 17, 2021, pp. 1-2.

[207] I note that I did not find any other forecast revisions in the analyst reports due to the BAR filed on November 15, 2021.

162. As the Company's press release emphasized, the revisions in the restated financial statements were in line with the prior August 15, 2021, October 12, 2021 and November 8, 2021 Disclosures, indicating that at the time of the November 15 Disclosure, the market was already apprised of the magnitude of the accounting misrepresentations. The confounding news related to the Q2 2021 financial results was overall mixed and was not the cause of downward revisions in analyst forecasts.

163. While the stock price initially increased by a statistically significant amount at the 5% level on November 15, 2021, over the course of the week as analyst commentary continued to be published through November 18, 2021, and the market fully digested the news, the stock price declined. The cumulative excess stock-price return over the November 15-18, 2021 event window is not statistically significant at the 5% level.[208] The lack of a statistically significant stock price response to the November 15, 2021 Disclosure (including the follow-on analyst commentary) indicates that the negative impact of this disclosure was already incorporated into Akumin's stock price following the prior disclosures.

IX. CONCLUSION ON THE ALLEGED PUBLIC CORRECTIONS

164. The information revealed by Akumin in the August 15, 2021, October 12, 2021, November 8, 2021 and November 15, 2021 Disclosures corresponds to the revenue, accounts receivable, property and equipment, and total shareholders' equity misrepresentations alleged in the Statement of Claim.

[208] I also conducted robustness checks for the statistical significance of the cumulative excess return during November 15-18, 2021 and found it to be not statistically significant at the 5% level under each of the three alternative market model specifications described in footnote 102.

165. The discussion and analyses presented above show that the public corrections in the form of the August 15, 2021 and October 12, 2021 Disclosures, as alleged in the Statement of Claim, caused statistically significant declines in the price of Akumin's common stock amid higher-than-normal trading volume. Commentary by security analysts and financial press reporting contemporaneously with the disclosures underscores the significance of these alleged public corrections to Akumin's common stock. The academic literature on the importance of unanticipated earnings disclosures and restatements of historic financials further underscores the importance of the alleged misrepresentations to investors.

166. The alleged public corrections in the form of the November 8, 2021 and November 15, 2021 Disclosures (including follow-on analyst commentary) did not result in statistically significant declines in the price of Akumin's common stock. The lack of a statistically significant stock price response following these disclosures is consistent with the market having generally anticipated the information from these disclosures given Akumin's prior August 15, 2021 and October 12, 2021 Disclosures.

Exhibit 4
Market Model for Akumin Common Stock

Intercept	-0.0014
(t-statistic)	*(-0.367)*
Coefficient on Market Return	1.3801
(t-statistic)	*(1.969)*
Coefficient on Industry Return (Net of Market)	0.7255
(t-statistic)	*(1.808)*
Coefficient on Change in Currency	1.0501
(t-statistic)	*(1.036)*
Estimation Period	June 25, 2021 - December 15, 2021
R-Squared	8.45%
Adjusted R-Squared	5.47%
Standard Error	3.63%
Observations	96

Notes:

[1] The market return is represented by the return on the S&P/TSX Composite Total Return Index (Bloomberg ticker "0000AR"). Source: Bloomberg.

[2] The industry return is represented by the S&P 600 Health Care Total Return Index (Bloomberg ticker: SP6THLTH). The industry return is measured net of the market return. Source: Bloomberg.

[3] The change in currency is the daily percent change in the worth of one US$ in terms of C$ (Bloomberg ticker: USDCAD Curncy). Source: Bloomberg.

[4] I exclude five trading days after each corrective disclosure (August 16, 2021, October 12, 2021, November 8, 2021 and November 15, 2021), including the day of the disclosure, from the estimation period. *See* Report for discussion.

[5] In multiple regression analysis, any independent variable with a t-statistic greater than one (in absolute value) will increase the adjusted R-squared statistic. *See* , e.g., Jeffrey M. Woolridge, Introductory Econometrics: A Modern Approach, 5th ed., South-Western Cengage Learning, 2013, p. 202: “If we add a new independent variable to a regression equation, [adjusted R-squared] increases if, and only if, the t statistic on the new variable is greater than one in absolute value.”

Exhibit 5
Daily Trading Statistics for Akumin Common Stock
June 25, 2021 - November 19, 2021

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
	Akumin Common Stock			Market	Industry	Change in	Predicted	Excess			Excess Price
Date	Volume	Price	Return	Return	Return	Currency	Return	Return	t-stat	p-value	Change
06/25/2021	1,282,278	$4.10	7.61%	0.11%	0.68%	-0.26%	0.15%	7.46%	2.05	0.0429 **	$0.28
06/28/2021	208,880	$3.91	-4.63%	-0.42%	-0.80%	0.37%	-0.61%	-4.03%	-1.11	0.2708	-$0.17
06/29/2021	73,495	$4.00	2.30%	0.21%	-1.10%	0.52%	-0.25%	2.55%	0.70	0.4848	$0.10
06/30/2021	1,921,406	$3.95	-1.25%	-0.03%	-0.26%	-0.02%	-0.36%	-0.89%	-0.24	0.8081	-$0.04
07/02/2021	88,328	$4.14	4.81%	0.30%	-0.09%	-0.61%	-0.65%	5.46%	1.50	0.1362	$0.22
07/05/2021	1,263	$4.11	-0.72%	0.31%	n/a	0.16%	n/a	n/a	n/a	n/a	n/a
07/06/2021	79,016	$4.06	-1.22%	0.09%	n/a	0.96%	n/a	n/a	n/a	n/a	n/a
07/07/2021	34,905	$4.09	0.74%	-0.04%	-0.36%	0.16%	-0.26%	1.00%	0.27	0.7847	$0.04
07/08/2021	67,584	$4.10	0.24%	-1.08%	-0.87%	0.42%	-1.03%	1.27%	0.35	0.7274	$0.05
07/09/2021	37,996	$4.04	-1.46%	0.98%	0.93%	-0.69%	0.45%	-1.92%	-0.53	0.5991	-$0.08
07/12/2021	9,452	$4.05	0.25%	-0.12%	0.82%	0.05%	0.43%	-0.18%	-0.05	0.9597	-$0.01
07/13/2021	79,051	$4.11	1.48%	0.19%	-2.22%	0.48%	-1.12%	2.60%	0.72	0.4760	$0.11
07/14/2021	36,376	$3.99	-2.92%	-0.61%	-2.54%	-0.03%	-2.41%	-0.51%	-0.14	0.8888	-$0.02
07/15/2021	39,564	$4.04	1.25%	0.18%	-0.90%	0.69%	0.05%	1.20%	0.33	0.7417	$0.05
07/16/2021	10,712	$3.98	-1.49%	-0.98%	-0.11%	0.14%	-0.71%	-0.78%	-0.21	0.8312	-$0.03
07/19/2021	28,521	$4.00	0.50%	-1.30%	0.01%	1.09%	0.16%	0.34%	0.09	0.9253	$0.01
07/20/2021	23,697	$3.98	-0.50%	1.10%	2.22%	-0.53%	1.63%	-2.13%	-0.59	0.5592	-$0.09
07/21/2021	10,651	$4.00	0.50%	0.84%	1.41%	-0.99%	0.39%	0.11%	0.03	0.9758	$0.00
07/22/2021	19,098	$3.98	-0.50%	-0.06%	-1.10%	0.06%	-0.92%	0.42%	0.11	0.9088	$0.02
07/23/2021	6,686	$4.01	0.75%	0.51%	0.67%	0.01%	0.69%	0.07%	0.02	0.9851	$0.00
07/26/2021	56,635	$3.97	-1.00%	-0.12%	-0.46%	-0.10%	-0.66%	-0.34%	-0.09	0.9251	-$0.01
07/27/2021	20,495	$4.00	0.76%	0.04%	0.05%	0.41%	0.35%	0.40%	0.11	0.9123	$0.02
07/28/2021	11,906	$4.00	0.00%	0.28%	1.24%	-0.59%	0.33%	-0.33%	-0.09	0.9278	-$0.01
07/29/2021	23,624	$3.88	-3.00%	0.41%	-0.24%	-0.64%	-0.71%	-2.29%	-0.63	0.5307	-$0.09
07/30/2021	530,522	$3.96	2.06%	-0.09%	0.15%	0.22%	0.14%	1.92%	0.53	0.5991	$0.07
08/03/2021	45,725	$3.81	-3.79%	0.38%	0.70%	0.51%	1.17%	-4.95%	-1.36	0.1762	-$0.20
08/04/2021	35,550	$3.67	-3.67%	-0.18%	-1.21%	0.01%	-1.12%	-2.56%	-0.70	0.4837	-$0.10
08/05/2021	37,408	$3.84	4.63%	0.23%	1.21%	-0.27%	0.60%	4.03%	1.11	0.2707	$0.15
08/06/2021	12,403	$3.91	1.82%	0.49%	-0.19%	0.38%	0.45%	1.38%	0.38	0.7060	$0.05
08/09/2021	12,124	$3.83	-2.05%	-0.19%	-1.08%	0.18%	-0.85%	-1.20%	-0.33	0.7421	-$0.05
08/10/2021	70,431	$3.57	-6.79%	0.29%	-1.60%	-0.45%	-1.59%	-5.20%	-1.43	0.1557	-$0.20
08/11/2021	25,622	$3.61	1.12%	0.28%	-0.20%	-0.13%	-0.23%	1.35%	0.37	0.7106	$0.05
08/12/2021	48,704	$3.66	1.39%	-0.10%	0.44%	0.18%	0.30%	1.09%	0.30	0.7653	$0.04
08/13/2021	33,776	$3.73	1.91%	-0.01%	-0.70%	-0.09%	-0.74%	2.66%	0.73	0.4667	$0.10
08/16/2021	487,519	$3.05	-18.23%	-0.15%	0.04%	0.47%	0.29%	-18.52%	-5.10	0.0000 ***	-$0.69
08/17/2021	486,979	$2.84	-6.89%	-0.58%	-0.33%	0.44%	-0.30%	-6.58%	-1.81	0.0733 *	-$0.20
08/18/2021	133,319	$2.84	0.00%	-0.29%	-1.05%	0.23%	-0.84%	0.84%	0.23	0.8167	$0.02
08/19/2021	174,131	$2.72	-4.23%	-0.42%	-1.02%	1.34%	0.26%	-4.49%	-1.23	0.2202	-$0.13
08/20/2021	556,927	$2.93	7.72%	0.61%	1.72%	-0.05%	1.45%	6.27%	1.72	0.0879 *	$0.17
08/23/2021	88,554	$2.88	-1.71%	0.68%	1.70%	-1.30%	0.17%	-1.88%	-0.52	0.6060	-$0.06
08/24/2021	50,361	$2.88	0.00%	0.36%	-0.12%	-0.51%	-0.53%	0.53%	0.14	0.8853	$0.02
08/25/2021	22,737	$2.93	1.74%	0.19%	-0.04%	0.02%	-0.02%	1.76%	0.48	0.6302	$0.05
08/26/2021	68,501	$2.93	0.00%	-0.40%	-0.90%	0.76%	-0.25%	0.25%	0.07	0.9452	$0.01
08/27/2021	112,736	$2.80	-4.44%	0.69%	2.79%	-0.53%	1.78%	-6.22%	-1.71	0.0905 *	-$0.18
08/30/2021	118,944	$2.83	1.07%	-0.21%	0.08%	-0.11%	-0.33%	1.40%	0.39	0.7005	$0.04
08/31/2021	79,843	$2.72	-3.89%	-0.05%	0.43%	0.08%	0.23%	-4.11%	-1.13	0.2606	-$0.12
09/01/2021	232,004	$3.14	15.44%	0.52%	0.81%	0.03%	0.83%	14.61%	4.02	0.0001 ***	$0.40
09/02/2021	452,514	$3.15	0.32%	0.53%	0.95%	-0.53%	0.34%	-0.02%	-0.01	0.9953	$0.00
09/03/2021	105,116	$3.06	-2.86%	0.13%	-1.05%	-0.23%	-1.06%	-1.80%	-0.50	0.6213	-$0.06
09/07/2021	279,377	$2.90	-5.23%	-0.05%	-1.30%	0.98%	-0.08%	-5.15%	-1.42	0.1599	-$0.16
09/08/2021	110,360	$2.87	-1.03%	-0.30%	-0.41%	0.35%	-0.27%	-0.77%	-0.21	0.8329	-$0.02
09/09/2021	139,427	$3.09	7.67%	-0.16%	-0.82%	-0.21%	-1.06%	8.73%	2.40	0.0183 **	$0.25
09/10/2021	144,198	$3.14	1.62%	-0.35%	-0.78%	0.22%	-0.70%	2.32%	0.64	0.5249	$0.07
09/13/2021	99,699	$3.00	-4.46%	0.16%	-0.15%	-0.35%	-0.51%	-3.95%	-1.09	0.2795	-$0.12

Exhibit 5
Daily Trading Statistics for Akumin Common Stock
June 25, 2021 - November 19, 2021

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
	Akumin Common Stock			Market	Industry	Change in	Predicted	Excess			Excess Price
Date	Volume	Price	Return	Return	Return	Currency	Return	Return	t-stat	p-value	Change
09/14/2021	172,866	$3.04	1.33%	-0.51%	-0.84%	0.36%	-0.69%	2.03%	0.56	0.5782	$0.06
09/15/2021	117,294	$3.01	-0.99%	0.69%	0.39%	-0.50%	0.07%	-1.05%	-0.29	0.7723	-$0.03
09/16/2021	46,048	$2.97	-1.33%	-0.42%	0.08%	0.42%	0.09%	-1.42%	-0.39	0.6978	-$0.04
09/17/2021	29,350	$3.04	2.36%	-0.54%	1.26%	0.64%	1.10%	1.26%	0.35	0.7293	$0.04
09/20/2021	32,010	$3.02	-0.66%	-1.63%	-2.92%	0.45%	-2.84%	2.19%	0.60	0.5489	$0.07
09/21/2021	33,156	$3.10	2.65%	0.45%	0.71%	-0.02%	0.65%	2.00%	0.55	0.5842	$0.06
09/22/2021	54,213	$3.09	-0.32%	0.78%	1.12%	-0.37%	0.79%	-1.11%	-0.31	0.7602	-$0.03
09/23/2021	19,902	$3.02	-2.27%	0.31%	0.87%	-0.92%	-0.27%	-1.99%	-0.55	0.5846	-$0.06
09/24/2021	33,291	$2.96	-1.99%	-0.28%	-1.28%	-0.02%	-1.27%	-0.71%	-0.20	0.8448	-$0.02
09/27/2021	50,974	$3.02	2.03%	0.32%	0.84%	-0.19%	0.48%	1.55%	0.43	0.6715	$0.05
09/28/2021	97,920	$3.02	0.00%	-1.33%	-1.96%	0.47%	-1.93%	1.93%	0.53	0.5960	$0.06
09/29/2021	22,527	$3.02	0.00%	-0.08%	0.43%	0.55%	0.70%	-0.70%	-0.19	0.8470	-$0.02
09/30/2021	76,021	$3.07	1.66%	-0.44%	-0.55%	-0.60%	-1.45%	3.11%	0.86	0.3946	$0.09
10/01/2021	47,446	$3.15	2.61%	0.40%	0.98%	-0.25%	0.57%	2.03%	0.56	0.5770	$0.06
10/04/2021	61,868	$3.00	-4.76%	-0.45%	-2.20%	-0.47%	-2.52%	-2.24%	-0.62	0.5385	-$0.07
10/05/2021	7,955	$3.02	0.67%	0.65%	0.21%	-0.05%	0.39%	0.28%	0.08	0.9398	$0.01
10/06/2021	30,118	$3.02	0.00%	0.04%	-0.88%	0.06%	-0.69%	0.69%	0.19	0.8502	$0.02
10/07/2021	29,717	$3.10	2.65%	1.16%	1.49%	-0.31%	1.38%	1.27%	0.35	0.7282	$0.04
10/08/2021	22,783	$3.10	0.00%	0.00%	-1.42%	-0.63%	-1.83%	1.83%	0.50	0.6159	$0.06
10/12/2021	171,561	$3.01	-2.90%	0.10%	-0.34%	-0.03%	-0.35%	-2.55%	-0.70	0.4838	-$0.08
10/13/2021	368,987	$2.74	-8.97%	0.89%	-0.04%	-0.20%	0.20%	-9.17%	-2.52	0.0133 **	-$0.28
10/14/2021	195,393	$2.62	-4.38%	0.98%	0.28%	-0.59%	0.09%	-4.47%	-1.23	0.2218	-$0.12
10/15/2021	108,244	$2.55	-2.67%	0.52%	-0.57%	-0.02%	-0.23%	-2.45%	-0.67	0.5027	-$0.06
10/18/2021	62,315	$2.53	-0.78%	0.27%	-0.25%	0.09%	-0.05%	-0.74%	-0.20	0.8396	-$0.02
10/19/2021	245,221	$2.38	-5.93%	0.48%	0.92%	-0.13%	0.71%	-6.64%	-1.83	0.0710 *	-$0.17
10/20/2021	1,454,658	$2.15	-9.66%	0.48%	0.27%	-0.34%	0.01%	-9.68%	-2.66	0.0091 ***	-$0.23
10/21/2021	169,776	$2.25	4.65%	0.12%	0.51%	0.38%	0.71%	3.94%	1.08	0.2812	$0.08
10/22/2021	180,450	$2.10	-6.67%	0.02%	-0.05%	-0.02%	-0.17%	-6.49%	-1.79	0.0773 *	-$0.15
10/25/2021	204,336	$2.24	6.67%	0.37%	-0.14%	0.13%	0.14%	6.52%	1.80	0.0759 *	$0.14
10/26/2021	198,350	$2.20	-1.79%	-0.52%	-0.39%	0.06%	-0.70%	-1.09%	-0.30	0.7651	-$0.02
10/27/2021	104,867	$2.25	2.27%	-1.03%	-1.11%	-0.25%	-1.88%	4.15%	1.14	0.2563	$0.09
10/28/2021	60,042	$2.24	-0.44%	1.17%	2.78%	-0.11%	2.53%	-2.98%	-0.82	0.4150	-$0.07
10/29/2021	26,323	$2.23	-0.45%	-0.73%	0.20%	0.34%	-0.11%	-0.33%	-0.09	0.9271	-$0.01
11/01/2021	30,731	$2.19	-1.79%	1.00%	1.35%	-0.15%	1.34%	-3.13%	-0.86	0.3913	-$0.07
11/02/2021	114,916	$2.24	2.28%	-0.36%	-0.05%	0.34%	-0.05%	2.33%	0.64	0.5224	$0.05
11/03/2021	57,577	$2.18	-2.68%	0.45%	3.25%	-0.16%	2.35%	-5.02%	-1.38	0.1702	-$0.11
11/04/2021	30,703	$2.13	-2.29%	0.36%	-0.50%	0.52%	0.29%	-2.58%	-0.71	0.4797	-$0.06
11/05/2021	22,616	$2.16	1.41%	0.53%	1.05%	0.01%	0.98%	0.43%	0.12	0.9066	$0.01
11/08/2021	92,637	$2.19	1.39%	0.47%	0.31%	-0.12%	0.27%	1.12%	0.31	0.7595	$0.02
11/09/2021	72,050	$2.14	-2.28%	0.18%	-0.58%	-0.03%	-0.48%	-1.81%	-0.50	0.6200	-$0.04
11/10/2021	333,454	$2.17	1.40%	-0.61%	-0.95%	0.43%	-0.78%	2.18%	0.60	0.5502	$0.05
11/11/2021	97,213	$2.32	6.91%	0.56%	0.35%	0.70%	1.22%	5.69%	1.57	0.1207	$0.12
11/12/2021	91,990	$2.32	0.00%	0.92%	0.02%	-0.23%	0.24%	-0.24%	-0.07	0.9476	-$0.01
11/15/2021	353,484	$2.64	13.79%	-0.39%	-0.75%	-0.27%	-1.22%	15.01%	4.13	0.0001 ***	$0.35
11/16/2021	162,020	$2.55	-3.41%	0.17%	0.34%	0.34%	0.57%	-3.98%	-1.10	0.2763	-$0.11
11/17/2021	61,633	$2.41	-5.49%	-0.29%	-0.37%	0.41%	-0.16%	-5.33%	-1.47	0.1462	-$0.14
11/18/2021	51,290	$2.33	-3.32%	-0.06%	-1.19%	-0.06%	-1.11%	-2.21%	-0.61	0.5449	-$0.05
11/19/2021	93,360	$2.18	-6.44%	-0.38%	-0.41%	0.30%	-0.36%	-6.07%	-1.67	0.0981 *	-$0.14

Notes:

[1] Canadian stock market trading day (source: Bloomberg).

[2] Combined daily U.S. and Canadian stock market composite trading volume (source: Bloomberg).

[3] Closing Canadian stock market composite share price (source: Bloomberg).

[4] = {[3] / previous trading day's [3]} - 1.

[5] The market return is represented by the return on the S&P/TSX Composite Total Return Index (Bloomberg ticker "0000AR").

Exhibit 5
Daily Trading Statistics for Akumin Common Stock
June 25, 2021 - November 19, 2021

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
	Akumin Common Stock			Market	Industry	Change in	Predicted	Excess			Excess Price
Date	Volume	Price	Return	Return	Return	Currency	Return	Return	t-stat	p-value	Change

Source: Bloomberg.
[6] The industry return is represented by the S&P 600 Health Care Total Return Index (Bloomberg ticker: SP6THLTH).
Source: Bloomberg.
[7] The change in currency is the daily percent change in the worth of one US$ in terms of C$ (Bloomberg ticker: USDCAD Curncy).
Source: Bloomberg.
[8] Predicted return equals: intercept + (market beta x [5]) + {industry (net of market) beta x ([6] - [5])} + change in currency coefficient x [7]. *See* Exhibit 4 for the intercept, market beta, industry (net of market) beta, and change in currency coefficient from the market model regression.
[9] = [4] - [8].
[10] = [9] / standard error of the regression. *See* Exhibit 4 for the standard error from the market model regression.
[11] Two-tailed p-value associated with the t-statistic in [10] with degrees of freedom of 92 from the market model regression. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.
[12] = prior [3] x [9].

APPENDIX A: MARKET EFFICIENCY FOR AKUMIN COMMON STOCK

I. INTRODUCTION

1. In the context of securities litigation, the market for a stock is said to be informationally efficient if the stock price reflects all publicly available information (henceforth referred to as an "efficient market"), which is consistent with the semi-strong form of the Efficient Capital Market Hypothesis ("**ECMH**"), a bedrock of modern financial theory.[1,2] Over the last half a century, the ECMH has occupied a prominent place in the economics and finance literature, and "economists broadly agree that stock prices in developed markets generally do respond to information."[3]

[1] Based on nested information sets, three forms of an efficient market have traditionally been defined: (1) the weak form, in which historical prices are incorporated into public prices; (2) the semi-strong form, in which all publicly available information is incorporated into public prices; and (3) the strong form, in which all publicly and privately available information are incorporated into public prices. *See* John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, p. 22.

[2] This concept of informational efficiency is distinct from fundamental efficiency which posits that the information is incorporated correctly or accurately. It is my understanding that for securities litigation, the relevant concept is that of informational efficiency. *See*, *e.g.*, Brief of Financial Economists as Amici Curiae in Support of Respondent for the Supreme Court of the United States, *Amgen, Inc., et al. v. Connecticut Retirement Plans and Trust Funds*, p. 7 ("The SSEMH [Semi-Strong Efficient Market Hypothesis] is a theory of *informational* efficiency and must be distinguished from theories of *fundamental* efficiency." (emphasis in original)). *See also* Sunita Surana, "Informational Efficiency in the Context of Securities Litigation: What Have We Learned?" *University of Illinois Law Review Online* 334-341, Fall 2021 ("Surana (2021)") (attached as **Appendix B**).

[3] Brief of Financial Economists as Amici Curiae in Support of Respondents for the Supreme Court of the United States, *Halliburton Co. v. Erica P. John Fund, Inc.* 573 U.S. 258 (U.S. Supreme Court 2014) (hereinafter "Brief of Financial Economists"), p. 12. Amici included academic financial economists who teach and write about public securities markets. They "file[d] this brief in order to clarify the areas of agreement and disagreement among economists regarding the 'Efficient Capital Markets Hypothesis' ('ECMH')." *Id.* pp. 1–2.

2. At any point in time, the market price of a security is based on the buying and selling decisions of a diverse set of investors who hold heterogenous views about the expected future cash flows and growth prospects of a company. Trading based on these disparate views and the forces of supply and demand determine the market price.[4] According to the ECMH, as new information enters the market that causes investors to alter their expectations, the market price of the security responds to reflect this new information.[5,6]

3. Economists generally consider the following factors or indicators in assessing whether a stock trades in an informationally efficient market: (1) trading volume; (2) analyst and media coverage of the company; (3) presence of one or more market makers; (4) market capitalization; (5) institutional ownership; (6) bid-ask spreads; (7) ability to sell short; (8) lack of systematic and persistent autocorrelation in the stock's price; and (9) cause-and-effect relationship

[4] While the resulting market price may diverge from any particular investor's expectations about the future prospects for the company, it reflects the overall consensus view of the market participants. In fact, trading based on the different views and strategies of different investors drives the formation of the market price and makes the market informationally efficient. *See* Surana (2021), pp. 338-339.

[5] *See*, *e.g.*, Eugene F. Fama, "Efficient Capital Markets: II," *The Journal of Finance* 46(5), December 1991, 1575-1617; Eugene F. Fama, "Two Pillars of Asset Pricing," *American Economic Review* 104(6), 2014, 1467-1485. As the U.S. Supreme Court noted, "[e]ven the foremost critics of the efficient capital markets hypothesis acknowledge that public information generally affects stock prices. *See*, *e.g.*, Shiller, We'll Share the Honors, and Agree to Disagree, N.Y. Times, Oct. 27, 2013, p. BU6 ('*Of course, prices reflect available information*')." *Halliburton Co. v. Erica P. John Fund, Inc.* 573 U.S. 258, 272 (U.S. Supreme Court 2014).

[6] According to leading financial scholars: "Economists disagree about whether markets *perfectly* process information and how quickly they do so; about whether prices reflect the fundamental value of the underlying stock; about the size and significance of 'bubbles' and other pricing anomalies in the market and the extent to which non-informational factors affect prices; and about whether it is possible to 'beat the market' by pursuing various investment strategies designed to exploit pricing anomalies. Such disagreements existed when *Basic* was decided in 1988, and they exist today. ***But economists do not generally disagree about whether market prices respond to new material information***." Brief of Financial Economists, p. 3 (emphasis added and in original).

between new, unanticipated and important information and changes in the security's price. These factors generally examine whether information is readily available, whether there is sufficient trading activity, whether the costs of trading are reasonably low and whether the institutional and trading conditions enhance the flow of information such that the market price for the security is expected to reflect the new information. Below, I show that Akumin common stock traded in an informationally efficient market at the time the corrective disclosures were made. Specifically, I discuss each of these factors for Akumin common stock over the time period spanning June 25, 2021, when Akumin made the announcement to acquire Alliance, to November 19, 2021, the end of the week after the final corrective disclosure on November 15, 2021 (the "Analysis Period").[7] For these factors of efficiency, where feasible, I also include an applicable comparison of Akumin common stock to the universe of stocks listed on the TSX. Such benchmarking is consistent with the explanation in the widely used textbook by Campbell, Lo and MacKinlay (1997):

> The notion of *relative* efficiency … may be a more useful concept than the all-or-nothing view taken by much of the traditional market-efficiency literature. The advantages of relative efficiency over absolute efficiency are easy to see by way of an analogy. Physical systems are often given an efficiency rating based on the relative proportion of energy or fuel converted to useful work. Therefore, a piston engine may be rated at 60% efficiency, meaning that on average 60% of the energy contained in the engine's fuel is used to turn the crankshaft, with the remaining 40% lost to other forms of work such as heat, light, or noise.
>
> Few engineers would ever consider performing a statistical test to determine whether or not a given engine is perfectly efficient—such an engine exists only in the idealized frictionless world of the imagination.[8]

[7] Unless otherwise specified, I conducted the analyses based on Akumin's composite stock price in Canada and the currency is in Canadian dollars.

[8] John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, p. 24 (emphasis in original).

4. While stocks traded on open and well-developed markets generally impound information quickly, it is important to recognize that even in the most developed markets, frictions such as trading costs and costs of gathering information exist, in varying degrees, for all stocks, and thus, the notion of "perfect efficiency is an unrealistic benchmark that is unlikely to hold in practice."[9] Indeed, according to leading financial scholars, informational efficiency "does not require that markets be *anywhere near perfectly efficient*."[10]

5. It is also important to recognize that no single factor by itself is determinative of market efficiency for a stock. This determination should be based on the preponderance of evidence from all the factors considered together.[11] Likewise, no single factor provides sufficient evidence to conclude market inefficiency.

II. INDICATORS OF MARKET EFFICIENCY FOR AKUMIN COMMON STOCK

i) Weekly Trading Volume

6. Trading volume is generally viewed as an indicator of market efficiency because high volume signals significant investor interest in the company which facilitates incorporation of new public information into stock prices. High turnover of shares is indicative of an active and liquid market. Liquidity allows investors to buy and sell shares quickly when their assessments

[9] John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, p. 24.

[10] Brief of Financial Economists, p. 12 (emphasis added).

[11] Judicial analysis of market efficiency reflects this recognition. *See*, *e.g.*, *Vinh Nguyen v. Radient Pharm. Corp*., 287 F.R.D. 563, 574 (C.D. Cal. 2012) ("This Court recognizes that *Cammer* factors are 'an analytical tool, not a checklist' of requirements."); *Waggoner v. Barclays PLC*, 875 F.3d, 79, 99 (2d Cir. 2017) (holding that the district court in finding an efficient market based on the first four *Cammer* factors and the three *Krogman* factors acted within its discretion, and finding that the district court was not required to reach a conclusion regarding the fifth *Cammer* factor).

about the value of a company's stock change, which encourages investors to make greater investments in information gathering and processing. High trading activity, thus, enhances the informational efficiency of the market.[12,13]

7. During the Analysis Period, a total of 15.2 million shares of Akumin common stock were traded by investors, 4.1 million shares in Canada and 11.2 million shares in the U.S. The average weekly trading volume, combined in Canada and the U.S., was 0.7 million shares during this time period. The average weekly trading volume as a percent of shares outstanding was 0.9% and as a percent of public float was 1.3%.[14] *See* **Exhibit A-1**.

8. Akumin's weekly trading volume in Canada as a percent of shares outstanding was higher than 15% of the stocks listed on the TSX.[15,16] I note that this benchmarking statistic for

[12] Larry Harris, Trading & Exchanges: Market Microstructure for Practitioners, Oxford University Press, 2003, pp. 70, 205, 215.

[13] U.S. Courts have considered trading volume as an indicator of market efficiency. The *Cammer* court noted that weekly trading volume of two percent or more of the outstanding shares would justify a "strong presumption" of market efficiency; one percent would justify a "substantial presumption." *See Cammer v. Bloom*, 711 F. Supp. 1264, 1286 (D.N.J. 1989) ("*Cammer*").

[14] All days in the first week of the Analysis Period are included in the weekly analysis.

[15] The benchmarking analyses presented in this report are based on companies with a single class of common stock listed on the TSX as of August 13, 2021, the last trading day before the first alleged corrective disclosure. This list was determined from the Bloomberg equity screener. For this list of stocks, relevant data for benchmarking the various factors were obtained from Refinitiv. For each stock, data were obtained, where available, for the Canadian Composite identifier for all benchmarked factors except analyst coverage for which data were obtained for the TSX identifier (because, according to the Refinitiv client support team, comprehensive analyst coverage data are stored under the TSX identifier). Note that results for Akumin obtained using Refinitiv data may vary somewhat from the results I have computed using other data sources. But, for the purposes of benchmarking, in order to keep all companies on an "apples-to-apples" basis, I use Akumin's statistic as obtained from Refinitiv.

[16] The benchmarking for weekly trading volume as a percent of shares outstanding is based on first calculating the average of 22 weekly turnover statistics (from the full week ending on June 25, 2021 to the full week ending on November 19, 2021) for each company in the list of companies described in footnote 15, where data is available, and then calculating Akumin's percentile rank.

volume is a conservative measure because the benchmarking is based on the Canadian Composite identifiers for all stocks and thus includes trading volume only in Canada. Akumin stock was however cross-listed in the U.S. and also had trading volume in the U.S. (whereas not all companies listed on the TSX are cross-listed in the U.S.).

9. In my opinion, the Company's trading volume provides support for the conclusion that Akumin common stock traded in an efficient market.

ii) Analyst and Media Coverage

Analyst Coverage

10. Securities analysts collect information on specific companies, and in conjunction with their research and assessment of relevant industry and market conditions, publish research reports that contain discussions of, among other things, recent company-specific events, their projections for future earnings, price targets, and Buy/Hold/Sell recommendations. Coverage by research analysts, thus, means that important information about the company is analyzed by these professionals who expend considerable resources and is likely to be reflected in the security price

through increased trading activity.[17] Analyst coverage is widely regarded as an indicator of market efficiency.[18,19]

11. The importance of analyst coverage to investors is also evident from the wide use of the collection of forecasted financial estimates put forth by research analysts, commonly referred to as consensus estimates. Consensus estimates are compiled by financial services firms such as Thomson and S&P Capital IQ. Thomas and Cotter (2000) comment on the relevance of consensus estimates to the investing community, noting that, "First Call's [acquired by Thomson] earnings estimate dissemination service is a very important conduit for information from companies to their investors. Investors believe that First Call data is so important that they (investors) actually purchase consensus earnings estimates and short analyst write-ups (First Call Notes) that sell-side analysts publish."[20]

12. In line with academic research, the role of research analysts is aptly summed up in the U.S. Supreme Court's decision in *Dirks v. Securities Exchange Commission*: "[the] value to

[17] Research published by so-called sell-side analysts is typically available to investors. These analysts are employed by full service financial firms such as investment banks. In contrast, research by so-called buy-side analysts, employed by institutional investors such as hedge funds is generally available exclusively to their employers.

[18] "Analyst coverage is the most widely-accepted method of measuring when securities markets are efficient at processing information. Academic commentators have agreed that analyst coverage is an important mechanism for disseminating information to the market." Randall S. Thomas and James F. Cotter, "Measuring Securities Market Efficiency in the Regulatory Setting," *Law and Contemporary Problems* 63(3), Summer 2000, 105-122, at 111 (footnote omitted).

[19] U.S. Courts have considered analyst coverage as an indication of market efficiency. *See*, *e.g.*, *In re Xcelera.com Securities Litigation*, 430 F.3d 503, 514 (1st Cir. 2005) ("[T]he greater the number of securities analysts following and reporting on a company's stock, the greater the likelihood that information released by a company is being relied upon by investors."); *In Re Winstar Comm. Sec. Litig.*, 290 F.R.D. 437, 446 (S.D.N.Y. 2013) (market considered efficient where three analysts followed the security).

[20] Randall S. Thomas and James F. Cotter, "Measuring Securities Market Efficiency in the Regulatory Setting," *Law and Contemporary Problems* 63(3), Summer 2000, 105-122, at 114.

the entire market of [analysts'] efforts cannot be gainsaid; market efficiency in pricing is significantly enhanced by [their] initiatives to ferret out and analyze information, and thus the analyst's work redounds to the benefit of all investors."[21]

13. Detailed research coverage for Akumin was provided by analysts associated with firms such as: Canaccord Genuity; Clarus Securities; Cormark Securities Inc.; and National Bank of Canada.[22] Moody's, a debt ratings agency, also reported on Akumin. There were 4 additional technical or other analyst firms that covered the Company.[23] In total, there were at least 9 analysts (including the ratings agency, Moody's) reporting on Akumin.[24] Over 35 analyst reports were issued during the Analysis Period by these firms. **Exhibit A-2** provides a list of the analysts covering the Company along with the number of reports issued by these analysts.

14. According to Bloomberg data, there were 4 research analysts providing investment recommendations for Akumin during the Analysis Period. Further, during this time period, between 2 and 4 research analysts, with an average of 3 analysts, were part of the Refinitiv I/B/E/S consensus EPS estimate for the current fiscal year. *See* **Exhibit A-3**.

15. Analyst coverage of Akumin was higher than 40% of all stocks listed on the TSX.[25]

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[21] *Dirks v. Securities Exchange Commission*, 463 U.S. 646, 659 n.17 (U.S. Supreme Ct. 1983).

[22] Based on reports available on the S&P Capital IQ and Refinitiv Eikon databases.

[23] Based on reports available on the S&P Capital IQ and Refinitiv Eikon databases.

[24] The list of analysts is limited to information currently available from S&P Capital IQ and Refinitiv Eikon databases which may not be a comprehensive list of all analysts covering the Company.

[25] The benchmarking for analyst coverage is based on first calculating the average of 6 end-of-month (June 2021 – November 2021) statistics for each company in the list of companies described in footnote 15, where data is available, and then calculating Akumin's percentile rank.

Media Coverage[26]

16. In addition to analyst reports, information was also disseminated through media coverage of the Company. During the Analysis Period, over 340 news articles about Akumin are currently available from Factiva and over 420 articles are currently available from LexisNexis, data services that cover various media outlets.[27] These news stories about Akumin appeared in publications such as *American Banking and Market News, Benzinga.com, Briefing.com, Business Wire, Canada NewsWire, Canada Stockwatch, Contify Life Science News, Dow Jones Institutional News, ENP Newswire, FinancialWire, Impact Financial News, Market News Publishing, Moody's Investors Service, MT Newswires Live Briefs INVESTOR Canada, Reuters News, Troubled Company Reporter,* among others. In addition, over 15 *Bloomberg News* or *Bloomberg First Word* articles currently are available from Bloomberg.[28]

17. Additional information about Akumin was disseminated through more than 50 SEDAR filings (in English) during this time period by Akumin (News Releases, Interim and

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The analyst coverage represents the number of sell-side analysts covering the security. I exclude data points where the analyst coverage for a company on a date is zero. If such zero analyst coverage data points are included and treated as zero, then analyst coverage for Akumin is higher than 54% of stocks listed on the TSX.

[26] In addition to analyst coverage, courts have recognized media coverage as an indicator of market efficiency. *See*, *e.g.*, *Cheney v. Cyberguard Corp.*, 213 F.R.D 484, 499-501 (S.D. Fla. 2003) ("Plaintiffs have shown that CyberGuard was featured in a significant number of news items indicating that information regarding CyberGuard may have been widely distributed, which would support a finding of efficiency.").

[27] I searched all sources in Factiva for search term "Akumin" in English language. I searched all sources in LexisNexis for search term "Akumin."

[28] Based on a search of *Bloomberg News* or *Bloomberg First Word* articles for identifier "Akumin Inc."

Annual Financial Statements, etc.).[29] Akumin also filed over 20 SEC filings during this time period.[30]

18. In my opinion, the Company's analyst and media coverage along with frequent disclosures by the Company in the form of news releases and financial statements provides support for my opinion that Akumin common stock traded in an efficient market.

iii) Listing on the TSX and Presence of a Market Maker

19. During the Analysis Period, the Company's shares were listed on the TSX in Canada and traded under the ticker symbol "AKU."[31] Listing on such a major exchange is generally considered a good indication of market efficiency for the stock.

20. Large, well-established exchanges such as the TSX have processes and systems to allow investors the ability to execute trades quickly and efficiently and to provide liquidity. To augment liquidity, the TSX uses a market maker program where the listed securities have designated Market Maker firms. The TSX describes the role of the market maker as follows:

> The role of the Market Maker is to augment liquidity, and ensure a 2-sided market exists, while maintaining the primacy of an order-driven continuous auction market based on price-time priority. A Market Maker manages market liquidity through a mainly passive role, and is often only visible when natural market forces are not sufficiently supporting a liquid trading environment.[32]

[29] Source: www.sedar.com.

[30] Source: www.sec.gov.

[31] Akumin Inc. Annual report on Form 10-K, filed March 16, 2022, p. 41.

[32] *See* https://www.tsx.com/trading/toronto-stock-exchange/order-types-and-features/market-maker-program (last visited May 5, 2022).

21. Market makers thus provide liquidity to traders, which facilitates economically efficient trading and thus is an indicator of an efficient market.[33] For Akumin common stock, TD Securities Inc., and Citadel Securities Canada ULC were the designated market makers during the Analysis Period.[34]

22. In my view, listing on a major stock exchange such as the TSX as well as the presence of a market maker supports a finding of efficiency for Akumin common stock.

iv) Market Capitalization and Public Float

23. A large market capitalization is an indicator of market efficiency because there is generally a greater incentive for investors to gather and analyze information about large corporations. Greater investor interest facilitates the incorporation of new public information into stock prices and enhances market efficiency.[35] During the Analysis Period, Akumin's market capitalization ranged from approximately $187.0 million to $295.2 million, with an average of $248.4 million. *See* **Exhibit A-4**.

24. Akumin's market capitalization was higher than 34% of all stocks listed on the TSX.[36]

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[33] Larry Harris, Trading & Exchanges: Market Microstructure for Practitioners, Oxford University Press, 2003, pp. 401, 408.

[34] This information was obtained from the TMX Group via email communication.

[35] U.S. courts have considered market capitalization as an indication of market efficiency. *See, e.g., McIntire v. China MediaExpress Holdings, Inc.*, 38 F. Supp. 3d 415, 433 (S.D.N.Y. 2014) (holding that market capitalization of $292 to $585 million supported market efficiency); *The Pennsylvania Avenue Funds v. Inyx Inc.*, 2011 U.S. Dist. LEXIS 72999, *28 (S.D.N.Y 2011) ("the market capitalization was consistently in excess of $22.4 million throughout the Class Period.").

[36] The benchmarking for market capitalization is based on first calculating the average of 6 end-of-month (June 2021 – November 2021) statistics for each company in the list of companies described in footnote 15, where data is available, and then calculating Akumin's percentile rank.

25. The size of the public float, *i.e.*, market capitalization excluding the holdings by Company insiders, is also often used as an indicator of market efficiency.[37] Akumin's market capitalization of public float ranged from $113.7 million to $224.2 million, with an average of $168.9 million during the Analysis Period. *See* **Exhibit A-4**.

26. In my opinion, Akumin's market capitalization and public float provide support for my opinion that its common stock traded in an efficient market.

v) Institutional Ownership

27. Sophisticated investors, such as institutional investors, obtain and assess information quickly. Examples of institutional investors include mutual funds, pension funds, investment banks and other financial institutions that hold large amounts of assets under management. These investors generally have large amounts of capital available to trade based on their assessments. The process of trading based on new important information facilitates market efficiency by impounding the new information in stock prices. Indeed, the level of institutional ownership has been suggested as a proxy for market efficiency.[38]

28. Moreover, shares held by institutions are often available for borrowing by short sellers. Thus, by facilitating the views of short sellers to be incorporated into the stock price, institutional ownership of shares contributes to the efficiency of the stock.

[37] *See*, *e.g.*, *Krogman v. Sterritt*, 202 F.R.D. 467, 478 (N.D. TX. 2001) ("In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders.").

[38] Randall S. Thomas and James F. Cotter, "Measuring Securities Market Efficiency in the Regulatory Setting," *Law and Contemporary Problems* 63(3), Summer 2000, 105-122, at 106.

29. According to quarterly institutional data available from Refinitiv Eikon, during the quarters ending on June 30, 2021 through December 31, 2021, 39 institutions reported their ownership of Akumin common stock. At the end of these quarters, institutions held between 30% and 41% of Akumin's shares outstanding and between 49% and 53% of public float. Institutional holders included well-known firms such as BlackRock Institutional Trust Company, N.A., BMO Capital Markets (US), CIBC Asset Management Inc., CIBC World Markets Inc., First Light Asset Management, LLC and RBC Dominion Securities, Inc., among others. *See* **Exhibit A-5**.

30. Institutional ownership of Akumin common stock as a percent of shares outstanding was higher than 62% of all stocks listed on the TSX.[39]

31. Ownership by a large number of sophisticated institutions offers further support that Akumin common stock traded in an efficient market throughout the Analysis Period.

vi) Bid-Ask Spread

32. The quoted bid price represents the highest price a buyer is willing to pay, and the ask (or offer) price represents the lowest price a seller is willing to accept. Demsetz (1968) first related the spread between bid and ask prices as a component of transaction costs.[40] Low transaction costs reduce impediments to trade, stimulate arbitrage activity, and can thus facilitate

[39] The benchmarking for institutional ownership is based on first calculating the average of 6 end-of-month (June 2021 – November 2021) statistics for each company in the list of companies described in footnote 15, where data is available, and then calculating Akumin's percentile rank. Institutional ownership is measured as a percent of shares outstanding and includes all investor types under the categories of investment managers, brokerage firms and funds.

[40] Harold Demsetz, "The Cost of Transacting," *The Quarterly Journal of Economics* 82(1), 1968, 33-53.

incorporation of new information into stock prices.[41] Low bid-ask spreads, therefore, are often used as indication of an efficient market.[42]

33. Because liquidity can be measured by the cost of immediate execution of a transaction, bid-ask spreads are also widely used as a measure of liquidity.[43] I calculate the dollar bid-ask spread as the difference between the ask quote and the bid quote and the percent spread as the dollar spread divided by the average of the bid and ask quotes. Using intraday quotes from Tick Data, Inc., the average dollar bid-ask spread for Akumin common stock during the Analysis Period was $0.035 and the average percent spread was 1.14%.[44] *See* **Exhibit A-6**.

34. Akumin's bid-ask spread was not a deterrent to investor trading activity in Akumin common stock and provides support for my opinion that Akumin common stock traded in an efficient market.

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[41] Arbitrageurs are generally understood to be sophisticated investors who can act rapidly to take advantage of any pricing discrepancies.

[42] *See*, *e.g.*, *Vinh Nguyen v. Radient Pharms. Corp.*, 287 F.R.D. 563, *32 (C.D. Cal. 2012) (finding a bid-ask spread of 0.58% supported market efficiency); *In re Scientific-Atlanta Securities Litigation*, 571 F. Supp. 2d 1315, 1339 (N.D. Ga. 2007) (finding that a bid-ask spread that "never exceeded 1.9%" weighed heavily in favor of a finding of market efficiency).

[43] Yakov Amihud and Haim Mendelson, "Asset Pricing and the Bid-Ask Spread," *Journal of Financial Economics* 17, 1986, 223-249.

[44] I use quotes classified by Tick Data as "day session" for the TSX exchange (Exchange Code = "XTSE"). I remove any instances where the ask quote is less than or equal to the bid quote (*i.e.*, a non-positive bid-ask spread). I then calculate the amount of time each bid-ask spread was outstanding during a trading day. Next, I calculate a weighted-average intraday bid-ask spread each day with the weights being the amount of time each spread was outstanding (the last spread of the day is thus excluded from the average). The average bid-ask spread during the Analysis Period is based on calculating the average of the computed (based on intraday data) daily spreads. Because Akumin's bid-ask spreads are reasonably low and the spread analysis using intraday quotes is data intensive, to save time and cost, I did not perform a benchmarking analysis for this factor.

vii) Short Interest

35. A short sale is the sale of a stock that an investor does not own. When an investor holds the belief that a stock price will decline, she can borrow the stock, sell it, and then later buy the stock back to return it to the lender. If the price drops between the time the short seller sold the stock and the time she buys it back, the short seller realizes a gain. Short selling thus enables arbitrage activity as it allows short sellers to trade on their perceived negative views.[45] Because investor activity is a key component of a well-functioning efficient market, short selling in general facilitates market efficiency as the views of the short sellers get impounded in the stock price.[46]

36. The amount of combined short interest in Canada and the U.S. for Akumin common stock during the Analysis Period ranged between 30,910 shares and 139,473 shares, with an average short interest of 66,216 shares based on semi-monthly data.[47] As a percentage of shares outstanding (public float), the combined short interest ranged from 0.04% to 0.20% (0.06% to 0.26%), with an average of 0.08% (0.12%). *See* **Exhibit A-7**.

37. Short interest as a percentage of shares outstanding in Akumin common stock was higher than 23% of stocks listed on the TSX.[48]

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[45] Arbitrageurs are generally understood to be sophisticated investors who can act quickly to take advantage of pricing discrepancies.

[46] U.S. courts have also considered the level of short interest as another indicator of market efficiency. *See*, *e.g.*, *Vinh Nguyen v. Radient Pharms. Corp.*, 287 F.R.D. 563, 573 (C.D. Cal. 2012).

[47] Data on short interest is available on a semi-monthly basis. This analysis covers the period between June 15, 2021 and November 30, 2021 which fully encompasses the Analysis Period.

[48] The benchmarking for short interest is based on first calculating the average of 6 end-of-month (June 2021 – November 2021) statistics for each company in the list of companies described in footnote 15, where data is available, and then calculating Akumin's percentile rank.

38. I also examined the short interest coverage ratio, which indicates how many trading days it takes to cover a short position given the reported trading volume. The short interest coverage ratio equals short interest divided by average daily trading volume.[49] The average short interest coverage ratio for Akumin common stock was 1.0 day in Canada and 0.4 days in the U.S. during the Analysis Period.[50] *See* **Exhibit A-7**. This indicates that, on average, short sellers could cover their entire short position within a day in Canada and it would take them only 0.4 trading days to cover their entire short position in the U.S., assuming historical trading volume remained constant. Akumin's short interest ratio indicates that the market for Akumin common stock had sufficient liquidity to rapidly absorb the volume from short covering.

39. Akumin's short interest ratio was lower than 67% of all stocks listed on the TSX.[51]

40. Short interest in Akumin stock and the low short interest ratio suggest that arbitrageurs and traders with negative views on Akumin were able to remain active and support the conclusion that Akumin common stock traded in an efficient market.

viii) Autocorrelation

41. In an informationally efficient market, all publicly available information, including past prices, are reflected in stock prices. To test whether future prices can be predicted based *solely* on past prices, economic experts in securities litigation generally examine the first-order

[49] For each day, the average trading volume equals the average volume for the prior 30 Canadian trading days or 30 U.S. trading days.

[50] This analysis covers the period between June 15, 2021 and November 30, 2021 which fully encompasses the Analysis Period.

[51] The benchmarking for short interest ratio is based on first calculating the average of 6 end-of-month (June 2021 – November 2021) statistics for each company in the list of companies described in footnote 15, where data is available, and then calculating Akumin's percentile rank.

autocorrelation of daily stock-price returns.[52] A statistically insignificant result implies that there are no unexploited arbitrage opportunities based on historical prices.

42. A statistically significant result, however, does not necessarily imply that the stock trades in an inefficient market. If a trading strategy based on historical, *statistically* significant autocorrelation is expected to be unprofitable after deducting reasonable trading costs, then the serial correlation would not be *economically* significant. Professor Fama, 2013 Nobel laureate in Economics and widely recognized as the father of modern finance, notes that it is unlikely that the observed levels of serial correlation "can be used as the basis of substantially profitable trading systems."[53] He further explains that any advantage from a trading scheme designed to exploit the serial correlation disappears when trading costs are accounted for and concludes that, "in spite of any statistical significance they might have, from an economic viewpoint the departures are so small that it seems hardly justified to use them to declare the market inefficient."[54,55]

43. Furthermore, the presence of statistically significant serial correlation may not necessarily be an indication that it is ***persistent*** and ***systematic*** but instead may be driven by instances in which there are consecutive days on which important news is disseminated.[56] Under

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[52] *See*, *e.g.*, *Lehocky v. Tidel Techs.*, 220 F.R.D. 491, 506-507 n.20 (S.D.TX. 2004) ("Both parties' experts agreed that a serial correlation test is an accepted test for determining market efficiency.").

[53] Eugene F. Fama, "Efficient Capital Markets: A Review of Theory and Empirical Work," *The Journal of Finance* 25(2), 1970, 383-417, at 394.

[54] Eugene F. Fama, "Efficient Capital Markets: A Review of Theory and Empirical Work," *The Journal of Finance* 25(2), 1970, 383-417, at 396.

[55] I note that during the period 2016 to 2018, 27% of stocks listed on the NYSE or Nasdaq markets exhibited first order serial correlation in daily stock returns. *See* Table 7 in Bharat Bhole, Sunita Surana, and Frank Torchio, "Benchmarking Market Efficiency Indicators for Securities Litigation," *University of Illinois Law Review Online* 96, Spring 2020.

[56] As the Court in *Teva Securities Litigation* stated regarding an expert's explanation: "Dr.

these circumstances, statistically significant serial correlation would not indicate that any arbitrage opportunity existed based solely on past prices, but rather would be a result of consecutive days with important news.[57]

44. To test for autocorrelation, I performed regression analyses of Akumin's daily common stock returns (excess returns) on the returns (excess returns) from the previous trading day over the Analysis Period. In both cases, I found no statistically significant autocorrelation at the 5% significance level. This shows that there was no systematic or persistent autocorrelation where future prices could be predicted based *solely* on past prices. *See* **Exhibit A-8**.

45. The lack of persistent or systematic autocorrelation in Akumin's daily common stock returns and excess returns also indicates that the stock traded in an efficient market.

ix) Cause-and-Effect Relationship

46. Finally, I conducted tests to assess the existence of an informationally efficient cause-and-effect relationship[58] between new information (cause) and the resulting stock-price movement (effect).

Tabak reiterates that the 'real question is whether the observed autocorrelation is exploitable, meaning that an investor could earn trading profits as a result.' . . . 'Autocorrelation that appears and disappears, or changes direction . . . is generally not exploitable because once one determines the proper trading strategy, that strategy may no longer be profitable.'" *In Re Teva Securities Litigation*, 2021 WL 872156 (D.Conn. March 9, 2021), at *16.

[57] In addition, a finding of statistically significant autocorrelation over a certain time period does not mean that such autocorrelation was systematic and persistent within the entire time period studied (*e.g.*, it may be driven by a certain sub-period of the data).

[58] The *Cammer* court considered "a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price" as an indicator of efficiency. *See Cammer v. Bloom*, 711 F. Supp. 1264, 1287 (D.N.J. 1989).

a) Correlation Between Price Changes and Trading Volume

47. For over four decades, economists have studied the relationship between price changes and trading volume in financial markets and the empirical evidence overwhelmingly supports that volume is positively related to the absolute value of the price change. Karpoff summarizes the extensive research that has documented this relationship and concludes that the correlation can likely "be traced to their common ties to information flows."[59]

48. A positive correlation between absolute stock returns and trading volume is, therefore, also an indicator of market efficiency because it is expected that if investors have heterogenous beliefs, new important information will cause both trading activity to increase and price changes to occur.[60] Days with important news will tend to correspond with greater than normal trading volume as different investors alter positions in accordance with their differing valuation views. Evidence of positive co-movements between absolute value of price changes and trading volume has often been presented by economic experts and accepted by courts as evidence of a cause-and-effect relationship between new information and price changes.[61]

49. I checked for this statistical correlation between Akumin's reported volume and stock-price changes using both the Company's absolute returns and absolute excess stock returns. An "absolute return" means that each negative return is transformed into a positive return (*i.e.*,

[59] Jonathan M. Karpoff, "The Relation Between Price Changes and Trading Volume: A Survey," *Journal of Financial and Quantitative Analysis* 22(1), 1987, 109-126 at 121.

[60] Karpoff notes that one interpretation is that price movements are viewed as the market's assessment of new information while trading volume is viewed as a reflection of changes in the expectations of individual investors. *Id.* at 110.

[61] *See*, *e.g.*, *Vinh Nguyen v. Radient Pharms. Corp.*, 287 F.R.D. 563, 574 (C.D. Cal. 2012).

only the magnitude but not the direction of the return is considered). Both returns are regressed on (the natural log of) Akumin's trading volume on a daily basis over the Analysis Period.

50. In both regressions, consistent with an efficient market, I found a strong positive relationship between daily volume and the absolute value of Akumin's common stock price returns. The results, presented in **Exhibit A-9**, show that the relationship is statistically significant at the 1% level.

b) Cause-and-Effect Analysis Using Company-Issued Press Releases

51. Another test of a cause-and-effect relationship that has been employed by financial economists evaluating market efficiency in securities litigation is a statistical comparison of stock-price movements on days during the relevant period on which a certain category of firm-specific news is released to those on days on which no such firm-specific news is released.

52. For this test of a cause-and-effect relationship, I determine an appropriate definition of a "news" or event day. To avoid making subjective decisions based on reading and attempting to "value" the actual news stories to determine "news" or event days, I rely on a pre-set objective definition of event days – days with a Company-issued press release.[62,63]

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[62] Source for Company-issued press releases: https://akumin.com/investor-relations/newsroom/. Excluded from event days are days on which the issued press release(s) simply disclosed the existence of a future event, such as the date on which earnings would be disclosed. News released after the close of market are mapped to the following trading day. Timestamps of press releases are obtained from Factiva.

[63] The Court in *Petrobras* noted, "However, evidence of directionality or the degree of fit between expected and observed moves in a market need not be substantial to allow a finding of market efficiency. Such evidence goes to the accuracy of the price of a security, and the Supreme Court has explained that it is not the accuracy of a price as a reflection of underlying value but instead the sensitivity of the price to false statements that underlies the *Basic* presumption. ….

53. When selecting an event for inclusion in an event study, events such as announcements made via press releases are selected because such events as a *group* generally have a greater likelihood of containing information that is important and unanticipated as compared to all other days. Statistical tests can be used to determine whether the incidence rate of statistically significant returns is greater on the event days than the incidence rate on the non-event days. The use of such tests comparing price movements on event days to non-event days is widely used to assess market efficiency in securities litigation.

54. It must be emphasized that while events such as press release announcements have a greater likelihood of containing unanticipated important information and thus resulting in a statistically significant price reaction, no single definition of an event will perfectly identify all the days that in fact have value-relevant news and that news about Akumin, like any other company, can and was disclosed by means other than through Company-issued press releases.[64] Non-event days, for the purpose of this analysis, includes all days without a Company-issued press release. I note that the term non-event days is not meant to imply that there was no value-

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Whether the market, upon receiving new information, moved in the precise way analysts or experts would expect it to move is not the key to unlocking *Basic*'s presumption of reliance. What is essential is evidence that, when the market received new information, it 'generally affect[ed]' the price." *See In re: Petrobras Sec. Litig.*, 312 F.R.D. 354 (S.D.N.Y. 2016) at 370 (original emphasis removed and emphasis added).

[64] The news might not have a valuation effect great enough to cause a stock-price reaction that is statistically significant at 5% level. To illustrate this point, first note that an excess stock return must exceed 1.99 times the standard error of the market model to be significant at the 5% level. 1.99 is the t-statistic associated with a 5% p-value for my market model (with 96 observations and degrees of freedom of 92). When using the standard error from my market model for Akumin, this means that the daily excess return must be at least 7.2% (*i.e.*, the standard error from the market model of 3.6% x 1.99) in this example to be significant at the 5% level. Given that Akumin's average market capitalization during the Analysis Period was $248.4 million (*see* **Exhibit A-4**), a 7.2% excess return translates to a market value increase (or decrease) of roughly $18.0 million (*i.e.*, $248.4 million x 7.2%).

relevant news on any of these days, and that it simply identifies the days that do not fit the definition of an event day used for this analysis. Moreover, there are also factors, such as insider trading and portfolio rebalancing among others, that might lead to significant price movements without observable news. This is consistent with academic research.[65]

55. There are 13 days with Company-issued press releases which I identified as passing my pre-set objective criteria of an event day.[66] Of these 13 event days, 4 days (or 30.8%) were accompanied by statistically significant stock-price movements at the 5% significance level. Conversely, of the 87 non-event days, only 3 (or 3.4%) were statistically significant at the 5% significance level, indicating that Akumin's stock was approximately 8.9 times (30.8% / 3.4%) more likely to react in a statistically significant manner on days when the Company issued press releases containing potentially value-relevant information than on days without.[67]

56. I tested whether the proportion of statistically significant stock-price reactions on event days is statistically significantly different from the proportion on non-event days using Fisher's Exact Test. With a p-value of 0.005, Fisher's Exact Test shows that the difference in proportions is statistically significant at the 1% significance level.[68] This analysis supports a finding of market efficiency for Akumin common stock.

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[65] *See*, *e.g.*, Ray C. Fair, "Events That Shook the Market," *Journal of Business* 75(4), 2002, 713-731, at 714 (finding that 69 of 220 days with significant returns, or 31.4%, had identifiable news, while 68.6% had no identifiable event or news).

[66] These dates are: 6/25/2021, 7/26/2021, 7/30/2021, 8/16/2021, 8/23/2021, 8/30/2021, 9/1/2021, 9/13/2021, 9/27/2021, 10/12/2021, 10/25/2021, 11/8/2021, and 11/15/2021.

[67] Courts have accepted the test of proportions for analyzing cause-and-effect. *See, e.g., In re Alstom SA Sec. Litig.*, 253 F.R.D. 266 (S.D.N.Y. 2008) at 280.

[68] For this analysis, I also considered excluding the press release event dates from the estimation period of the selected market model. The qualitative results of the analysis are unchanged.

c) Correlation of Stock Returns in Canada and the U.S.

57. As mentioned above, Akumin common stock traded both in Canada and the U.S. The figure below shows that the closing prices in Canada and the U.S., adjusted for the exchange rate, moved in tandem in the two markets.[69]

FIGURE 1
AKUMIN DAILY COMMON STOCK PRICES IN CANADA AND THE U.S.
(June 25, 2021 to November 19, 2021)



[69] Prices are composite closing prices in Canada and the U.S. (in Canadian dollars). Source: Bloomberg.

58. The daily stock returns in the two markets have a correlation coefficient of 94.3% during the Analysis Period.[70] This indicates that there was virtually no unexploited opportunity for arbitrage and supports a finding of market efficiency for Akumin common stock.

III. CONCLUSION

59. The analyses presented above offer evidence that Akumin common stock traded in (a) an open capital market in which anyone could buy and sell the stock; (b) a well-developed market with trading at reasonably low costs; and (c) a market with information flow and a presence of sophisticated investors. Under these conditions, economists generally agree that a market can be characterized as one in which the stock price reflects publicly available information. Thus, based on the analyses presented above, in my opinion, during the Analysis Period, Akumin common stock traded in an informationally efficient market with regard to publicly disclosed information.

[70] The correlation analysis is based on days when the stock traded in both markets during the Analysis Period.

Exhibit A-1
Weekly Trading Volume and Turnover for Akumin Common Stock
June 21, 2021 - November 19, 2021

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Date	Daily Volume (CN)	Daily Volume (US)	Daily Volume (CN & US)	Weekly Volume	Shares Outstanding	Weekly Turnover	Float	Weekly Turnover of Float
Total	4,077,507	11,158,698	15,236,205	15,386,817				
Min	1,000	3,031	1,263	88,653		0.12%		0.16%
Average	39,976	107,295	145,107	699,401		0.88%		1.29%
Median	19,932	39,108	62,315	529,588		0.59%		0.98%
Max	1,029,039	1,885,881	1,921,406	2,347,521		3.29%		4.33%
06/21/2021	3,400	9,160	12,560	---	71,153,427	---	54,012,624	---
06/22/2021	26,092	14,552	40,644	---	71,153,427	---	54,012,624	---
06/23/2021	5,240	10,848	16,088	---	71,153,427	---	54,012,624	---
06/24/2021	31,309	50,011	81,320	---	71,153,427	---	54,012,624	---
06/25/2021	128,438	1,153,840	1,282,278	1,432,890	71,153,427	2.01%	54,012,624	2.65%
06/28/2021	27,793	181,087	208,880	---	71,153,427	---	54,012,624	---
06/29/2021	16,715	56,780	73,495	---	71,153,427	---	54,012,624	---
06/30/2021	35,525	1,885,881	1,921,406	---	71,303,427	---	54,162,624	---
07/01/2021	n/a	55,412	55,412	---	71,303,427	---	54,162,624	---
07/02/2021	18,872	69,456	88,328	2,347,521	71,303,427	3.29%	54,162,624	4.33%
07/05/2021	1,263	n/a	1,263	---	71,303,427	---	54,162,624	---
07/06/2021	4,990	74,026	79,016	---	71,303,427	---	54,162,624	---
07/07/2021	3,400	31,505	34,905	---	71,303,427	---	54,162,624	---
07/08/2021	36,627	30,957	67,584	---	71,303,427	---	54,162,624	---
07/09/2021	6,200	31,796	37,996	220,764	71,303,427	0.31%	54,162,624	0.41%
07/12/2021	1,000	8,452	9,452	---	71,303,427	---	54,162,624	---
07/13/2021	10,823	68,228	79,051	---	71,303,427	---	54,162,624	---
07/14/2021	16,780	19,596	36,376	---	71,303,427	---	54,162,624	---
07/15/2021	7,400	32,164	39,564	---	71,303,427	---	54,162,624	---
07/16/2021	3,300	7,412	10,712	175,155	71,303,427	0.25%	54,162,624	0.32%
07/19/2021	9,090	19,431	28,521	---	71,303,427	---	54,162,624	---
07/20/2021	10,590	13,107	23,697	---	71,303,427	---	54,162,624	---
07/21/2021	7,620	3,031	10,651	---	71,303,427	---	54,162,624	---
07/22/2021	8,800	10,298	19,098	---	71,303,427	---	54,162,624	---
07/23/2021	1,730	4,956	6,686	88,653	71,303,427	0.12%	54,162,624	0.16%
07/26/2021	19,100	37,535	56,635	---	71,303,427	---	54,162,624	---
07/27/2021	1,100	19,395	20,495	---	71,303,427	---	54,162,624	---
07/28/2021	6,100	5,806	11,906	---	71,303,427	---	54,162,624	---
07/29/2021	7,800	15,824	23,624	---	71,303,427	---	54,162,624	---
07/30/2021	14,123	516,399	530,522	643,182	71,303,427	0.90%	54,162,624	1.19%
08/02/2021	n/a	7,296	7,296	---	71,303,427	---	54,162,624	---
08/03/2021	15,820	29,905	45,725	---	71,303,427	---	54,162,624	---
08/04/2021	12,706	22,844	35,550	---	71,303,427	---	54,162,624	---
08/05/2021	5,840	31,568	37,408	---	71,303,427	---	54,162,624	---
08/06/2021	1,793	10,610	12,403	138,382	71,303,427	0.19%	54,162,624	0.26%
08/09/2021	2,330	9,794	12,124	---	71,303,427	---	54,162,624	---
08/10/2021	28,496	41,935	70,431	---	71,303,427	---	54,162,624	---
08/11/2021	8,020	17,602	25,622	---	71,303,427	---	54,162,624	---
08/12/2021	13,500	35,204	48,704	---	71,303,427	---	54,162,624	---
08/13/2021	16,052	17,724	33,776	190,657	71,303,427	0.27%	54,162,624	0.35%
08/16/2021	152,499	335,020	487,519	---	71,303,427	---	54,162,624	---
08/17/2021	118,983	367,996	486,979	---	71,303,427	---	54,162,624	---
08/18/2021	27,995	105,324	133,319	---	71,303,427	---	54,162,624	---
08/19/2021	22,285	151,846	174,131	---	71,303,427	---	54,162,624	---
08/20/2021	119,221	437,706	556,927	1,838,875	71,303,427	2.58%	54,162,624	3.40%
08/23/2021	29,765	58,789	88,554	---	71,303,427	---	54,162,624	---
08/24/2021	19,847	30,514	50,361	---	71,303,427	---	54,162,624	---
08/25/2021	2,956	19,781	22,737	---	71,303,427	---	54,162,624	---
08/26/2021	11,956	56,545	68,501	---	71,303,427	---	54,162,624	---

Exhibit A-1
Weekly Trading Volume and Turnover for Akumin Common Stock
June 21, 2021 - November 19, 2021

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
Date	Daily Volume (CN)	Daily Volume (US)	Daily Volume (CN & US)	Weekly Volume	Shares Outstanding	Weekly Turnover	Float	Weekly Turnover of Float
08/27/2021	41,051	71,685	112,736	342,889	71,303,427	0.48%	54,162,624	0.63%
08/30/2021	22,517	96,427	118,944	---	71,303,427	---	54,162,624	---
08/31/2021	19,443	60,400	79,843	---	71,303,427	---	54,162,624	---
09/01/2021	39,561	192,443	232,004	---	89,026,997	---	54,162,624	---
09/02/2021	76,024	376,490	452,514	---	89,026,997	---	54,162,624	---
09/03/2021	29,739	75,377	105,116	988,421	89,026,997	1.11%	54,162,624	1.82%
09/07/2021	45,769	233,608	279,377	---	89,026,997	---	54,162,624	---
09/08/2021	19,955	90,405	110,360	---	89,026,997	---	54,162,624	---
09/09/2021	41,199	98,228	139,427	---	89,026,997	---	54,162,624	---
09/10/2021	42,882	101,316	144,198	673,362	89,026,997	0.76%	54,162,624	1.24%
09/13/2021	25,283	74,416	99,699	---	89,026,997	---	54,162,624	---
09/14/2021	42,097	130,769	172,866	---	89,026,997	---	54,162,624	---
09/15/2021	20,810	96,484	117,294	---	89,026,997	---	54,162,624	---
09/16/2021	13,009	33,039	46,048	---	89,026,997	---	54,162,624	---
09/17/2021	14,503	14,847	29,350	465,257	89,026,997	0.52%	54,162,624	0.86%
09/20/2021	19,680	12,330	32,010	---	89,026,997	---	54,162,624	---
09/21/2021	19,909	13,247	33,156	---	89,026,997	---	54,162,624	---
09/22/2021	47,656	6,557	54,213	---	89,026,997	---	54,162,624	---
09/23/2021	11,065	8,837	19,902	---	89,026,997	---	54,162,624	---
09/24/2021	20,150	13,141	33,291	172,572	89,026,997	0.19%	54,162,624	0.32%
09/27/2021	17,192	33,782	50,974	---	89,026,997	---	54,162,624	---
09/28/2021	52,263	45,657	97,920	---	89,026,997	---	54,162,624	---
09/29/2021	18,492	4,035	22,527	---	89,026,997	---	54,162,624	---
09/30/2021	38,689	37,332	76,021	---	89,026,997	---	54,162,624	---
10/01/2021	21,742	25,704	47,446	294,888	89,026,997	0.33%	54,162,624	0.54%
10/04/2021	22,649	39,219	61,868	---	89,026,997	---	54,162,624	---
10/05/2021	4,518	3,437	7,955	---	89,026,997	---	54,162,624	---
10/06/2021	14,844	15,274	30,118	---	89,026,997	---	54,162,624	---
10/07/2021	13,455	16,262	29,717	---	89,026,997	---	54,162,624	---
10/08/2021	12,590	10,193	22,783	152,441	89,026,997	0.17%	54,162,624	0.28%
10/11/2021	n/a	4,711	4,711	---	89,026,997	---	54,162,624	---
10/12/2021	13,116	158,445	171,561	---	89,026,997	---	54,162,624	---
10/13/2021	154,516	214,471	368,987	---	89,026,997	---	54,162,624	---
10/14/2021	83,729	111,664	195,393	---	89,026,997	---	54,162,624	---
10/15/2021	37,157	71,087	108,244	848,896	89,026,997	0.95%	54,162,624	1.57%
10/18/2021	37,343	24,972	62,315	---	89,026,997	---	54,162,624	---
10/19/2021	72,163	173,058	245,221	---	89,026,997	---	54,162,624	---
10/20/2021	1,029,039	425,619	1,454,658	---	89,026,997	---	54,162,624	---
10/21/2021	81,179	88,597	169,776	---	89,026,997	---	54,162,624	---
10/22/2021	77,446	103,004	180,450	2,112,420	89,026,997	2.37%	54,162,624	3.90%
10/25/2021	36,477	167,859	204,336	---	89,026,997	---	54,162,624	---
10/26/2021	43,121	155,229	198,350	---	89,026,997	---	54,162,624	---
10/27/2021	27,305	77,562	104,867	---	89,026,997	---	54,162,624	---
10/28/2021	21,045	38,997	60,042	---	89,026,997	---	54,162,624	---
10/29/2021	14,547	11,776	26,323	593,918	89,026,997	0.67%	54,162,624	1.10%
11/01/2021	14,008	16,723	30,731	---	89,026,997	---	54,162,624	---
11/02/2021	16,943	97,973	114,916	---	89,026,997	---	54,162,624	---
11/03/2021	25,111	32,466	57,577	---	89,026,997	---	54,162,624	---
11/04/2021	14,565	16,138	30,703	---	89,026,997	---	54,162,624	---
11/05/2021	8,657	13,959	22,616	256,543	89,026,997	0.29%	54,162,624	0.47%
11/08/2021	41,929	50,708	92,637	---	89,026,997	---	54,162,624	---
11/09/2021	9,905	62,145	72,050	---	89,026,997	---	54,162,624	---
11/10/2021	97,573	235,881	333,454	---	89,026,997	---	54,162,624	---
11/11/2021	31,939	65,274	97,213	---	89,026,997	---	54,162,624	---
11/12/2021	33,450	58,540	91,990	687,344	89,026,997	0.77%	54,162,624	1.27%

Exhibit A-1
Weekly Trading Volume and Turnover for Akumin Common Stock
June 21, 2021 - November 19, 2021

[1] Date	[2] Daily Volume (CN)	[3] Daily Volume (US)	[4] Daily Volume (CN & US)	[5] Weekly Volume	[6] Shares Outstanding	[7] Weekly Turnover	[8] Float	[9] Weekly Turnover of Float
11/15/2021	53,934	299,550	353,484	---	89,026,997	---	54,162,624	---
11/16/2021	74,659	87,361	162,020	---	89,026,997	---	54,162,624	---
11/17/2021	24,252	37,381	61,633	---	89,026,997	---	54,162,624	---
11/18/2021	21,719	29,571	51,290	---	89,026,997	---	54,162,624	---
11/19/2021	36,701	56,659	93,360	721,787	89,026,997	0.81%	54,162,624	1.33%

Notes:

[1] Trading days when either the US or Canadian stock market was open. Source: Bloomberg.

[2] Reported daily Canadian composite volume. Volume is n/a on days when the Canadian stock market was closed. Source: Bloomberg.

[3] Reported daily U.S. composite volume. Volume is n/a on days when the U.S. stock market was closed. Source: Bloomberg.

[4] = [2] + [3].

[5] Weekly volume is sum of US and Canadian volume during the week. Weekly volume includes all the days in the first week of the Analysis Period.

[6] The number of shares outstanding. Source: Akumin SEDAR Filings.

[7] = [5] / [6].

[8] Float is equal to number of shares outstanding less number of shares held by directors and officers as well as the holdings of Tahoe Investment Group and Stonepeak Infrastructure Partners after the Alliance deal closed on September 1, 2021. Sources: Akumin SEDAR Filings for Akumin shares outstanding and holdings of executives and directors and Refinitiv Eikon for holdings of Tahoe Investment Group and Stonepeak Infrastructure Partners. In addition to ownership of executives and directors, ownership of Tahoe and Stonepeak are excluded from public float, because both Stonepeak and Tahoe Investment Group (through Thaihot Investment Co., LTD) had representatives as directors on the board after the acquisition of Alliance. *See* "Akumin Announces Agreement to Acquire Alliance Healthcare Services," Canada NewsWire, June 25, 2021, 7:00 am; "Akumin Announces Closing of Acquisition of Alliance Healthcare Services and Related Financing," Akumin News Release filed with SEDAR on September 1, 2021; Akumin Management Information Circular filed with SEDAR on November 1, 2021, pp. 7-10; Akumin Form 10-K filed with SEC on March 16, 2022, signature pages.

[9] = [5] / [8].

* Total trading volume over the Analysis Period was 15,236,205 shares (4,077,507 shares in Canada and 11,158,698 shares in the U.S.) with average daily volume of 145,107 shares (39,976 shares in Canada and 107,295 shares in the U.S.).

Exhibit A-2
Numbers of Analyst Reports Issued for Akumin
June 25, 2021 - November 19, 2021

No.	Analyst	Number of Reports
[1]	Canaccord Genuity	4
[2]	Clarus Securities	4
[3]	Cormark Securities Inc.	4
[4]	Moody's	9
[5]	National Bank of Canada	5
[6]	S&P Global Compustat	5
[7]	S&P Global Ratings	2
[8]	Third Bridge	1
[9]	Wright Reports	2
	Total	**36**

Note:
Reports are counted as follows:
• a listing of available analyst reports is obtained from Refinitiv Eikon and all the analyst reports available from Refinitiv Eikon are included in the Number of Reports; and
• a listing of available analyst reports is obtained S&P Capital IQ and for any analyst that was not available from Refinitiv Eikon, all of the analyst reports available from S&P Capital IQ are included in the Number of Reports.
Reports issued by "Refinitiv StreetEvents" are not analyst reports and thus removed from the count.

Sources: Refinitiv Eikon and S&P Capital IQ.

Exhibit A-3
Analyst Coverage of Akumin
June 25, 2021 - November 19, 2021

[1] Date	[2] Number of Analyst Recommendations Reported in Bloomberg	[3] Number of Analysts in Refinitiv I/B/E/S Consensus
Min	4	2
Average	4	3
Median	4	3
Max	4	4
06/25/2021	4	4
06/28/2021	4	3
06/29/2021	4	3
06/30/2021	4	3
07/02/2021	4	3
07/05/2021	4	3
07/06/2021	4	3
07/07/2021	4	3
07/08/2021	4	3
07/09/2021	4	3
07/12/2021	4	3
07/13/2021	4	3
07/14/2021	4	3
07/15/2021	4	3
07/16/2021	4	3
07/19/2021	4	3
07/20/2021	4	3
07/21/2021	4	3
07/22/2021	4	3
07/23/2021	4	3
07/26/2021	4	3
07/27/2021	4	3
07/28/2021	4	3
07/29/2021	4	3
07/30/2021	4	3
08/03/2021	4	3
08/04/2021	4	3
08/05/2021	4	3
08/06/2021	4	3
08/09/2021	4	3
08/10/2021	4	3
08/11/2021	4	3
08/12/2021	4	3
08/13/2021	4	3
08/16/2021	4	3
08/17/2021	4	3
08/18/2021	4	3
08/19/2021	4	3
08/20/2021	4	3
08/23/2021	4	3

Exhibit A-3
Analyst Coverage of Akumin
June 25, 2021 - November 19, 2021

[1]	[2]	[3]
Date	Number of Analyst Recommendations Reported in Bloomberg	Number of Analysts in Refinitiv I/B/E/S Consensus
08/24/2021	4	3
08/25/2021	4	3
08/26/2021	4	3
08/27/2021	4	3
08/30/2021	4	3
08/31/2021	4	3
09/01/2021	4	3
09/02/2021	4	2
09/03/2021	4	2
09/07/2021	4	2
09/08/2021	4	2
09/09/2021	4	2
09/10/2021	4	2
09/13/2021	4	2
09/14/2021	4	2
09/15/2021	4	2
09/16/2021	4	2
09/17/2021	4	2
09/20/2021	4	2
09/21/2021	4	2
09/22/2021	4	2
09/23/2021	4	2
09/24/2021	4	2
09/27/2021	4	3
09/28/2021	4	3
09/29/2021	4	3
09/30/2021	4	3
10/01/2021	4	3
10/04/2021	4	3
10/05/2021	4	3
10/06/2021	4	3
10/07/2021	4	3
10/08/2021	4	3
10/12/2021	4	3
10/13/2021	4	3
10/14/2021	4	3
10/15/2021	4	3
10/18/2021	4	3
10/19/2021	4	3
10/20/2021	4	3
10/21/2021	4	3
10/22/2021	4	3
10/25/2021	4	3
10/26/2021	4	3
10/27/2021	4	3

Exhibit A-3
Analyst Coverage of Akumin
June 25, 2021 - November 19, 2021

[1] Date	[2] Number of Analyst Recommendations Reported in Bloomberg	[3] Number of Analysts in Refinitiv I/B/E/S Consensus
10/28/2021	4	3
10/29/2021	4	3
11/01/2021	4	3
11/02/2021	4	3
11/03/2021	4	3
11/04/2021	4	3
11/05/2021	4	3
11/08/2021	4	3
11/09/2021	4	3
11/10/2021	4	3
11/11/2021	4	3
11/12/2021	4	3
11/15/2021	4	3
11/16/2021	4	4
11/17/2021	4	4
11/18/2021	4	4
11/19/2021	4	4

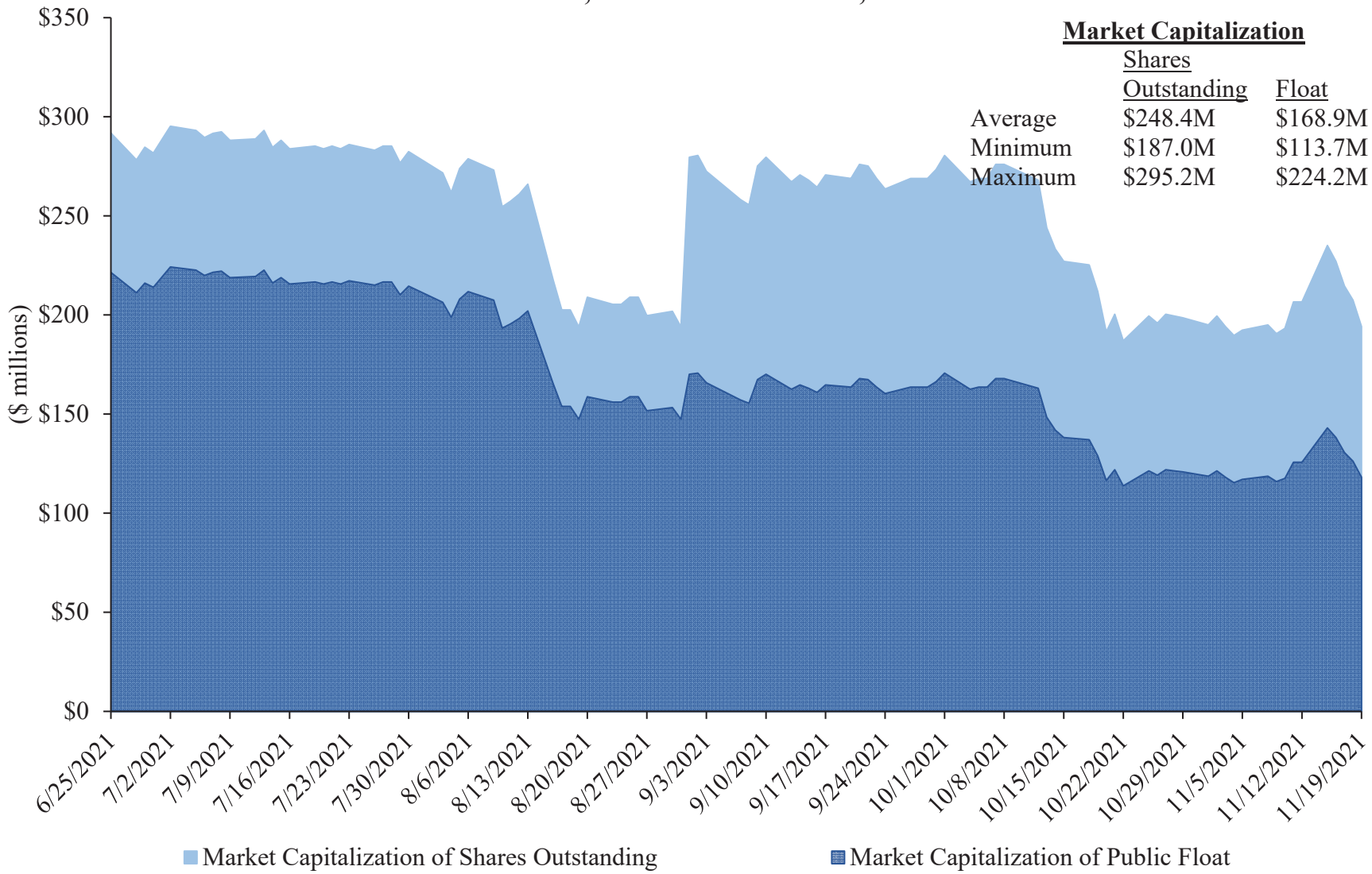
Notes:

[1] Trading days when the Canadian stock market was open. Source: Bloomberg.

[2] Number of Analyst Recommendations Reported in Bloomberg. Bloomberg defines "total analyst recommendations" as the total number of analysts making recommendations for the security. Source: Bloomberg.

[3] Number of analysts in Refinitiv I/B/E/S consensus EPS estimates for current fiscal year. Source: S&P Capital IQ. Refinitiv I/B/E/S was previously known as Thomson Reuters I/B/E/S.

Exhibit A-4
Market Capitalization of Shares Outstanding and Public Float of Akumin
June 25, 2021 - November 19, 2021



Sources: Bloomberg, Refinitiv Eikon and Akumin SEDAR Filings.

Exhibit A-5
Quarterly Positions of Institutional Holders of Akumin Common Stock
During the Analysis Period

Summary	6/30/2021	9/30/2021	12/31/2021
Total Institutional Positions	28,961,834	27,636,424	26,750,798
Number of Institutions with Positions	28	25	26
Cumulative Number of Institutions with Positions from 6/30/2021 to Date	28	33	39
Shares Outstanding	71,303,427	89,026,997	89,026,997
Positive Institutional Positions as a % of Shares Outstanding	41%	31%	30%
Float	54,162,624	54,162,624	54,162,624
Positive Institutional Positions as a % of Float	53%	51%	49%

No.	Institution	6/30/2021	9/30/2021	12/31/2021
[1]	1832 Asset Management L.P.	17,874	0	0
[2]	Advisor Group, Inc	5,950	7,975	15,975
[3]	Archer Investment Corporation	800	0	3,000
[4]	Barclays Bank PLC	2,864	11,485	0
[5]	BlackRock Institutional Trust Company, N.A.	150,299	141,326	145,386
[6]	BlackRock Investment Management, LLC	12,044	12,044	12,044
[7]	BMO Capital Markets (US)	183,545	208,646	206,188
[8]	BofA Global Research (US)	400	189	0
[9]	Burgundy Asset Management Ltd.	347,095	347,095	347,095
[10]	Canoe Financial LP	5,634	0	0
[11]	CapitalOne Asset Management, Ltd.	200,000	200,000	200,000
[12]	Castleknight Management LP	0	0	98,321
[13]	CIBC Asset Management Inc.	934,801	689,976	0
[14]	CIBC World Markets Inc.	432,773	431,465	427,764
[15]	Citadel Advisors LLC	0	0	14,995
[16]	Dimensional Fund Advisors, Ltd.	0	9,755	9,755
[17]	First Light Asset Management, LLC	3,559,911	3,559,911	3,666,648
[18]	Geode Capital Management, L.L.C.	36,627	36,627	36,627
[19]	Koshinski Asset Management, Inc	0	8,000	0
[20]	LDIC Inc.	378,896	378,896	0
[21]	Lord, Abbett & Co. LLC	0	12,044	12,044
[22]	Luther King Capital Management Corp.	242,244	242,244	242,244
[23]	Millennium Management LLC	0	0	10,683
[24]	Montrusco Bolton Investments Inc.	851,542	0	0
[25]	Morgan Stanley & Co. International Plc	0	0	64
[26]	Nantahala Capital Management, LLC	6,220,740	6,320,740	6,320,740
[27]	New York Life Investments Alternatives LLC	24,861	0	0
[28]	OJM Group, LLC	0	3,385	3,385
[29]	Optiver Holding B.V.	0	0	1,479
[30]	PowerOne Capital Corporation	3,475,000	3,475,000	3,475,000
[31]	Prosight Capital	327,680	0	0
[32]	Qube Research & Technologies Ltd	0	11,385	0
[33]	RBC Dominion Securities, Inc.	7,009	3,988	2,653
[34]	Scotia Capital Inc.	73,700	70,968	73,700
[35]	SCW Capital Management, LP	11,435,008	11,419,908	11,419,908
[36]	SEI Investments Canada	33,372	33,372	0
[37]	TD Securities, Inc.	8	0	0
[38]	Tower Research Capital LLC	1,157	0	3,610
[39]	UBS Financial Services, Inc.	0	0	1,490

Notes:

The Analysis Period is from June 25, 2021 to November 19, 2021. The exhibit lists all institutions that had non-zero positions on any date as of 6/30/2021, 9/30/2021, or 12/31/2021. Institutions include all investors from the Refinitiv Eikon Shareholder Report other than those with "Investor Sub-Type" of "Individual Investor" and Stonepeak Infrastructure Partners and Tahoe Investment Group Company

Exhibit A-5
Quarterly Positions of Institutional Holders of Akumin Common Stock
During the Analysis Period

Limited. Although both Stonepeak and Tahoe Investment Group are investment firms, I exclude their holdings from institutional ownership because both companies had representatives as directors of the board after the Alliance acquisition. *See* "Akumin Announces Agreement to Acquire Alliance Healthcare Services," Canada NewsWire, June 25, 2021, 7:00 am; "Akumin Announces Closing of Acquisition of Alliance Healthcare Services and Related Financing," Akumin News Release filed with SEDAR on September 1, 2021; Akumin Management Information Circular filed with SEDAR on November 1, 2021, pp. 7-10; Akumin Form 10-K filed with SEC on March 16, 2022, signature pages.
Float is equal to number of shares outstanding less number of shares held by directors and officers and shares held by Stonepeak Infrastructure Partners and Tahoe Investment Group Company Limited after the Alliance deal closed on September 1, 2021.
Sources: Akumin SEDAR Filings for Akumin shares outstanding and holdings of executives and directors and Refinitiv Eikon for holdings of Tahoe Investment Group and Stonepeak Infrastructure Partners.

Exhibit A-6
Bid-Ask Spread for Akumin Common Stock
June 25, 2021 - November 19, 2021

[1] Date	[2] Bid-Ask Spread ($)	[3] Bid-Ask Spread (%)
Min	$0.017	0.48%
Average	$0.035	1.14%
Median	$0.033	1.06%
Max	$0.093	2.38%
06/25/2021	$0.041	0.99%
06/28/2021	$0.029	0.71%
06/29/2021	$0.035	0.87%
06/30/2021	$0.044	1.11%
07/02/2021	$0.044	1.07%
07/05/2021	$0.030	0.73%
07/06/2021	$0.036	0.89%
07/07/2021	$0.042	1.04%
07/08/2021	$0.041	1.02%
07/09/2021	$0.069	1.69%
07/12/2021	$0.033	0.81%
07/13/2021	$0.033	0.80%
07/14/2021	$0.043	1.07%
07/15/2021	$0.058	1.45%
07/16/2021	$0.033	0.82%
07/19/2021	$0.046	1.15%
07/20/2021	$0.042	1.04%
07/21/2021	$0.020	0.51%
07/22/2021	$0.019	0.48%
07/23/2021	$0.027	0.69%
07/26/2021	$0.032	0.79%
07/27/2021	$0.043	1.07%
07/28/2021	$0.054	1.36%
07/29/2021	$0.093	2.38%
07/30/2021	$0.032	0.82%
08/03/2021	$0.039	1.00%
08/04/2021	$0.036	0.97%
08/05/2021	$0.036	0.95%
08/06/2021	$0.056	1.46%
08/09/2021	$0.047	1.24%
08/10/2021	$0.064	1.74%
08/11/2021	$0.048	1.34%
08/12/2021	$0.039	1.07%
08/13/2021	$0.044	1.21%
08/16/2021	$0.052	1.63%
08/17/2021	$0.037	1.23%
08/18/2021	$0.046	1.64%
08/19/2021	$0.057	2.05%
08/20/2021	$0.044	1.56%
08/23/2021	$0.024	0.82%
08/24/2021	$0.023	0.81%

Exhibit A-6
Bid-Ask Spread for Akumin Common Stock
June 25, 2021 - November 19, 2021

[1] Date	[2] Bid-Ask Spread ($)	[3] Bid-Ask Spread (%)
08/25/2021	$0.038	1.32%
08/26/2021	$0.051	1.74%
08/27/2021	$0.029	1.02%
08/30/2021	$0.044	1.54%
08/31/2021	$0.020	0.72%
09/01/2021	$0.053	1.91%
09/02/2021	$0.040	1.25%
09/03/2021	$0.042	1.40%
09/07/2021	$0.047	1.61%
09/08/2021	$0.042	1.44%
09/09/2021	$0.040	1.33%
09/10/2021	$0.027	0.90%
09/13/2021	$0.041	1.34%
09/14/2021	$0.032	1.05%
09/15/2021	$0.024	0.81%
09/16/2021	$0.024	0.81%
09/17/2021	$0.037	1.21%
09/20/2021	$0.020	0.67%
09/21/2021	$0.027	0.89%
09/22/2021	$0.025	0.81%
09/23/2021	$0.024	0.80%
09/24/2021	$0.021	0.71%
09/27/2021	$0.037	1.24%
09/28/2021	$0.035	1.13%
09/29/2021	$0.023	0.75%
09/30/2021	$0.031	1.01%
10/01/2021	$0.050	1.63%
10/04/2021	$0.031	1.03%
10/05/2021	$0.028	0.92%
10/06/2021	$0.043	1.43%
10/07/2021	$0.047	1.49%
10/08/2021	$0.033	1.07%
10/12/2021	$0.028	0.89%
10/13/2021	$0.037	1.29%
10/14/2021	$0.032	1.22%
10/15/2021	$0.034	1.31%
10/18/2021	$0.033	1.31%
10/19/2021	$0.026	1.06%
10/20/2021	$0.045	2.02%
10/21/2021	$0.022	1.00%
10/22/2021	$0.034	1.56%
10/25/2021	$0.023	1.01%
10/26/2021	$0.023	1.05%
10/27/2021	$0.023	1.05%
10/28/2021	$0.025	1.12%
10/29/2021	$0.027	1.23%

Exhibit A-6
Bid-Ask Spread for Akumin Common Stock
June 25, 2021 - November 19, 2021

[1] Date	[2] Bid-Ask Spread ($)	[3] Bid-Ask Spread (%)
11/01/2021	$0.022	1.02%
11/02/2021	$0.030	1.36%
11/03/2021	$0.017	0.76%
11/04/2021	$0.018	0.82%
11/05/2021	$0.019	0.91%
11/08/2021	$0.022	1.00%
11/09/2021	$0.023	1.07%
11/10/2021	$0.029	1.33%
11/11/2021	$0.023	1.00%
11/12/2021	$0.022	0.93%
11/15/2021	$0.041	1.63%
11/16/2021	$0.031	1.19%
11/17/2021	$0.022	0.90%
11/18/2021	$0.023	0.99%
11/19/2021	$0.028	1.25%

Notes:
See report for the methodology of calculating bid-ask spread. Source: Tick Data.

Exhibit A-7
Short Interest for Akumin Common Stock

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Date	Short Interest (CN)	Short Interest (US)	Short Interest (CN & US)	Shares Outstanding	Short Interest as a % of Shares Outstanding	Float	Short Interest as a % of Float	Short Interest Ratio (CN)	Short Interest Ratio (US)
Min	8,484	12,816	30,910	71,153,427	0.04%	54,012,624	0.06%	0.35	0.16
Average	32,317	33,899	66,216	80,152,712	0.08%	54,150,124	0.12%	1.00	0.38
Median	28,347	27,827	46,698	80,165,212	0.06%	54,162,624	0.09%	0.75	0.31
Max	75,287	64,186	139,473	89,026,997	0.20%	54,162,624	0.26%	2.97	0.75
6/15/2021	16,608	14,302	30,910	71,153,427	0.04%	54,012,624	0.06%	0.65	0.20
6/30/2021	32,712	41,926	74,638	71,303,427	0.10%	54,162,624	0.14%	1.12	0.38
7/15/2021	12,160	28,454	40,614	71,303,427	0.06%	54,162,624	0.07%	0.50	0.16
7/30/2021	8,484	27,199	35,683	71,303,427	0.05%	54,162,624	0.07%	0.53	0.21
8/13/2021	10,260	26,652	36,912	71,303,427	0.05%	54,162,624	0.07%	0.96	0.62
8/31/2021	75,287	64,186	139,473	71,303,427	0.20%	54,162,624	0.26%	2.97	0.75
9/15/2021	72,874	41,261	114,135	89,026,997	0.13%	54,162,624	0.21%	2.07	0.37
9/30/2021	28,096	54,649	82,745	89,026,997	0.09%	54,162,624	0.15%	0.90	0.60
10/15/2021	28,598	12,816	41,414	89,026,997	0.05%	54,162,624	0.08%	0.86	0.18
10/29/2021	24,515	17,320	41,835	89,026,997	0.05%	54,162,624	0.08%	0.35	0.25
11/15/2021	43,583	61,089	104,672	89,026,997	0.12%	54,162,624	0.19%	0.62	0.72
11/30/2021	34,622	16,939	51,561	89,026,997	0.06%	54,162,624	0.10%	0.50	0.17

Notes:

[1] Semi-monthly dates on which short interest data is provided by Bloomberg.
[2] Short interest of Akumin common stock in Canada. Source: Bloomberg.
[3] Short interest of Akumin common stock in the US. Source: Bloomberg.
[4] = [2] + [3].
[5] The number of shares outstanding. Source: Akumin SEDAR Filings.
[6] = [4] / [5].
[7] Float is equal to number of shares outstanding less number of shares held by directors and officers and shares held by Stonepeak Infrastructure Partners and Tahoe Investment Group Company Limited after the Alliance deal closed on September 1, 2021. Sources: Akumin SEDAR Filings for Akumin shares outstanding and holdings of executives and directors and Refinitiv Eikon for holdings of Tahoe Investment Group and Stonepeak Infrastructure Partners.
[8] = [4] / [7].
[9] Equals [2] divided by the average daily Canadian composite volume over the prior 30 Canadian market trading days.
[10] Equals [3] divided by the average daily US composite volume over the prior 30 US market trading days.

Exhibit A-8
Tests for Autocorrelation in Akumin Common Stock Returns

	Date Range	Coefficient	t-stat	Observations	R-Squared
Return					
	06/25/2021 - 11/19/2021	-0.03	-0.30	102	0.09%
Excess Return					
	06/25/2021 - 11/19/2021	-0.04	-0.36	99	0.13%

Note:
Based on regressions of daily returns (or excess returns) on prior day's returns (excess returns). 7/5/2021, 7/6/2021, and 7/7/2021 are excluded from the autocorrelation analysis of excess returns, because either the excess return or the lagged excess return on these days are not available. *See* Exhibit 5 for daily returns and excess returns.

Exhibit A-9
Regression of Absolute Value of Akumin Common Stock Return on Natural Log of Volume

Date Range	Coefficient	t-stat	Observations	R-Squared
Return				
06/25/2021 - 11/19/2021	0.01	6.09	102	27.07%
Excess Return				
06/25/2021 - 11/19/2021	0.02	6.64	100	31.03%

Note:
Based on regressions of absolute value of daily return (or excess returns) on natural log of daily volume on the Canadian composite exchange. 7/5/2021 and 7/6/2021 are excluded from the analysis of excess returns, because excess returns on these days are not available. *See* Exhibit 5 for daily returns and excess returns. *See* Exhibit A-1 for Canadian composite volume.

Appendix B

INFORMATIONAL EFFICIENCY IN THE CONTEXT OF SECURITIES LITIGATION: WHAT HAVE WE LEARNED?

*Sunita Surana**

I. INTRODUCTION

In *Basic Inc. v. Levinson*, the U.S. Supreme Court held that investors could satisfy the reliance requirement under Section 10(b) of the Securities Exchange Act of 1934 and the Securities and Exchange Commission's Rule 10b-5 promulgated thereunder by invoking a presumption that the price of a security traded in an efficient market reflects all public, material information, including material misstatements.[1] This presumption, predicated on the fraud-on-the-market theory, "is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business. Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements."[2] To utilize the fraud-on-the-market theory to satisfy the reliance element of Rule 10b-5, a plaintiff must therefore demonstrate that the security traded in an efficient market.[3]

In securities class action litigation, challenges to market efficiency have often focused on arguments that can be broadly classified under two categories: (1) a notion of a perfectly efficient market; or (2) fundamental efficiency.[4] This short essay discusses the shortcomings of such arguments, explains why they are misplaced in the context of securities litigation, and suggests the usefulness of benchmarking the routinely used indicia of efficiency against a universe of stocks generally considered to trade on open and well-developed markets.

* Vice President, Forensic Economics, Inc. I would like to thank the editors of the *University of Illinois Law Review* for helpful suggestions.

1. Basic Inc. v. Levinson, 485 U.S. 224, 241–48 (1988).
2. *Id.* at 241–42.
3. *Id.* at 248.
4. *See*, *e.g.*, In re Xcelera.com Sec. Litig., 430 F.3d 503, 511 (1st Cir. 2005). The Appeals Court for the First Circuit explained, "[t]he district court was right to worry about these implications of Defendants' efficiency arguments; it did not err by rejecting Defendants' proposed definition of market efficiency requiring consistency with fundamental value. By drawing on the standard of efficiency in *Cammer* and holding that 'a share's market price [must] reflect publicly available information, *not . . . perfectly and correctly incorporate it*,' the district court adopted the correct standard of efficiency." *Id.* (emphasis added).

II. THE FAIRLY MODEST PREMISE OF INFORMATIONAL EFFICIENCY

In the context of securities litigation, the market for a stock is said to be efficient if the stock price quickly reflects all publicly available information.[5] This concept of efficiency is generally referred to as informational efficiency, as distinct from fundamental efficiency which posits that the information is incorporated correctly or accurately.[6] Informational efficiency is consistent with the semi-strong form of the Efficient Capital Market Hypothesis (ECMH), a bedrock of modern financial theory.[7]

While stocks traded on open and well-developed markets generally impound information rapidly, it is important to recognize that even in the most developed markets, frictions such as trading costs and costs of gathering information exist, in varying degrees, for all stocks.[8] In fact, the notion of "perfect efficiency is an unrealistic benchmark that is unlikely to hold in practice."[9] As Grossman and Stiglitz (1980) explained, if prices at all times perfectly reflected all public information, then there would be no incentive for any investor to incur information-gathering costs to acquire information which is the source of efficiency in the first place.[10] This apparent paradox illustrates that no market is perfectly efficient and that market efficiency is appropriately viewed as "a matter of degree."[11]

Indeed, informational efficiency "does not require that markets be *anywhere near perfectly efficient*."[12] Courts and financial economists are in

5. *Id.* at 508.

6. "Therefore, by requiring that stock price in an efficient market fully reflect all publicly available information in order to establish the fraud-on-the-market presumption, we do not suggest that stock price must accurately reflect the fundamental value of the stock. This distinction is well-supported by the legal and economic commentary." In re PolyMedica Corp. Sec. Litig., 432 F.3d 1, 16 (1st Cir. 2005).

7. Based on nested information sets, three forms of an efficient market have traditionally been defined: (1) the weak form, in which historical prices are incorporated into public prices; (2) the semi-strong form, in which all publicly available information is incorporated into public prices; and (3) the strong form, in which all publicly and privately available information are incorporated into public prices. *See* JOHN Y. CAMPBELL ET AL., THE ECONOMETRICS OF FINANCIAL MARKETS 22 (1997). *See also* Daniel R. Fischel, *Efficient Capital Markets, the Crash, and the Fraud on the Market Theory*, 74 CORNELL L. REV. 907, 911 (1989) ("The link between the concept of efficient capital markets and the fraud on the market theory is clear. The central premise of the fraud on the market theory is that prices of actively-traded securities reflect publicly-available information. This premise is roughly equivalent to the semi-strong version of the efficient capital markets hypothesis. Not surprisingly, courts adopting the fraud on the market theory have alluded to the empirical studies establishing the validity of the semi-strong version of the efficient capital markets hypothesis for support."). *See also, e.g.*, Eugene F. Fama, *Efficient Capital Markets: II*, 46 J. FIN. 1575, 1575 (1991); Eugene F. Fama, *Two Pillars of Asset Pricing*, 104 AM. ECON. REV. 1467, 1467–69 (2014).

8. *See, e.g.*, CAMPBELL ET AL., *supra* note 7, at 24.

9. *Id.*

10. Sanford J. Grossman & Joseph E. Stiglitz, *On the Impossibility of Informationally Efficient Markets*, 70 AM. ECON. REV. 393, 393 (1980).

11. Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 272 (2014).

12. Brief of Financial Economists as *Amici Curiae* in Support of Respondents for the Supreme Court of the United States, *Halliburton Co. v. Erica P. John Fund, Inc.* 573 U.S. 258 (2014) (hereinafter "Brief of Financial Economists as *Amici Curiae*") at 12 (emphasis added). *Amici* included the following academic financial economists who teach and write about public securities markets: Sanjai Bhagat; John H. Cochrane; Darrell Duffie; B. Espen Eckbo; Eugene Fama; S.P. Kothari; Reinier H. Kraakman; Andrew Lo; Burton G. Malkiel;

agreement on this.[13] Therefore, any argument that absence of perfect efficiency implies that the market does not adequately impound information is misguided. Such an argument is also inconsistent with the decision in *Basic*, reaffirmed in *Halliburton II*, which noted that the presumption of reliance is based on "the *fairly modest premise* that 'market professionals generally consider most publicly announced material statements about companies, thereby affecting stock market prices.'"[14]

Although the notion of perfect efficiency is unrealistic, "economists broadly agree that stock prices in developed markets generally do respond to information,"[15] making efficiency a matter of degree. As Campbell, Lo, and MacKinlay (1997) explain:

> The notion of *relative* efficiency … may be a more useful concept than the all-or-nothing view taken by much of the traditional market-efficiency literature. The advantages of relative efficiency over absolute efficiency are easy to see by way of an analogy. Physical systems are often given an efficiency rating based on the relative proportion of energy or fuel converted to useful work. Therefore, a piston engine may be rated at 60% efficiency, meaning that on average 60% of the energy contained in the engine's fuel is used to turn the crankshaft, with the remaining 40% lost to other forms of work such as heat, light, or noise.
>
> Few engineers would ever consider performing a statistical test to determine whether or not a given engine is perfectly efficient—such an engine exists only in the idealized frictionless world of the imagination.[16]

In similar vein, it is futile to argue for perfect efficiency; the more relevant concept is that of relative efficiency. As such, to understand where a security falls in the spectrum of efficiency, benchmarking the various indicia of market efficiency for a particular stock against those listed on markets considered to be open and well-developed can provide insight into the relative or degree of efficiency of the stock at issue.[17] Citing Bromberg and Lowenfels, the *Cammer* court

Jeffry M. Netter; Thomas Philippon; Jay R. Ritter; Richard Roll; and David L. Yermack. *Id.* at 1–2. They "file[d] this brief in order to clarify the areas of agreement and disagreement among economists regarding the 'Efficient Capital Markets Hypothesis' ('ECMH')." *Id.* at 1.

13. *Id.* at 3. "Economists disagree about whether markets *perfectly* process information and how quickly they do so; about whether prices reflect the fundamental value of the underlying stock; about the size and significance of 'bubbles' and other pricing anomalies in the market and the extent to which non-informational factors affect prices; and about whether it is possible to 'beat the market' by pursuing various investment strategies designed to exploit pricing anomalies. Such disagreements existed when *Basic* was decided in 1988, and they exist today. *But economists do not generally disagree about whether market prices respond to new material information*." *Id.* (emphasis added and in original). *See also* In re Computer Sci. Corp. Sec. Litig., 2012 U.S. Dist. LEXIS 181450, *28 n.10 (E.D. Va. 2012) ("Of course, it must be said that the NYSE is not a perfectly efficient market for any stock, as there is no such thing as a perfectly efficient market.").

14. *Halliburton*, 573 U.S. at 272 (emphasis added) (citing Basic Inc. v. Levinson, 485 U.S. 224, 247 (1988)).

15. Brief of Financial Economists as *Amici Curiae*, *supra* note 12, at 12.

16. CAMPBELL ET AL., *supra* note 7, at 24.

17. The following factors are generally considered when examining the efficiency of the market for a given stock: (1) trading volume; (2) number of analysts following and reporting on the security; (3) bid-ask spreads; (4) level of institutional ownership; (5) market capitalization of the company; (6) ability to sell short; (7) presence of market makers; (8) serial correlation in the stock's price; and (9) cause-and-effect relationship between new

noted that "[t]urnover measured by average weekly trading of two percent or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; one percent would justify a substantial presumption."[18] The use of these thresholds of 1% and 2% as guideposts in the determination of whether trading volume is adequate is ubiquitous in court opinions.[19] Thus, the idea of the use of a yardstick to assess market efficiency is well accepted and widely used. In fact, courts have also accepted the use of relative benchmarking for other indicia of market efficiency.[20] While courts near-universally use the 1%–2% thresholds for turnover, similar thresholds for other factors of efficiency, however, were not articulated by the *Cammer* court. Using data from 2010 to 2018, Bhole, Surana, and Torchio (2020)[21] rank stocks listed on the NYSE and Nasdaq stock exchanges—two of the most open and well-developed markets[22]—from best to worst, allowing a researcher to assess, relative to this universe of stocks, the percentile ranking, and hence the relative efficiency, of the stock that is the subject of the efficiency inquiry.[23] Such benchmarking offers a means to objectively assess efficiency of a particular stock and can be insightful for judges and practitioners alike.

information and changes in the security's price. *See*, *e.g.*, Vinh Nguyen v. Radient Pharms. Corp., 287 F.R.D. 563, 574–75 (C.D. Cal. 2012).

18. Cammer v. Bloom, 711 F. Supp. 1264, 1286 (D.N.J. 1989) (citing BROMBERG & LOWENFELS, 4 SECURITIES FRAUD AND COMMODITIES FRAUD, § 8.6 (Aug. 1988)).

19. *See*, *e.g.*, In re NetSol Techs., Inc. Sec. Litig., 2016 U.S. Dist. LEXIS 193924, 17–18 (C.D. Cal. 2016) ("The turnover as a percentage of average shares outstanding during the Class Period was 14.9%. In *Cammer*, the court cited approvingly an assessment that '[t]urnover measured by average weekly trading of 2% or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one…'") (quoting *Cammer*, 711 F. Supp. At 1293); Willis v. Big Lots, Inc., 242 F. Supp. 3d 634, 654 (S.D. Ohio 2017) ("This amounted to a weekly turnover of over 11% of its outstanding shares, which well exceeds the 2% benchmark justifying a 'strong presumption' of efficiency, which was referenced in *Cammer*"); Norfolk Cty. Ret. Sys. v. Cmty. Health Sys., 332 F.R.D. 556, 574 (M.D. Tenn. 2019) ("An average weekly trading volume that exceeds two percent of the total outstanding shares of the company is widely recognized as a sign of an efficient market.").

20. *See*, *e.g.*, Loritz v. Exide Techs., 2015 U.S. Dist. LEXIS 100471, 30–31 (C.D. Cal. 2015) ("Torchio finds that, on average, Exide's analyst coverage was in the 57th percentile of stocks in his NASDAQ benchmark. The Court FINDS that this factor favors market efficiency.") (internal citation omitted).

21. Bharat Bhole et al., *Benchmarking Market Efficiency Indicators for Securities Litigation*, 2020 U. ILL. L. REV. ONLINE 96 (2020).

22. Courts have recognized the NYSE and Nasdaq stock exchanges to be open and well-developed markets. *See*, *e.g.*, Local 703, I.B. v. Regions Fin. Corp., 282 F.R.D. 607, 618 (N.D. Ala. 2012) ("As noted by the Third Circuit: Securities markets like the NYSE and the NASDAQ are open and developed, and are therefore well suited for application of the fraud on the market theory") (internal citations omitted); Lapin v. Goldman Sachs & Co., 254 F.R.D. 168, 183 (S.D.N.Y. 2008) ("[N]o argument could be made that the [NYSE] is not an efficient market."); In re Accredo Health, Inc., 2006 U.S. Dist. LEXIS 97621, 25 (W.D. Tenn. 2006) ("Moreover, based on this court's research, the overwhelming case authority holds that securities listed on the NASDAQ trade in an efficient market"); Lumen v. Anderson, 280 F.R.D. 451, 461–62 (W.D. Mo. 2012) ("The NASDAQ is probably properly considered to be a *per se* efficient market.").

23. Daniel R. Fischel, *Use of Modern Finance Theory in Securities Fraud Cases Involving Actively Traded Securities*, 38 BUS. LAW. 1, 4 (1982) ("In an efficient capital market, such as American stock markets, however, the market price of a firm's stock will reflect all available information about the firm's prospects") (internal citation omitted).

III. FUNDAMENTAL EFFICIENCY IS BESIDE THE POINT

At any point in time, the market price of a security is based on the buying and selling decisions of a diverse set of investors who hold different views about the future prospects of a company.[24] Trading based on these disparate views and the forces of supply and demand determine the market price. While the resulting market price may diverge from any particular investor's view of the future prospects for the company, it reflects the overall consensus view of the market participants.

Underlying the diverse set of views that drives the trading are oftentimes a diverse set of investment strategies—value investing, growth investing, momentum investing, counter-cyclical investing, to name just a few.[25] Because these investment strategies are generally based on views on whether the market price has impounded information "correctly," it is often used as a pretext to argue against market efficiency.[26] These criticisms, however, miss the mark.[27] As courts have emphasized, the relevant concept of efficiency in the context of securities litigation is informational efficiency, not fundamental efficiency.[28] In *Halliburton II*, the U.S. Supreme Court categorically rejected the argument that "'overwhelming empirical evidence' now 'suggests that capital markets are not fundamentally efficient'" as a basis for overturning *Basic*.[29] As the Court recognized, "this debate [about fundamental efficiency] is not new,"[30] and has "not refuted the modest premise underlying the presumption of reliance."[31] For the same reason, many courts have explicitly ruled that a showing of "directionality

24. *See*, *e.g.*, LARRY HARRIS, TRADING & EXCHANGES: MARKET MICROSTRUCTURE FOR PRACTITIONERS 243 (2003).

25. *Id*. at 226–35.

26. Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 273–74 (2014).

27. Similarly, pricing anomalies identified in the literature are also consistent with informational efficiency. As explained in Brief of Financial Economists as *Amici Curiae*, "Our conclusion that prices generally move reasonably promptly in the predicted direction in response to unexpected material public information (favorable or unfavorable) is *perfectly consistent* with the view that there are sometimes anomalies in the way markets process information and that bubbles can exist." Brief of Financial Economists as *Amici Curiae*, *supra* note 12, at 3 (emphasis added). Moreover, proponents of the semi-strong form of the ECMH, such as Schwert (2003), have argued that such anomalies tend "to disappear, reverse, or attenuate." WILLIAM SCHWERT, *Anomalies and Market Efficiency*, in HANDBOOK OF ECONOMICS AND FINANCE 940 (2003).

28. *See*, *e.g.*, Loritz v. Exide Techs., 2015 U.S. Dist. LEXIS 100471, 42–43 (C.D. Cal. 2015) ("This Court agrees with the First Circuit and with *In re Countrywide* that for purposes of showing entitlement to the fraud-on-the-market presumption, a plaintiff need only show that a security's market is informationally efficient; the plaintiff need not show fundamental efficiency."); In re Accredo Health, Inc., 2006 U.S. Dist. LEXIS 97621, *30 (W.D. Tenn. 2006) ("First, the standard by which Statman measures the efficiency of the Accredo market is more demanding than is required for purposes of class certification. Statman defines the term 'efficient market' as follows: 'The market for a stock is 'efficient' when the price of a stock reflects its fundamental value. The fundamental value of a stock . . . is the present value of logically expected cash flows, such as dividends, discounted by a rate that reflects the risk of these cash flows.' … Accredo, however, in its brief and at oral argument could not cite any case that has accepted this fundamental value analysis for market efficiency. To the contrary, the few cases that have addressed this issue have squarely rejected this fundamental value approach.").

29. Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 270–72 (2014).

30. *Id*.

31. *Id.*

or the degree of fit between expected and observed moves in a market need not be substantial to allow a finding of market efficiency."[32]

The fact that any given type of investor's views about the prospects of a company differs from the consensus view of the market does not make a market informationally inefficient. Quite the opposite. Trading based on these disparate views and strategies drives the price and makes the market informationally efficient. As Harris (2003) explains, "[i]nformed traders are speculators who acquire and act on information about fundamental values. They buy when prices are below their estimates of fundamental value and sell when prices are above their estimates. Informed traders include value traders, news traders, information-oriented technical traders, and arbitrageurs."[33] These traders "generally differ in their estimates of values," and "[t]he price impacts of their trading cause prices to reflect the information they collect."[34]

The ultimate question in securities litigation is whether investors were harmed by the alleged misrepresentations or omissions. The out-of-pocket damages methodology, a standard approach used in securities class action litigation, measures damages based on artificial inflation in *market* prices at the time of purchase and sale, *i.e.*, did the investors transact at artificially inflated market prices?[35] Generally, event studies are used by financial economists to assess the impact of a specific event (such as the corrective disclosure) on the value of a stock and thus determine the level of artificial inflation in the stock.[36] Event studies are based on *market* prices.[37] Even the statutory limitation on damages

32. *See*, *e.g.*, In re: Petrobras Sec. Litig., 312 F.R.D. 354, 370 (S.D.N.Y. 2016) ("Such evidence goes to the accuracy of the price of a security, and the Supreme Court has explained that it is not the accuracy of a price as a reflection of underlying value but instead the sensitivity of the price to false statements that underlies the Basic presumption"); Petrie v. Elec. Game Card, Inc., 308 F.R.D. 336, 354–55 (C.D. Cal. 2015) ("The Court agrees with Plaintiffs that there is no absolute requirement to show that certain information caused prices to move in a specific direction. In some circumstances, it may be virtually impossible to determine the 'correct' direction in which the price should move in response to a certain piece of information. For instance, a press release might contain both 'good' and 'bad' news. Or, the same new information might be 'good' news to one investor but 'bad' to another. On the other hand, certain news can be reasonably expected to drive the price only in one direction.").

33. HARRIS, *supra* note 24, at 222 (emphasis removed).

34. *Id*. at 224, 237.

35. *See*, *e.g.*, City of Miami Gen. Employees' & Sanitation Employees' Ret. Trust v. RH, Inc., 2018 U.S. Dist. LEXIS 175573, *7 (N.D. Cal. 2018) ("Courts regularly reaffirm that the out-of-pocket, or event study, method matches plaintiffs' theory of liability under Section 10(b) of the Securities Exchange Act, making it the standard method for calculating damages in virtually every Section 10(b) class action.").

36. *See*, *e.g.*, CAMPBELL ET AL., *supra* note 7. ("The general applicability of the event-study methodology has led to its wide use. In the academic accounting and finance field, event-study methodology has been applied to a variety of firm specific and economywide events. Some examples include mergers and acquisitions, earnings announcements, issues of new debt or equity, and announcements of macroeconomic variables such as the trade deficit. However, applications in other fields are also abundant. For example, event studies are used in the field of law and economics to measure the impact on the value of a firm of a change in the regulatory environment, and in legal-liability cases event studies are used to assess damages.") (internal citations omitted).

37. While a showing of efficiency is required to satisfy the reliance element of a Rule 10b-5 claim, consistent with academic literature, courts recognize that it is not necessary to first establish an efficient market in order to conduct an event study. *See*, *e.g.*, Alpha Capital Anstalt v. Intellipharmaceutics International Inc., 2021 U.S. Dist. LEXIS 128773, *17 (S.D.N.Y. 2021) ("[I]n any event, '[l]oss causation addresses a matter different from whether an investor relied on a misrepresentation, presumptively or otherwise, when buying or selling a

pursuant to the Private Securities Litigation Reform Act (PSLRA) of 1995 is based on *market* prices in the 90-day period following the corrective disclosure.[38] Thus, for securities litigation, the emphasis is on realized *market* prices, not any particular investor's valuation of the company, underscoring the irrelevance of fundamental efficiency in securities litigation.[39] Accordingly, in the context of securities litigation, as the Supreme Court concluded, "[d]ebates about the precise degree to which stock prices *accurately* reflect public information are thus largely *beside the point*."[40] As the Court explained, debates about whether the market price is "accurate" does not "detract from the fact that false statements affect it, and cause loss."[41]

IV. CONCLUSION

For purposes of informational efficiency, the relevant concept of market efficiency in the context of securities litigation, criticisms rooted in notions of perfect efficiency or fundamental efficiency are misguided. As the court in *Xcelera* explained, "[t]he law expects that a share's market price reflect publicly available information, not that the price *perfectly* and *correctly* incorporate it… A stock may trade in an efficient market yet be overvalued, and in such cases victims of securities violations—and their correspondingly higher damages—must be taken as they are. Otherwise, a robust stock market would always present a defense at the class certification stage and on the merits that depends on highly subjective, retrospective analysis of what people trading in a stock should have been thinking."[42]

stock.' The Defendants therefore need not address market efficiency to prove negative loss causation. '[O]n both the materiality and loss causation fronts . . . the market efficiency issue [is] a red herring' in the context of a § 11 claim." (quoting Erica P. John Fund, Inc. v. Halliburton Co., 563 U.S. 804, 812 (2011) & In re Constar Int'l Inc. Sec. Litig., 585 F.3d 774, 785 (3d Cir. 2009).

38. Private Securities Litigation Reform Act of 1995, 15 U.S.C. § 78u–4(e) (1995).

39. "In an open and developed market, the dissemination of material misrepresentations or withholding of material information typically affects the price of the stock, and purchasers generally rely on the price of the stock as a reflection of its value." Peil v. Speiser, 806 F.2d 1986, 1154, 1161 (3rd Cir. 1986). *See also* Daniel R. Fischel, *Efficient Capital Markets, the Crash, and the Fraud on the Market Theory*, 74 CORNELL L. REV. 907, 911 (1989) ("Because market prices of actively-traded securities do reflect publicly-available information, it is rational for many investors to accept the market price as given. For the same reason, investors are harmed if they purchase securities at prices which reflect false information as a result of disclosure defects.").

40. Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 272 (2014) (emphasis added). This view is in line with those of financial economists: "The critical point, however, is that this debate about excess returns has little to do with the modest assumption that prices move reasonably promptly in a predictable direction in response to favorable or unfavorable public information. The excess returns debate goes to whether stock prices are fundamentally accurate, not whether they move in response to information." Brief of Financial Economists as *Amici Curiae*, *supra* note 12, at 11.

41. "That the . . . price [of a stock] may be inaccurate does not detract from the fact that false statements affect it, and cause loss," which is "all that *Basic* requires." *Halliburton*, 573 U.S. at 272 (quoting *Schleicher v. Wendt*, 618 F.3d 679, 685 (7th Cir. 2010).

42. In re Xcelera.com Sec. Litig., 2004 U.S. Dist. LEXIS 29064, 9–10 (D. Mass. 2004). The appeals court concurred: "Defendants do not, and cannot, cite to any language in *Basic* requiring that the market price of a stock must accurately reflect its fundamental value for purposes of demonstrating market efficiency. In fact, as we noted in *PolyMedica*, the Supreme Court in *Basic* declined to explicitly address the meaning of market efficiency—much less a fundamental value theory of market efficiency—stating that, 'we do not intend conclusively

to adopt any particular theory of how quickly and completely publicly available information is reflected in market price.'" In re Xcelera.Com Sec. Litig., 430 F.3d 503, 510 (1st Cir. 2005) (quoting Basic Inc., v. Levinson, 485 U.S. 224, 249 n.28 (1988)) (internal citations omitted).

Tab 18

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Expert Report of Robert Patton

In the matter between *Terry Longair, Plaintiff,*

and

Akumin Inc, Riadh Zine-El-Abidine, Mohammad Saleem, Stan Dunford, Murray Lee, Thomas Davies, James Webb and Ernst & Young LLP, Defendants

Ontario Superior Court of Justice, Court File No. CV-21-00674081-00CP

19 September 2023

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Contents

1. Introduction 1
1.1. Instructions 1
1.2. Qualifications 2
1.3. Materials Relied Upon 3

2. Summary of Conclusions 4
2.1. The Surana Report's Review of Academic Literature and Analyst Commentary Does Not Support the Conclusion that the Alleged Misrepresentations Would be Expected to Affect Akumin's Share Price 5
2.2. The Surana Report Ignores the September 1 Disclosure, Which Addressed Market Concern Generated by the August 15 Disclosure and Was Followed by a Statistically Significant Share Price Increase 9
2.3. The Surana Report Takes an Inconsistent and *Ad Hoc* Approach to Assessing Whether Akumin's Share Price Reacted in a Statistically Significant Manner to the Alleged Public Corrective Statements 11
2.4. There Was No Statistically Significant Response to the November 8 Disclosure, which for the First Time Quantified the Impact of the Cost Reclassification 15
2.5. Analyst Commentary Indicates the Statistically Significant Increase in Akumin's Share Price on November 15, 2021 Was Driven At Least In Part by the Resolution of Uncertainty and Delay 15

3. Background 16
3.1. Akumin and the Market for its Shares 16
3.2. Notes Issued by Akumin During the Proposed Class Period 18
3.3. The Alliance Acquisition 19
3.4. The Alleged Misrepresentations 21
3.5. The Alleged Corrective Disclosures 23
3.5.1. August 15, 2021 (the August 15 Disclosure) 24
3.5.2. October 12, 2021 (the October 12 Disclosure) 24
3.5.3. November 8, 2021 (the November 8 Disclosure) 26
3.5.4. November 15, 2021 (the November 15 Disclosure) 27

4. Methodological Considerations 27
4.1. The Market Price and Value of Akumin's Common Shares 27
4.2. Market Price Volatility 29
4.3. Market Models, Event Studies, and Excess Returns 30
4.4. The Market Model Applied to Akumin 37

5. The Surana Report's Review of Academic Literature and Analyst Commentary Does Not Support the Conclusion that the Alleged

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DocuSign Envelope ID: 2F366CA9-5057-4338-AEAA-85DEE55CACE7

Misrepresentations Would be Expected to Affect Akumin's Share Price 41

6. The Surana Report Ignores Akumin's September 1 Disclosure, which Addressed Market Concerns Generated by the August 15 Disclosure and Was Followed by a Statistically Significant Share Price Increase 46

6.1. Event Study of Akumin's Share Price Following the August 15 Disclosure 47

6.2. Commentary by Analysts and the Financial Press Does Not Support Dr. Surana's Opinion that the August 15 Disclosure Notified the Market of a Restatement 49

6.3. The Surana Report Omits that Concern About the Alliance Acquisition and the Pending Application for MCTO Contributed to Akumin's Share Price Decline on August 16, 2021 50

6.4. The Surana Report Ignores the Statistically Significant Akumin Share Price Increase on September 1, 2021 53

7. The Surana Report Takes an Inconsistent and *Ad Hoc* Approach to Assessing Whether Akumin's Share Price Reacted in a Statistically Significant Manner to the Alleged Public Corrective Statements 55

7.1. There Was No Statistically Significant Akumin Share Price Decline on October 12, 2021 55

7.2. In an Efficient Market, the Price of a Share Rapidly Responds to Important New Information 57

7.3. Akumin's Share Price Reacted Rapidly to Other Contemporaneous Disclosures 59

7.4. A Review of Intraday Price Data for October 12, 2021 Confirms That Akumin's Share Price Did Not React to the Company Disclosure That Morning 61

7.5. The October 13 Cormark Report Did Not Provide Additional Allegedly Corrective Information Other Than What Was in the October 12 Disclosure and Did Not Lead to a Swift Reaction in Akumin's Price 63

7.6. The Surana Report Finds a Statistically Significant Share Price *Increase* Following the November 15 Disclosure 66

7.7. The Surana Report's Arguments for Extending the Event Window for the November 15 Disclosure Do Not Withstand Close Examination 68

7.7.1. Analyst Reports 68

7.7.2. Trading Volume Over the Period November 15-18, 2021 71

7.7.3. Conclusion 72

8. There Was No Statistically Significant Response to the November 8 Disclosure, which for the First Time Quantified the Impact of the Cost Reclassification 73

8.1. Event Study of Akumin's Common Share Price on November 8, 2021 74

8.2. Commentary From Analysts and News Coverage 75

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DocuSign Envelope ID: 2F366CA9-5057-4338-AEAA-85DEE55CACE7

9. Analyst Commentary Indicates the Resolution of Uncertainty Contributed to the Statistically Significant Akumin Share Price Increase Following the November 15 Disclosure 76

10. Restrictions..... 80

Appendix A. Curriculum Vitae of Robert Patton, CFA 81

Appendix B. Materials Relied Upon 90

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1. Introduction

1.1. Instructions

1. Counsel for Akumin Inc. ("**Akumin**", "**AKU**" or the "**Company**") and Riadh Zine-El-Abidine, Mohammad Saleem, Thomas Davies, Stan Dunford, Murray Lee, and James Webb (the "**Individual Defendants**") has asked me to prepare this report in connection with the allegations contained in the Amended Statement of Claim issued by Terry Longair ("**Plaintiff**") against Akumin, the Individual Defendants and Ernst & Young LLP ("**EY**", and together with Akumin and the Individual Defendants, the "**Defendants**") on February 17, 2023 (the "**Amended Statement of Claim**").[1]

2. I have been asked to review and provide my comments in response to the opinions expressed in the Report of Sunita Surana, Ph.D., dated February 17, 2023 (the "**Surana Report**").[2] The Surana Report sets out opinions relating to the allegations in the Amended Statement of Claim that the Defendants made certain misrepresentations, which are alleged to have inflated the price of Akumin securities over the period from May 15, 2019 to November 12, 2021, inclusive (the "**Proposed Class Period**").[3] Plaintiff alleges misrepresentations (the "**Alleged Misrepresentations**") that relate to: (a) the reporting of the Company's revenue and accounts receivable in its financial statements for the Fiscal Years 2019 and 2020 ("**FY 2019**" and "**FY 2020**") and the first quarter of Fiscal Year 2021 ("**1Q21**")[4]; (b) the treatment of costs associated with replacement components, and whether these were capitalized or expensed by the

[1] Amended Statement of Claim, In the matter between *Terry Longair, Plaintiff, and Akumin Inc, Riadh Zine-El-Abidine, Mohammad Saleem, Stan Dunford, Murray Lee, Thomas Davies, James Webb and Ernest & Young LLP, Defendants*, Ontario Superior Court of Justice, dated February 17, 2023.

[2] Expert Report of Sunita Surana, Ph.D., February 17, 2023, Exhibit A to the Affidavit of Sunita Surana, Ph.D., In the matter between *Terry Longair, Plaintiff, and Akumin Inc, Riadh Zine-El-Abidine, Mohammad Saleem, Stan Dunford, Murray Lee, Thomas Davies, James Webb and Ernest & Young LLP, Defendants*, Ontario Superior Court of Justice, dated February 17, 2023.

[3] Amended Statement of Claim, ¶ 2(f). The Amended Statement of Claim proposes a class period running from May 15, 2019 at 7:46 AM ET to November 15, 2021 at 7:04 AM ET. I note that the final alleged corrective disclosure, which should end the Proposed Class Period, was made before the start of trading on November 15, 2021, a Monday. Therefore, Friday, November 12, 2021 was the last trading day before the Alleged Misrepresentations were fully corrected according to Plaintiff.

[4] I use similar abbreviations to refer to fiscal years and fiscal quarters throughout this report.

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Company in its financial statements for the same fiscal periods; (c) the effect on shareholders' equity of items (a) and (b) above; (d) compliance with financial accounting standards; (e) the effectiveness of the Company's internal controls over financial reporting ("**ICFR**") and disclosure controls and procedures ("**DC&P**"); and (f) statements by Akumin's auditors regarding the financial statements of the Company for FY 2019 and FY 2020.[5]

3. Plaintiff alleges that the Alleged Misrepresentations were corrected by a series of announcements made by the Company on August 15, October 12, November 8, and November 15, 2021 (the "**Alleged Public Corrective Statements**").[6]

4. All dollar amounts set out in this report are in Canadian dollars, unless otherwise indicated. All Akumin share prices presented in this report are Canadian composite closing prices, unless otherwise indicated.[7]

1.2. Qualifications

5. I am a Managing Director within the Securities and Finance and International Arbitration practice groups at NERA Economic Consulting ("**NERA**"). NERA is an international consultancy that provides financial and economic analysis and advice to corporations, governments, law firms, regulatory agencies, trade associations and international agencies. NERA was established in 1961 and now employs more than 500 professionals in more than 20 offices worldwide.

6. I earned an MSc from the London School of Economics in Economics and Economic History and a BA from the University of Michigan with a dual concentration in Economics and History. I am a Chartered Financial Analyst ("**CFA**") charterholder, a qualification for financial professionals that encompasses company valuation and financial statement analysis, amongst other topics. My CV is attached to this report as **Appendix B**.

[5] Amended Statement of Claim, ¶¶ 43-70.

[6] Amended Statement of Claim, ¶¶ 71-84.

[7] A share's composite closing price is the final price of the trading day across both the market on which the share is listed and any other market on which it trades. Akumin's Canadian composite closing price is the final price of the trading day across the TSX as well as other Canadian markets.

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7. At NERA, I have specialized in designing and implementing analyses in the context of advisory projects and disputes in a variety of jurisdictions. I have submitted written expert evidence and/or provided testimony in legal disputes, including securities class action proceedings, before courts in Canada and the US; the International Centre for the Settlement of Investment Disputes ("**ICSID**"); and the High Court of England and Wales. I have been qualified as an expert witness in Canada and have testified at trial. I have authored working papers relating to valuation issues and other analytical techniques in economics and finance.

8. In preparing this report, I have been assisted by others at NERA, including junior economists and researchers, who have worked under my supervision and review. However, the opinions expressed in this report are my own. The compensation of NERA is not contingent upon my conclusions or on the outcome of this proceeding. NERA is compensated for my time, and that of my colleagues who have assisted me in the preparation of this report, at our standard billing rates and for any out-of-pocket expenses at their cost to us. I provide a formal acknowledgement of my duty as an expert to the court in my Affidavit sworn on September 19, 2023, to which this report is also attached.

1.3. Materials Relied Upon

9. In the course of preparing my report I have relied upon materials including the following:

a. The Amended Statement of Claim;

b. Reports by equity analysts covering Akumin and by analysts at ratings agencies rating the Company's debt;

c. Annual and quarterly financial statements, Management Discussion and Analysis ("**MD&As**"), Annual Information Forms ("**AIFs**"), and news releases filed by Akumin with the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("**SEDAR**") and with the US Securities and Exchange Commission's Electronic Data Gathering, Analysis, and Retrieval system ("**EDGAR**");

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d. Transcripts of earnings conference calls with analysts and accompanying presentations;

e. Data on Akumin's common share price and trading volume, as well as the levels of relevant market and industry indices and currency exchange rates, obtained from Bloomberg L.P. ("**Bloomberg**");

f. Intraday stock price and volume data from Tick Data;

g. Academic literature and textbooks as referenced below; and

h. News articles as referenced below.

10. A complete list of materials relied upon is included in **Appendix C**.

2. Summary of Conclusions

11. The Surana Report sets out the opinion that Akumin's disclosure of a restatement of certain prior period financial statements in the Alleged Public Corrective Statements caused a decline in the price of its shares. As set out in this report, however, none of the Company's disclosures relating to the restatement resulted in a statistically significant decline in Akumin's share price. A careful review of Akumin disclosures, share price data (including minute-by-minute intraday prices), and analyst commentary shows that (a) the Company's news release on August 15, 2021, was not understood by the market to relate to an upcoming restatement; (b) the Company's news releases on October 12 and November 8, 2021 were not followed by statistically significant price declines; and (c) when the restatement itself was issued on November 15, 2021, the release was immediately followed by a statistically significant increase in Akumin's share price.

12. I summarize below the key conclusions underlying these opinions. These conclusions are then elaborated upon in the sections further below.

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2.1. The Surana Report's Review of Academic Literature and Analyst Commentary Does Not Support the Conclusion that the Alleged Misrepresentations Would be Expected to Affect Akumin's Share Price

13. The Surana Report presents examples of academic literature and analyst commentary prior to the Alleged Public Corrective Statements. This review forms the basis for Dr. Surana's opinion that:

> [A]nalyst commentary and academic research indicate that Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, would be expected to have an effect on the market price of Akumin's common stock.
>
> *and*
>
> [B]ased on analyst commentary and academic research, had Akumin told the truth in respect of its misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, in my opinion, Akumin's common stock price would have declined.

14. However, the academic literature presented in Section V of the Surana Report demonstrates only that, *in general*, financial disclosures by a company are considered by investors in that company's securities, and that in some cases the price of a company's securities will react to such disclosures. Likewise, the analyst commentary presented in Section VI of the Surana Report reflects only that analysts covering Akumin during the Proposed Class Period paid attention *generally* to disclosures relating to financial metrics such as revenue, accounts receivable, property and equipment and shareholders' equity.

15. While obviously true as generic propositions, these observations are not a sufficient basis from which to draw conclusions about the expected effect of the Alleged Misrepresentations on Akumin's share price. For example, while the literature cited to by Dr. Surana indicates that financial disclosures by a company may affect the price of its shares, this and other academic literature establishes that not all unexpected accounting and financial disclosures will affect a company's share price. Whether and to what extent a particular financial

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disclosure by Akumin would be expected to affect the price of its shares depends on factors including the nature, magnitude and context of that disclosure.

16. The Surana Report also points to an academic article that finds "statistically significant negative mean and median market reactions to restatements of annual and quarterly financial statements".[8] However, the same paper finds "significant variation in the market response" to restatements, and reports that nearly 30 percent of the restatement announcements in its sample were associated with a non-negative (positive or zero) share price change. One potential explanation put forward by the paper's authors for this observation is that "some restatements have very little impact on market perceptions".[9] In short, the paper finds that a restatement of a company's financials *may* affect the price of its shares, but will not necessarily do so.

17. In a similar vein, it is obviously true that, during the Proposed Class Period, analysts following Akumin tracked the Company's reported accounting metrics, such as revenue and measures of earnings. However, these observations are not a sufficient basis from which to conclude, as the Surana Report does, that "Akumin's common stock price would have declined … had Akumin told the truth in respect of its misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim".[10]

18. Whether information relating to revenue and earnings would meaningfully alter the market's assessment of a company's value depends on the magnitude and nature of the change, and the degree (if any) to which it affects expectations for future performance. The reaction may also depend on other factors that contextualize the metric being considered.

[8] Surana Report, ¶ 35.

[9] Zoe-Vonna Palmrose, Vernon J. Richardson, and Susan Scholz, "Determinants of Market Reactions to Restatement Announcements," *Journal of Accounting and Economics*, 37, 2004, pp. 59–89.

[10] Surana Report, ¶ 3.

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19. Examples of the importance of the above considerations in shaping the market's response to new financial information can be observed in analysts' reactions to Akumin's disclosures in respect of the restatement:

a. For instance, the Surana Report points out, correctly, that academic literature indicates that revenue is an important accounting metric considered by investors, and that Akumin revenue was followed and discussed by analysts during the Proposed Class Period. However, analysts covering Akumin focused not only on total revenue and other revenue-related measures (such as the volume of services and revenue per Relative Value Unit or "**RVU**"[11]) but also on the *magnitude* of any differences between their expectation and reported results. For example, following the Company's issuance of 2Q21 financials on November 15, 2021, the analyst from Canaccord Genuity Capital Markets ("**Canaccord**") noted a miss in Akumin's revenue per RVU, but added that it "was not significant".[12] Analysts also focused on contextual factors such as the extent to which Akumin's restatement of revenue improved its expected cash collection cycle by reducing Days Sales Outstanding.

b. The Surana Report is also correct to state that, in general, earnings metrics are important to investors, and that analysts covering Akumin tracked metrics such as Earnings Before Interest, Taxes, Depreciation and Amortization ("**EBITDA**") and Adjusted EBITDA[13] as well as EBITDA

[11] As discussed below within this report, RVUs are a standardized measure of value to determine the reimbursement amount for medical services.

[12] "Q2/21: Restatements impact pricing and margin", Canaccord, November 18, 2021.

[13] Surana Report, ¶¶ 45-48. The Company reported "Adjusted EBITDA", which it defined as "EBITDA, as further adjusted for stock-based compensation, impairment of property and equipment, provisions for certain credit losses, settlement costs, provisions, acquisition-related and public offering costs, gains (losses) in the period, deferred rent expense (credit) and one-time adjustments", in its earnings announcements. See e.g., Akumin Inc., "Akumin Inc. Announces Second Quarter 2021 Financial Results and Filing of Restated Financial Statements", November 15, 2021. Adjusted EBITDA was tracked by multiple analysts during the Proposed Class Period. See e.g., "Q2/19: If You Build It, They Will Come", Cormark, August 15, 2019 and "Completes Alliance Acquisition; Raising Estimates and Target Price", Clarus, September 2, 2021.

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Margin and Adjusted EBITDA margin.[14] However, analyst commentary also reflected the importance of context in assessing changes to these earnings variables. For example, analysts discussed the "sizable" effect on Akumin's EBITDA of a reclassification of certain repair and maintenance costs as operating expenditures ("**opex**") rather than capital expenditures ("**capex**").[15] The reclassification lowered Adjusted EBITDA because opex is subtracted in obtaining Adjusted EBITDA whereas capex is not. However, analysts also recognized that this reclassification did not change the magnitude of the reported cash expenditures. For example, Cormark Securities Inc. ("**Cormark**") wrote, "the revision is simply moving more capex into the opex bucket", but did not alter the Free Cash Flow ("**FCF**") generated by the company for shareholders: "In other words, higher opex hits EBITDA, but lower capex leaves a neutral FCF impact."[16] This is a critical consideration, as academic and practitioner literature indicates that generation of FCF is the key variable on which company valuation is based.

c. Finally, the Surana Report is correct to state that some restatements of prior period financials significantly affect investor perceptions of a firm's outlook. However, this is not always the case and depends on the specific attributes of the restatement. To take an example, following Akumin's publication of restated financials on November 15, 2021, the analyst at

[14] Surana Report, ¶¶ 45-48. The Company reported "Adjusted EBITDA margin", which it defined as "Adjusted EBITDA divided by the total revenue in the period", in its earnings announcements. See e.g., Akumin Inc., "Akumin Inc. Announces Second Quarter 2021 Financial Results and Filing of Restated Financial Statements", November 15, 2021. Adjusted EBITDA margin was tracked by multiple analysts during the Proposed Class Period. See e.g., "Q2/19: If You Build It, They Will Come", Cormark, August 15, 2019 and "Completes Alliance Acquisition; Raising Estimates and Target Price", Clarus, September 2, 2021.

[15] "Q2/21: Restatements impact pricing and margin", Canaccord, November 18, 2021.

[16] "High Torque Equity Requires Execution", Cormark, November 17, 2021.

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Clarus Securities Inc. ("**Clarus**") described the impact of the restatement on its future outlook as "extremely modest".[17]

20. These examples of analyst commentary underscore the importance of assessing the impact on share price of the specific Alleged Misrepresentations, not just considering in a generic sense whether certain accounting variables are followed by investors.

21. These conclusions, and further discussion, are presented in **Section 5** below.

2.2. The Surana Report Ignores the September 1 Disclosure, Which Addressed Market Concern Generated by the August 15 Disclosure and Was Followed by a Statistically Significant Share Price Increase

22. On August 15, 2021, Akumin announced a delay in the filing of its 2Q21 interim financial report, MD&A and CEO and CFO certifications (together, the "**2Q21 financials**") pending further information and analysis regarding an accounting issue that related to revenue and accounts receivable (the "**August 15 Disclosure**").[18] The Company also announced that it had applied for a Management Cease Trade Order ("**MCTO**") to avoid a general cease trade order. The Company did not state in the August 15 Disclosure that there would be a restatement of prior period financial statements. The Surana Report finds a statistically significant decline in Akumin's share price following the August 15 Disclosure, as does my event study.[19]

23. The Surana Report asserts that the August 15 Disclosure was interpreted by the market as signalling a potential restatement of past financial results. The Surana Report does not provide support for this assertion. In my review of analyst commentary and financial news, I find no indication that the market interpreted the August 15 Disclosure as foreshadowing a restatement.

[17] "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2," Clarus, November 16, 2021.

[18] Akumin Inc., "Akumin Announces Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis", August 15, 2021.

[19] Surana Report, ¶¶ 3(c), 91.

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24. Akumin announced on October 12, 2021 that it would restate certain prior period financial statements (the "**October 12 Disclosure**"). This was the first disclosure by the Company of a pending restatement.

25. The Surana Report then opines, incorrectly, that there was a "lack of a reversal" of the Akumin share price decline that followed the August 15 Disclosure.[20] This opinion ignores the Company's September 1, 2021 announcement (the "**September 1 Disclosure**") regarding the completion of Akumin's acquisition of Alliance HealthCare Services Inc. ("**Alliance**"). The agreement for Akumin to acquire Alliance had first been announced on June 25, 2021, which was followed by a statistically significant increase in Akumin's share price. Analysts called this transaction, valued at US$820 million, "transformative".[21]

26. In the September 1 Disclosure, Akumin announced that it had successfully closed the Alliance acquisition, including the associated financing by way of unsecured notes, on the terms described by the Company when it announced the Alliance transaction in June 2021. The September 1 Disclosure was followed by a statistically significant *increase* in the price of Akumin shares.

27. Analyst commentary indicates that the August 15 Disclosure gave rise to investor concern that the accounting issues delaying the release of the 2Q21 financials might jeopardize the completion of the Alliance acquisition, including the financing arrangements. An analyst report published by National Bank on August 16, 2021, expressed concern "related to the accounts receivable disclosure in conjunction with the previously announced acquisition of Alliance and related elevated leverage".[22] In addition, the analyst at Cormark stated that the August 15 Disclosure had led the market to perceive a "material closing risk" relating to the Alliance acquisition.[23]

---

[20] Surana Report, ¶ 100.

[21] "Acquisition Accretive But Already High Leverage Up And Some Concerns on the Target", National Bank, June 27, 2021. See also "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2", Clarus, November 16, 2021.

[22] Surana Report, ¶ 89.

[23] "Alliance Takeout Closed While Waiting For Delayed Q2/21", Cormark, September 2, 2021.

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28. However, Cormark stated that the September 1 Disclosure "put[…] an end to perceived risks that the takeout and related financings had material closing risk following the delay of AKU's Q2/21 financials". Cormark also stated that September 1 Disclosure reassured the market that the accounting issue described in the August 15 Disclosure was not sufficiently serious to deter the parties involved from completing the Alliance acquisition and related financing: "[T]he signal we now get from closing of the Alliance deal suggests there is no material revenue recognition issue (i.e. Alliance/Tahoe and Stonepeak on the inside with debt and equity stakes in AKU have not delayed/canceled the deal)."[24]

29. These conclusions, and the basis for them, are discussed in **Section 6**, below.

2.3. The Surana Report Takes an Inconsistent and *Ad Hoc* Approach to Assessing Whether Akumin's Share Price Reacted in a Statistically Significant Manner to the Alleged Public Corrective Statements

30. The Surana Report's analysis of the Akumin share price reaction to the Alleged Public Corrective Statements is inconsistent and *ad hoc*. Dr. Surana concludes (and I agree) that Akumin shares traded in an efficient market during the period over which the Alleged Public Corrective Statements were made (June 25 to November 19, 2021). As Dr. Surana states in a paper she recently co-authored, the price of a security trading in an efficient market will react "rapidly" to new, relevant information.[25] Academic literature cited by the Surana Report indicates that this reaction often begins within minutes of a disclosure. Consistent with this, Akumin's share price displayed a rapid adjustment to Company-specific news in this time period. For example, following the September 1 Disclosure, Akumin's share price took less than 45 minutes to fully reflect the information disclosed.

[24] "Alliance Takeout Closed While Waiting For Delayed Q2/21", Cormark, September 2, 2021.

[25] Sunita Surana, "Informational Efficiency in the Context of Securities Litigation: What Have We Learned?" *University of Illinois Law Review Online*, Fall 2021, pp. 334-341.

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31. Instead of applying the principles of market efficiency, the Surana Report adopts an *ad hoc* approach to assessing the reaction of Akumin's share price to the Alleged Public Corrective Disclosures:

a. *October 12, 2021*: The event study set out in the Surana Report does not measure a statistically significant share price reaction on October 12, 2021, following the October 12 Disclosure, which was made before the open of trading on the Toronto Stock Exchange ("**TSX**") and the NASDAQ Capital Markets Exchange ("**NASDAQ**"). Nonetheless, the Surana Report concludes that Akumin's share price declined significantly in response to the October 12 Disclosure, by attributing to that disclosure a price decline that did not begin until the middle of the following trading day. In an efficient market, the price of a security would not take a day and a half to begin reacting to value-relevant news.

b. *November 15, 2021*: On this date, before the opening of trading on the TSX and NASDAQ, the Company released its delayed 2Q21 financials as well as restated financials for FY 2019, FY 2020 and 1Q21 (the "**November 15 Disclosure**"). The event study set out in the Surana Report measures a highly statistically significant *increase* in the price of Akumin shares on November 15, 2021, following the Company's restatement of past financial results (as does my event study). Nonetheless, the Surana Report concludes that Akumin's share price did *not* react in a statistically significant manner to the November 15 Disclosure. Dr. Surana reaches this conclusion by extending the window of time over which this price reaction is measured to include three additional trading days, despite the fact that the share price movements on these three dates were not statistically significant and none of these days exhibited elevated trading volume (a criterion also applied in the Surana Report to assess whether Akumin's price was reacting to news on a particular date). The Surana Report has no reasonable economic basis for diluting the statistically significant share

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> price movement immediately following the November 15 Disclosure by adding additional trading days that do not exhibit statistically significant price movements in order to reach a conclusion that there was not a positive market reaction to the November 15 Disclosure.[26]

32. In addition to attributing the Akumin share price decline on the afternoon of October 13, 2021 to the disclosure on the morning of the previous trading day, the Surana Report attributes this price decline to an analyst report published by Cormark on that date (the "**October 13 Cormark Report**"):

> On October 13, 2021, after the publication of the Cormark report detailing the implications of the disclosure on future profitability and as the market continued to digest the information contained in the October 12, 2021 Disclosure, Akumin's stock price continued falling.[27]

33. The statement that the market for Akumin shares "continued to digest" the information disclosed a day and a half prior is not consistent with the lack of a share price movement on October 12, 2021 that was statistically distinguishable from zero. The statement that the Akumin share price "continued falling" is incorrect for the same reason.

34. While the October 13 Cormark Report reflected the new information provided by Akumin in the October 12 Disclosure, it did not provide *additional* new information regarding the accounting issues.

35. In addition, the October 13 Cormark Report was the second of two analyst reports published after the October 12 Disclosure. The Surana Report acknowledges that National Bank published a report on October 12 commenting on the October 12 Disclosure, the same news items that the October 13 Cormark Report is focused on. The Surana Report attributes the

[26] As discussed in Section 7, the Surana Report's inclusion of these additional dates is based in part on the publication of analyst reports on Akumin on these dates; however, the lack of statistically significant price movements and low trading volume on these dates is not consistent with this view. Moreover, the Surana Report attributes negative price movements to analyst commentary that is positive or neutral (for example, emphasizes the neutrality or insignificance of the restatements for forward-looking estimates of Akumin's performance) and is therefore unlikely have caused a negative price movement in Akumin shares.

[27] Surana Report, ¶ 119.

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October 13 share price decline to "the Cormark research report describing the impact of the October 12, 2021 Disclosure on the future profitability of the Company".[28] However, the National Bank report had already provided similar commentary a day prior.[29]

36. The October 13 Cormark Report was titled "Reporting Delays Continue"; it observed that Akumin would not report its 2Q21 financial results by October 15, 2021, as previously stated, and noted the possibility that the ongoing MCTO – which prohibited Akumin management from trading the Company's shares, but allowed other trading – would not be extended, which would have resulted in a general cease trade order in Canada. The October 13 Cormark Report's "Investment Conclusion" also underscored that delays and uncertainty were putting the Company's share price under pressure: "We expect the stock to remain under pressure near term, but see quick re-rate potential if the accounting issues resolve as outlined in our forecast."[30]

37. Cormark's emphasis on the delay of Akumin's 2Q21 financials and the possible non-extension of the MCTO indicate that, to the extent Cormark made any incremental contribution to the information conveyed to the market (in the context of the pre-existing mix of information that included the Company news and analyst report published the prior day), it did not relate to the substance of the Alleged Misrepresentations themselves but instead related to concern over increased uncertainty with respect to Akumin's future performance and liquidity (though this was also easily recognizable to the market based on the prior day's disclosures). These concerns were elaborated upon by a Moody's report on October 14, 2021.[31] The October 13 Cormark Report's statement that Akumin could be reassessed if the accounting issues resolved as expected is consistent with any decline in Akumin's share price being attributable to uncertainty and delay as opposed to the Alleged Misrepresentations.

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[28] Surana Report, ¶ 127.

[29] "Filing of Q2/2021 financials delayed to November with a writedown of up to 32% of A/R," National Bank, October 12, 2021.

[30] "Reporting Delays Continue," Cormark, October 13, 2021.

[31] "Moody's says Akumin's filing delay and accounting review are credit negative", Moody's Investors Service, October 14, 2021.

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38. These conclusions, and the basis for them, are discussed in **Section 7** below.

2.4. There Was No Statistically Significant Response to the November 8 Disclosure, which for the First Time Quantified the Impact of the Cost Reclassification

39. On November 8, 2021, in the context of a bi-weekly update required under the MCTO, Akumin disclosed for the first time its estimate of the quantitative impact of correcting the accounting issue of capitalizing rather than expensing certain repair and maintenance costs related to its legacy (i.e., non-Alliance) business (the "**November 8 Disclosure**"). National Bank analysts discussed this part of the company's disclosure in their analyst report published on November 8, the only analyst report following the November 8 Disclosure.[32]

40. I agree with the Surana Report that there was no statistically significant price change in Akumin's share price following the November 8 Disclosure.[33] The lack of a statistically significant movement in Akumin's share price in response to the November 8 Disclosure provides an objective indication that the market did not consider the restatement in respect of the cost reclassification issue to be economically material.

41. **Section 8**, below, sets out the full discussion regarding these conclusions.

2.5. Analyst Commentary Indicates the Statistically Significant Increase in Akumin's Share Price on November 15, 2021 Was Driven At Least In Part by the Resolution of Uncertainty and Delay

42. Based on a review of Company disclosures and analyst reactions, the statistically significant share price increase following the November 15 Disclosure appears attributable at least in part to the resolution of the uncertainty relating to the delay in filing the Company's

[32] "Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization", National Bank, November 8, 2021.

[33] Surana Report, ¶ 139.

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2Q21 financials and the possibility that the MCTO would not be extended and a general cease trade order put in its place.

43. The Akumin share price increase on November 15, 2021, of more than 14 percent, exceeds the 9.5 percent excess decline in Akumin's share price on October 13, 2021. Analyst commentary, both before and after the November 15 Disclosure, indicated that the reporting delays and attendant uncertainty had been weighing on Akumin's share price, and a statistically significant increase in Akumin's price is consistent with this commentary.

44. **Section 9**, below, sets out the full discussion regarding these conclusions.

3. Background

3.1. Akumin and the Market for its Shares

45. Akumin is a healthcare company specialized in the provision of outpatient diagnostic imaging services. Around the time of the Proposed Class Period, the Company described itself as offering a range of advanced imaging procedures to support the diagnosis and treatment of various medical conditions.[34]

46. Akumin was formed on August 12, 2015 through the amalgamation of Elite Imaging Inc. and 2473241 Ontario Inc.[35] Effective March 22, 2017, the combined entity was renamed Akumin Inc.[36] US dollar-denominated shares of the Company (ticker "**AKU.U**") commenced trading on the TSX on December 1, 2017, and Canadian dollar-denominated shares (ticker "**AKU**") were listed on the TSX on September 24, 2018.[37] On September 3, 2020, Akumin's shares began trading on the NASDAQ, and the US dollar-denominated shares were

[34] Akumin Inc., Annual Information Form for the year ended December 31, 2018, March 28, 2019, p. 6 and Akumin Inc., Form 10-K for the fiscal year ended December 31, 2021, March 16, 2022, p. 3.

[35] Akumin Inc. Annual Information Form for the Year Ended December 31, 2020, March 31, 2021, p. 5.

[36] Akumin Inc. Initial Public Offering Long-Form Prospectus, November 24, 2017, "Notes to Consolidated Financial Statements", pp. F-10. See also pp. 10-11 of the prospectus.

[37] Akumin Inc., "Akumin Inc. Completes Initial Public Offering," December 1, 2017; Akumin Inc., Annual Information Form for the year ended December 31, 2019, March 31, 2020, pp. 6-7.

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delisted from the TSX effective September 8, 2020.[38] During the Proposed Class Period, approximately 57 percent of the total combined US and Canada volume in Akumin's shares was traded in Canada, with the remaining 43 percent traded in the US. See **Exhibit 1** attached to this report.

47. During the Proposed Class Period, Akumin's market capitalization ranged from $131.6 million to $354.5 million. From May 2019 to November 2021, the Company reported common shares issued and outstanding ranging between approximately 62.6 million and 89.0 million.[39]

48. **Figure 1**, below, shows the daily composite Canadian closing price for Akumin common shares around the time of the Proposed Class Period, along with Canadian and US composite trading volume.[40]

[38] Akumin Inc., Annual Information Form for the year ended December 31, 2020, March 31, 2021, p. 8.

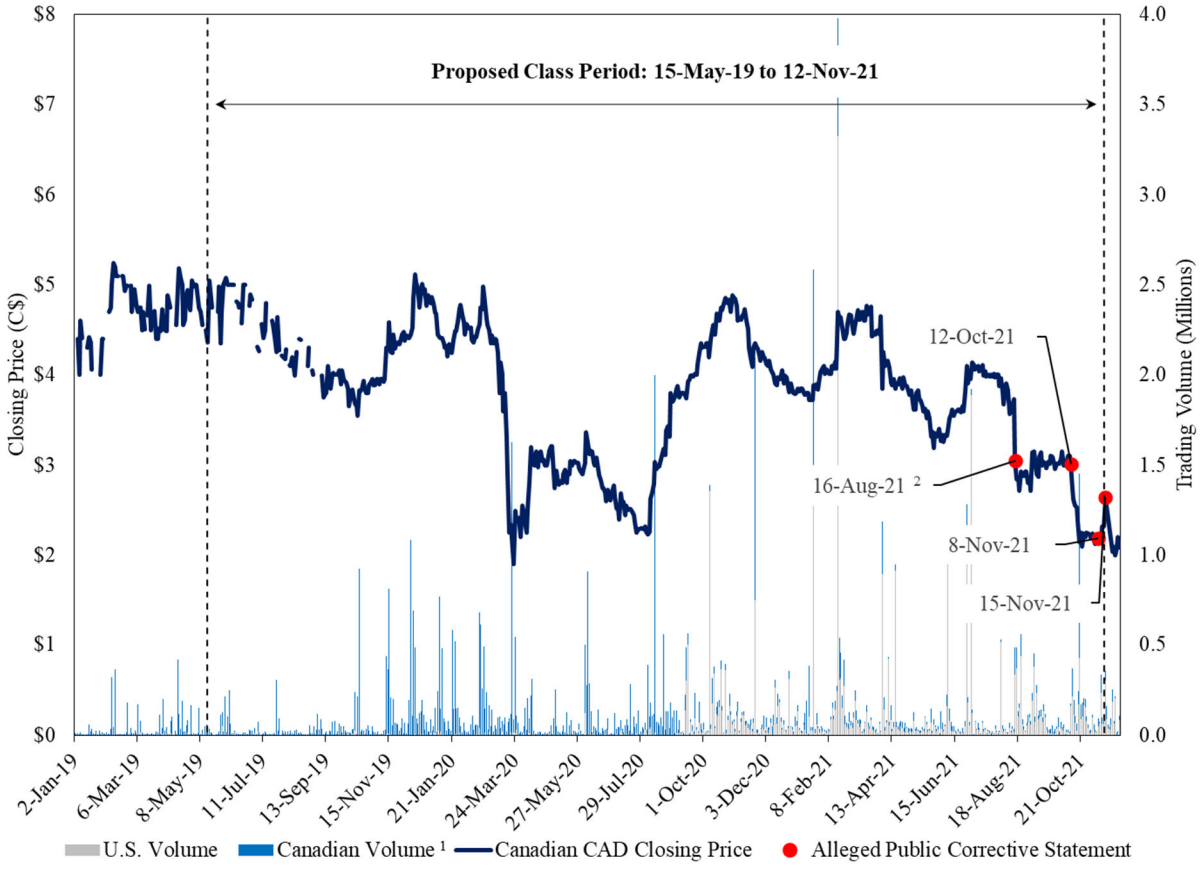
[39] The figures presented are for the period from May 15, 2019 to November 12, 2021. Market capitalization is calculated using the number of shares outstanding reported in the Company's filings published on SEDAR and the daily Canadian composite closing prices available from Bloomberg.

[40] Daily composite trading volume refers to total trading volume over both the market on which the share is listed and any other market on which it trades within the same country.

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Figure 1: Daily Canadian Composite Closing Price for Akumin Shares, With Canadian and US Composite Trading Volume, And Trading Volume for USD-Denominated Shares Listed in Canada Also Showing Alleged Public Corrective Statement January 1, 2019 to December 31, 2021



Notes and Sources:
Price and volume data are from Bloomberg. Closing prices shown for Akumin are Canadian composite.
Daily trading volume from each composite ticker is stacked; therefore, the size of each combined bar indicates total trading volume for that day across both countries.
[1] Includes USD-denominated shares listed on the TSX.
[2] Akumin published the press release alleged to be corrective on Sunday, August 15, 2021; the marker has been placed on the immediately following trading day.

3.2. Notes Issued by Akumin During the Proposed Class Period

49. During the Proposed Class Period, the Company issued two series of senior secured notes, in three tranches:

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a. On November 2, 2020, the Company issued an aggregate principal amount of US$400 million of 7.00% senior secured notes due November 1, 2025 (the "**Initial 2025 Senior Notes**"). The proceeds from this offering were used to pay "senior debt incurred by the Company in May 2019 primarily to help finance its acquisitions and settle previous loans."[41] On February 11, 2021, the Company issued an aggregate principal amount of US$75 million of additional 7.00% senior secured notes due November 1, 2025 (the "**Additional 2025 Senior Notes**") (together with the Initial 2025 Senior Notes, the "**2025 Senior Notes**"). According to the Company, the proceeds from this offering were partly used to pay for acquisitions "with any unused proceeds to be used for working capital and other general corporate purposes."[42]

b. On August 9, 2021, the Company issued an aggregate principal amount of US$375 million of 7.5% senior secured notes due August 1, 2028 (the "**2028 Senior Notes**"). The proceeds from this offering were used to fund the Alliance Acquisition.[43]

3.3. The Alliance Acquisition

50. On June 25, 2021, before the open of trading, Akumin announced an agreement to acquire Alliance for US$820 million. The announcement described Alliance as "a leading national provider of radiology and oncology solutions to hospitals, health systems and physician groups", which would help expand the geographic and service offering of Akumin. The announcement further stated that the transaction was expected to close in the third quarter of 2021.[44]

[41] Akumin Inc., Indenture for 7.000% Senior Secured Notes due 2025, November 2, 2020.

[42] Akumin Inc., First Supplemental Indenture, February 11, 2021.

[43] Akumin Escrow Inc., Indenture for 7.500% Senior Secured Notes due 2028, August 9, 2021.

[44] Akumin Inc., "Akumin Announces Agreement to Acquire Alliance HealthCare Services", June 25, 2021 (filed on SEDAR at 7:04 ET).

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51. During the related conference call with analysts that day, Akumin's management noted that:[45]

> The proposed transaction would result in Akumin becoming very well diversified, both in terms of service offering and in terms of payer mix. On a pro forma basis, radiology […] will account for 80% of our revenues. Radiology revenues are further diversified by modality and geography. Oncology, a higher growth segment[,] will account for 20% of our combined revenues. Importantly, this transaction significantly diversifies our revenues by payer mix. While Akumin's independent and dependent freestanding offering is largely made up of commercial insurance payers, the combination with [Alliance] will result in 52% of our revenues coming from services to health systems, hospitals, and physicians.

52. On September 1, 2021, Akumin announced the closing of the transaction. The Company also provided the final details regarding the financing of the US$820 million transaction, which included:[46]

a. Cash on hand;

b. Assumption of existing debt of Alliance;

c. Debt and equity commitments from Stonepeak Magnet Holdings LP ("**Stonepeak**"), including:

   i. US$340 million in unsecured notes;

   ii. US$10.4 million in Akumin shares;

   iii. Warrants to purchase 17.1 million common shares of the Company; and

[45] Akumin Inc., Business Update Call, June 25, 2021.

[46] Akumin Inc., "Akumin Announces Closing of Acquisition of Alliance HealthCare Services and Related Financing", September 1, 2021 (filed on SEDAR at 15:18 ET). Preliminary information regarding the Stonepeak financing was contained in Akumin's June 25, 2021 announcement of the Alliance acquisition (see Akumin Inc., "Akumin Announces Agreement to Acquire Alliance HealthCare Services", June 25, 2021).

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iv. Permission to obtain an additional US$349.6 million from Stonepeak provided that certain conditions were met over a period of three years following the closing of the acquisition.

d. Common shares issued to Thaihot Investment Co., LTD, the seller of Alliance and a wholly owned subsidiary of Tahoe Healthcare Management Limited; and

e. Proceeds from the offering of the 2028 Senior Notes that closed on August 9, 2021.

3.4. The Alleged Misrepresentations

53. The Amended Statement of Claim alleges that the Defendants made the Alleged Misrepresentations, which it groups into six categories:

a. Accounts Receivable and Revenue Misrepresentations: "during the Class Period, Akumin purported to report its accounts receivable on a net realizable value based on the amount expected to be collected from customers, which considered historical implicit price concessions and expected collection rates. Akumin did not accurately calculate its historical implicit price concessions. This caused Akumin to overstate its accounts receivable and revenue in its in its [*sic*] public disclosures…"[47]

b. Costs Associated with Repairs and Maintenance Misrepresentations: "during the Class Period, Akumin improperly capitalized costs associated with replacement components when it repaired and recorded these costs in property and equipment. The cost of these replacement components should have been expensed as repairs and maintenance rather than capitalized and recorded as

[47] Amended Statement of Claim, ¶ 43.

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costs in property and equipment. This resulted in Akumin materially overstating its property and equipment, net."[48]

c. Shareholders' Equity Misrepresentations: "the cumulative impact of [the Accounts Receivable and Revenue Misrepresentations and Costs Associated with Repairs and Maintenance Misrepresentations] caused Akumin to overstate its total shareholders' equity during the Class Period."[49]

d. Compliance with Financial Accounting Standards Misrepresentations: Allegedly in contrast with statements made by the Company during the Proposed Class Period, "Akumin's Interim and Annual Financial Statements during the Class Period did not comply with IAS 34 – Interim Financial Reporting, IFRS, US GAAP or FASB Accounting Standards Codification (ASC) Topic 270, Interim Reporting".[50]

e. Effectiveness of ICFR and DC&P Misrepresentations: "at all material times during the Class Period, Akumin had material weaknesses in its ICFR, and its DC&P were not effective in respect of Akumin's ability to identify, process, record, and value its accounts receivable"; furthermore, "Akumin also had material weaknesses in its ICFR and its DC&P because they were not effective in respect of Akumin's ability to identify, process, record, and value its capitalization adjustments".[51]

f. Auditor Misrepresentations: the Amended Statement of Claim alleges that statements by EY that Akumin's 2019 and 2020 annual financial statements "[presented] Akumin's financial position, results of operations, and cash flows in accordance with IFRS or US GAAP" were false.[52]

[48] Amended Statement of Claim, ¶ 50.

[49] Amended Statement of Claim, ¶ 55.

[50] Amended Statement of Claim, ¶¶ 58, 59.

[51] Amended Statement of Claim, ¶¶ 64, 66.

[52] Amended Statement of Claim, ¶ 70.

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54. The Amended Statement of Claim alleges that the Alleged Misrepresentations were contained in financial documents released by Akumin during the Proposed Class Period. These documents are listed below in **Table 1**.

Table 1: Documents Containing Alleged Misrepresentations

Date of Release (1)	Document (2)
May 15, 2019	Interim Financial Statements, CEO and CFO Forms 52-109F2, and MD&A for the three months ended March 31, 2019
Aug 14, 2019	Interim Financial Statements, CEO and CFO Forms 52-109F2, and MD&A for the three and six months ended June 30, 2019
Nov 14, 2019	Interim Financial Statements, CEO and CFO Forms 52-109F2, and MD&A for the three and nine months ended September 30, 2019
Mar 31, 2020	Audited Annual Financial Statements, CEO and CFO Forms 52-109F1, and MD&A for the year ended December 31, 2019
Jun 3, 2020	Interim Financial Statements, CEO and CFO Forms 52-109F2, and MD&A for the three months ended March 31, 2020
Aug 12, 2020	Interim Financial Statements, CEO and CFO Forms 52-109F2, and MD&A for the three and six months ended June 30, 2020
Nov 2, 2020	Offering Memoranda for $400 million of 7.000% Senior Secured Notes due 2025
Nov 11, 2020	Interim Financial Statements, CEO and CFO Forms 52-109F2, and MD&A for the three and nine months ended September 30, 2020
Feb 11, 2021	Offering Memoranda for $75 million of 7.000% Senior Secured Notes due 2025
Mar 31, 2021	Audited Annual Financial Statements, CEO and CFO Forms 52-109F1, and MD&A for the year ended December 31, 2020
May 17, 2021	Interim Financial Statements, CEO and CFO Forms 52-109F2, and MD&A for the three months ended March 31, 2021
Aug 12, 2021	Offering Memoranda for $375 million of 7.500% Senior Secured Notes due 2028

3.5. The Alleged Corrective Disclosures

55. According to the Amended Statement of Claim, the Alleged Misrepresentations were corrected by certain disclosures made by the Company in the period from August to November 2021.

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3.5.1. August 15, 2021 (the August 15 Disclosure)

56. On August 15, 2021 (a Sunday), Akumin published a news release announcing a delay in the publication of its 2Q21 financials, which were due August 16, 2021.[53] The Company stated in the announcement that:

> [B]oth management and its external auditors, Ernst & Young LLP, agreed that additional information and analysis is necessary to complete the interim financial report for the quarter ended June 30, 2021 and Ernst & Young's review of such report. The additional information and analysis relates to potential additional credit losses with respect to prior years. The production of this additional information and analysis will not be completed prior to the filing deadline of August 16, 2021.

57. Akumin added that it expected to file its 2Q21 financials within 60 days of the original filing deadline (i.e., by mid-October 2021). As part of the announcement of the delayed filing, the Company indicated that it had requested the Ontario Securities Commission ("**OSC**") to obtain an MCTO, which would prohibit Akumin's officers and directors from trading in the Company's securities, for purposes of avoiding the imposition of a general cease trade order.[54]

3.5.2. October 12, 2021 (the October 12 Disclosure)

58. Before the market opened on October 12, 2021, Akumin issued a press release (one of the bi-weekly updates required under the MCTO, which was granted on August 20, 2021) that included the following disclosures:[55]

a. The Company would further delay the publication of its 2Q21 financials and now expected to file these documents by November 15, 2021;

[53] Akumin Inc., "Akumin Announces Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis", August 15, 2021 (filed on SEDAR at 6:59 ET).

[54] Akumin Inc., "Akumin Announces Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis", August 15, 2021. On August 23, 2021 Akumin announced that on August 20, 2021 the Ontario Securities Commission granted Akumin's MCTO application. See Akumin Inc., "Akumin Announces Acceptance of its Management Cease Trade Order Application", August 23, 2021 (filed on SEDAR at 7:01 ET).

[55] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", October 12, 2021 (filed on SEDAR at 7:03 ET).

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b. Akumin would restate its FY 2019, FY 2020, and 1Q21 financial reports due to the identification of "issues in the recording of write-offs and cash collections on acquired accounts receivable balances impacting current and prior periods";

c. While integrating the accounting policies and procedures of the companies in the context of the Alliance acquisition, the Company "identified certain differences in recording the capitalization, as opposed to the repair and maintenance expense, of components that are replaced when equipment is repaired." Akumin noted that it would need additional information to quantify the impact of the incorrect treatment of such replacement costs.

59. Regarding the issue with accounts receivable, based on a review of historical collections carried out using "enhanced reporting and analytics tools", the Company observed that:[56]

> [E]stimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections which were occurring and Akumin has determined that a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 is required.

60. The Company further noted that:

> Although the quantum of the adjustments is still being finalized, it is currently expected that the changes in the Restated Filings will result in an accounts receivable balance as at June 30, 2021 of between [US]$65.0 million and $70.0 million as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of $95.9 million.[57]

61. With respect to the identified issues regarding the incorrect treatment of replacement costs, the Company indicated that, while integrating its accounting policies and procedures with those of Alliance, "Akumin has identified certain differences in recording the

[56] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", October 12, 2021.

[57] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", October 12, 2021.

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capitalization, as opposed to the repair and maintenance expense, of components that are replaced when equipment is repaired."[58]

62. In the October 12 Disclosure, the Company did not quantify the impact of changing the treatment of these replacement costs, but noted:[59]

> Although Akumin's review of the impact of these changes remains preliminary, any adjustments related to such review would be expected to be reflected as an adjustment to the net book value of property and equipment and additional repairs and maintenance costs which are included in operating expenses[.]

3.5.3. November 8, 2021 (the November 8 Disclosure)

63. Before the market opened on November 8, 2021, Akumin issued a further bi-weekly update required under the MCTO, in which it reiterated that it expected to file its 2Q21 financials on November 15, 2021. The Company also provided for the first time an estimate of the expected impact of the accounting issue disclosed on October 12, 2021, relating to the treatment of maintenance and replacement costs. The Company stated that:[60]

> Although the quantum of the change is still being finalized, it is currently expected that the changes from the Restated Filings will result in a net book value of property and equipment as at June 30, 2021 of [US]$60.4 million as compared to Akumin's previously reported March 31, 2021 net book value of property and equipment of $79.2 million.

64. Akumin added that the preparation of its restated financials for FY 2019, FY 2020 and 1Q21 had prevented the Company from timely filing its financial reports for 3Q21, the deadline for which was November 15, 2021. Instead, Akumin planned to file its 3Q21 interim financial report, MD&A and management certifications by December 15, 2021.[61]

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[58] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", October 12, 2021.

[59] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", October 12, 2021.

[60] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", November 8, 2021 (filed on SEDAR at 7:02 ET).

[61] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", November 8, 2021.

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3.5.4. November 15, 2021 (the November 15 Disclosure)

65. On November 15, 2021, Akumin published its 2Q21 financials, and filed restated financial reports and MD&As for FY 2019, FY 2020, and 1Q21.[62]

66. The MD&A for 2Q21 stated for the first time that the Company's internal controls "in respect of the Company's ability to identify, process, record, and value [its] accounts receivable" were not effective for the fiscal periods ended March 31, 2021, December 31, 2020, and December 31, 2019.[63]

67. Also on November 15, 2021, Akumin released its Business Acquisition Report regarding the closing of the transaction with Alliance. The report contained the historical financial statements of Alliance for FY 2019 and FY 2020, as well as unaudited financial statements of Alliance for the six months ending June 30, 2021.[64]

68. Akumin reiterated that it expected to file its 3Q21 results by December 15, 2021, as stated on November 8, 2021.

69. I set out in the section immediately following certain methodological considerations relating to the analysis presented in the subsequent sections.

4. Methodological Considerations

4.1. The Market Price and Value of Akumin's Common Shares

70. It is a well-established principle in the field of finance that the value of a financial security, such as a common share of Akumin, equals the present discounted value of the future cash flows expected to accrue to its holder. A shareholder may realize this value by way of dividends paid by the company issuing the shares and/or indirectly via capital gains realized

[62] Akumin Inc., "Akumin Inc. Announces Second Quarter 2021 Financial Results and Filing of Restated Financial Statements", November 15, 2021 (filed on SEDAR at 7:02 ET).

[63] Akumin Inc., MD&A For the three-month and six-month periods ended June 30, 2021 and 2020, November 15, 2021, p. 29.

[64] Akumin Inc., Form 51-102F4: Business Acquisition Report, November 15, 2021.

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through the sale of the shares in the secondary market.[65] Expected dividends and capital gains are determined by the expected cash flows from the company. It follows from this principle that discounted cash flow ("**DCF**") analysis may be used to value Akumin's shares. In the case of Akumin's shares during the Proposed Class Period, value was determined by the cash flows that the Company's operations were expected to generate for shareholders.

71. In forecasting future cash flows in the context of a DCF analysis, finance theory and valuation practitioners commonly rely on the concept of FCF. This defines the cash that is returned by a company to its investors. There are different definitions of FCF depending on the investors in question: it is common to distinguish between FCF to equity ("**FCFE**") and FCF to the firm ("**FCFF**"). The first measures only the cash flows received by equity investors in the business, whereas the second focuses more broadly on cash flows to all claim holders in the business (including debt holders).[66]

72. The Surana Report discusses relative valuation, which as it notes is "based on the financial theory that similar assets should sell for a similar price". Dr. Surana mentions price to earnings (P/E) and Enterprise Value ("**EV**") to EBITDA as common ratios used in relative valuation.[67] Financial practitioner literature notes that, while a relative value analysis is easier to implement than a DCF, it can "also result in inconsistent estimates of value where key variables such as risk, growth, or cash flow potential are ignored."[68]

73. In an efficient market, an accounting change that does not alter the present value of a company's expected cash flows would not be expected to affect the price of its securities. As a noted corporate valuation textbook puts it:

[65] See, for example, Richard Brealey and Stewart Myers, *Principles of Corporate Finance* (McGraw-Hill: New York, 7th ed., 2003), pp. 59-64.

[66] Aswath Damodaran, *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance* (Wiley: New Jersey, 2nd ed., 2006), Ch. 3.

[67] Surana Report, ¶ 36.

[68] Aswath Damodaran, *Damodaran on Valuation: Security Analysis for Investment and Corporate Finance* (Wiley: New Jersey, 2nd ed., 2006), p. 236.

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> The argument that 'only cash matters' has more than theoretical backing; it is also supported by extensive research. This research focuses on listed companies for which it is possible to conduct direct tests of the relation between value and various measures of income, including cash flow and accounting earnings, because market values for listed companies can be estimated by the stock and debt approach. The results of these tests overwhelmingly support the view that corporate value is based on cash flow. When cash flow and earnings diverge, changes in value are associated with changes in cash flow, not changes in earnings.[69]

74. This implies that, in an efficient market, the price of a company's shares would not be expected to reflect the mechanical application of a multiple such as EV/EBITDA in a situation where doing so would lead to a discrepancy between the value estimated by the multiple and the value implied by expected cash flows.

4.2. Market Price Volatility

75. As with any publicly traded common shares, the market price of Akumin's shares fluctuates even in the absence of new Company-specific information. This price volatility may be attributed in part to factors external to the Company and to the effects of ordinary day-to-day trading by investors.

76. External factors that can affect the market price of a security include changes in the broader market and/or industry. For example, broad economic factors may affect the cost of capital for all companies, which, in turn, can impact the market price for a company's securities. These factors can often be measured by proxy. For instance, over the period from June 25, 2021 up to December 15, 2021, the market price of Akumin's common shares tended to vary with changes in the broad stock market and with factors specifically affecting the healthcare industry. In particular, Akumin's share price was correlated, to varying degrees, with both changes in the S&P/TSX Composite Index and the S&P 600 SmallCap Health Care Index (details are in **Section 4.4**, below). The use of such relationships to isolate the effect of Company-specific

[69] Bradford Cornell, *Corporate Valuation: Tools for Effective Appraisal and Decision Making* (McGraw-Hill, 1993), p. 104.

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information on changes in the market price of Akumin's shares is part of what is called an "**event study**", which is discussed in **Section 4.3**, below.

77. In addition to being affected by these external factors, the market price of a security will fluctuate as a result of ordinary trading by investors. Such trading occurs partly for investor-specific reasons, as investors trade pursuant to individual views or strategies (or personal circumstances) and can result in relatively small – and transitory – imbalances of demand and supply of the shares, leading in turn to relatively small changes in the market price. In an efficient market, larger imbalances of demand and supply, which might cause larger changes in the market price, will tend to be eliminated by arbitrage trading by investors who stand ready to profit from any deviation of the market price from the underlying value of the shares. However, because value is not determined with precision, with different investors potentially holding different views as to an issuer's fundamental value – and because trading shares involves some transaction costs - the market price will exhibit some volatility around the underlying value of the shares even in the absence of any external effects or company-specific news.

4.3. Market Models, Event Studies, and Excess Returns

78. An event study is a technique commonly used by financial economists to measure the change in the price of a company's shares (or other securities) attributable to the disclosure of information. To isolate the effect of company-specific information from the effects of external (market and/or industry) factors, the change in price is measured relative to changes in the broad stock market (such as the S&P/TSX Composite Index) and/or industry (such as the S&P 600 SmallCap Health Care Index).[70]

[70] For a discussion of the event study technique and its uses, see A. Craig MacKinlay, "Event Studies in Economics and Finance", *Journal of Economic Literature*, 35, March 1997, pp. 13-39. For a discussion of the uses of event studies within the litigation context, see David Tabak and Frederick Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom", *Litigation Services Handbook: The Role of the Financial Expert*, (Weil, Roman L. et al. eds., John Wiley & Sons, Inc.: New York, 3rd ed., 2001), Ch. 19; and Robert Patton and Susanne Toft, "The Use of Event Studies in Disputes and Enforcement", *Commercial Dispute Resolution*, December 2010.

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79. To control for such external effects on the market price of a security and to provide a basis for assessing the statistical significance of the "**excess return**" (the difference between the actual changes in a share price and what would have been expected based on the market and/or industry), a "**market model**" is estimated.[71] A market model measures the statistical relationship between the returns to (i.e., changes in) the market price of the share in question and the returns to variables capturing other market and/or industry factors ("**explanatory variables**"). A market model is an application of "**regression analysis**", a widely used statistical technique that estimates the relationship between a "**dependent variable**", the variable that the regression analysis seeks to predict or explain (such as the movement of a share price), and one or more explanatory variables—such as indices covering the broad stock market or a specific industry—which may correlate with or predict changes in the dependent variable.[72]

80. While, in practice, market models can include more than one explanatory variable, the concept is more easily illustrated by reference to a model with a single explanatory variable. **Figure 2**, below, is a scatterplot graph depicting visually such a market model, which explains the returns to Akumin's common shares (on the vertical axis) as a function of the average return to the S&P SmallCap 600 Health Care Index (on the horizontal axis). Each dot or "marker" on the scatterplot graph represents a trading day.

81. The dashed, upward-sloping green line characterizes the relationship estimated by a market model explaining Akumin's returns as a function of the returns to the S&P 600 SmallCap Health Care Index, as discussed above. The market model shown is estimated over the

[71] The daily "return" to a share is typically the relative change in its price from the prior (trading) day's price. Unless otherwise noted, all share price returns discussed in this report are logarithmic returns, i.e., a daily share price return for a particular day is calculated as the natural logarithm of the ratio of that day's closing price divided by the prior trading day's closing price. For a discussion of the properties of logarithmic returns, see Section 4.4.

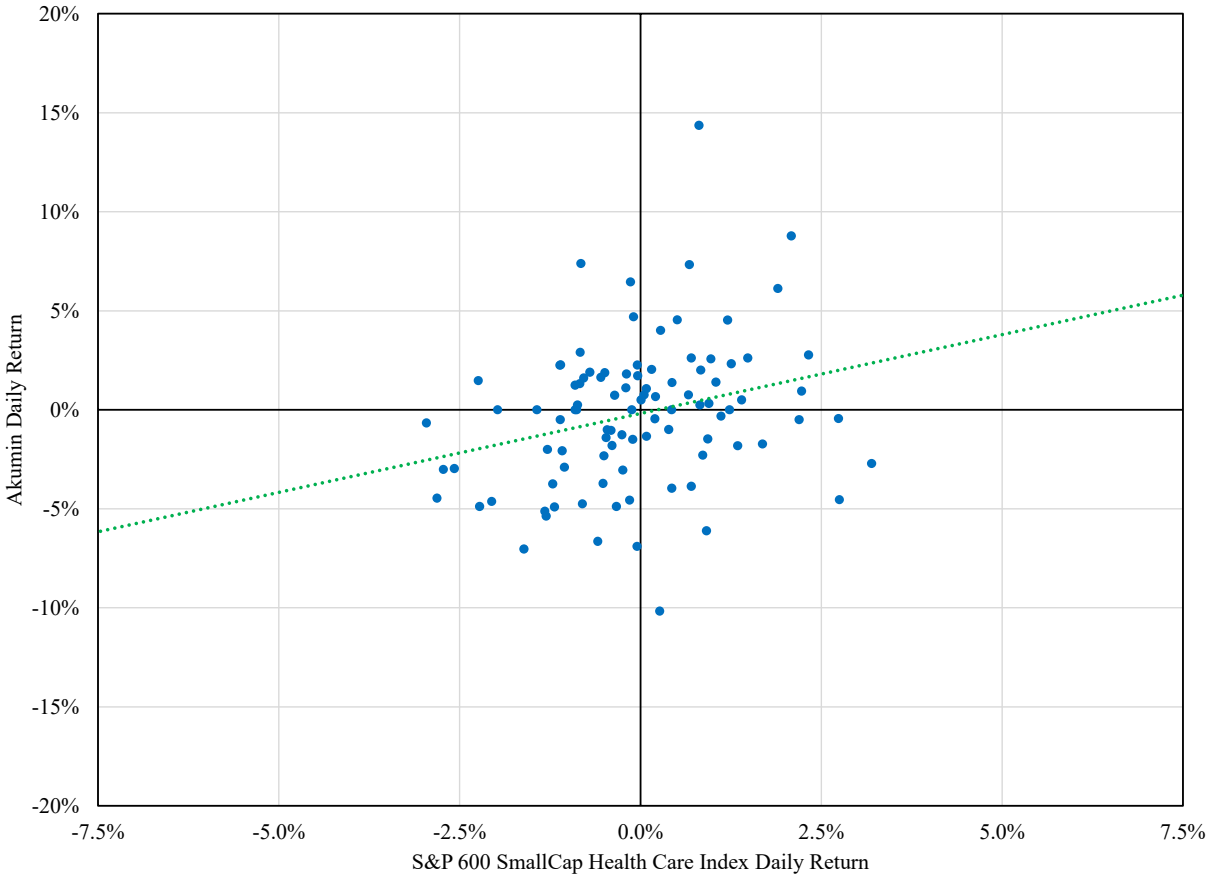
[72] Some applications of event studies, and the proposition that a security's price equals its value, rely on the market for the security in question to exhibit some degree of efficiency. For a discussion of market efficiency and the Efficient Market Hypothesis, see, "Efficient Market Hypothesis," NASDAQ. See also, Eugene F. Fama, "Efficient Capital Markets: II*," The Journal of Finance*, 46(5), December 1991, pp. 1575-1617, at p. 1575 and Eugene F. Fama, "Efficient Capital Markets: A Review of Theory and Empirical Work," *The Journal of Finance*, 25(2), May 1970, pp. 383-417.

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period between June 25, 2021 and December 15, 2021. In particular, the green line estimated by the market model represents the straight-line relationship that best fits these data.[73]

Figure 2: Illustrative Market Model for Akumin's Common Shares Estimated Using Data from June 25, 2021 to December 15, 2021



Notes and Sources:
Data are from Bloomberg.

82. A market model can be used to predict how Akumin's share price would have changed on a particular day if the only factors affecting the price were captured by changes in

[73] The market model is estimated using Ordinary Least Squares ("**OLS**") regression analysis, which, under commonly accepted statistical assumptions provides the optimal estimate of a linear relationship between two variables. Under OLS, the "straight-line relationship that best fits these data" is defined as the model that minimizes the sum of the squared in-sample prediction errors across the estimation sample, with "error" defined here as the difference between the actual observed return and the return predicted by the model (in Figure 2, the error for each observation is the vertical distance between that observation and the dashed green line). The sample of dates shown here omits certain dates as described in Section 4.4.

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the explanatory variables (the "**predicted return**"), i.e., market and/or industry returns. As noted above, the difference between the actual observed return and the predicted return is the excess return. If there is no new company-specific information disclosed on a particular day, the market model should predict a return that is, on average, equal to the actual return on that day. In other words, theoretically, the excess return should be close to zero in the absence of company-specific news. On the other hand, on days when value-relevant company-specific news was released, there may be a larger difference between the actual return and the predicted return; that is, the excess return might be greater and reflective of the value-relevance of the new information.

83. Excess returns that are "**statistically significant**" are those sufficiently large (positive or negative) to fall outside the range that would be expected to be observed merely by chance (rather than by reason of any new company-specific information) a certain percentage of the time. The standard scientific test for statistical significance in most fields, including financial economics, is to determine whether the actual change deviates from the predicted change by an amount sufficient to place the excess return outside the 95-percent confidence interval. This is also referred to as significance at the 5 percent level.[74] It means that an excess change of that magnitude or greater would be expected to occur by chance less than one day in 20 on average.[75] Consistent with this, the Surana Report states that "[t]he threshold for statistical significance generally considered is that of the 95% confidence level".[76]

84. In **Figure 3,** below, the vertical distance, above or below, between each observation and the estimated market model represents an excess return. The red lines above and below the market model reflect the thresholds for statistical significance at the 5 percent level—

[74] A common way of expressing this threshold of statistical significance is "statistically significant at the 5 percent level". This level of statistical significance is the level typically adopted in academic work and by the courts in Canada and the US.

[75] Statistical significance in this context is assessed by reference to a "t-statistic" which is the ratio of the excess return to the standard error of the regression (a measure of the typical variability of the excess returns). With a sufficiently large sample, a t-statistic of slightly below 2.0 is required for statistical significance at the 5 percent level (for example, using a market model estimated over 96 days, with three explanatory variables, a t-statistic of approximately 1.986 is required).

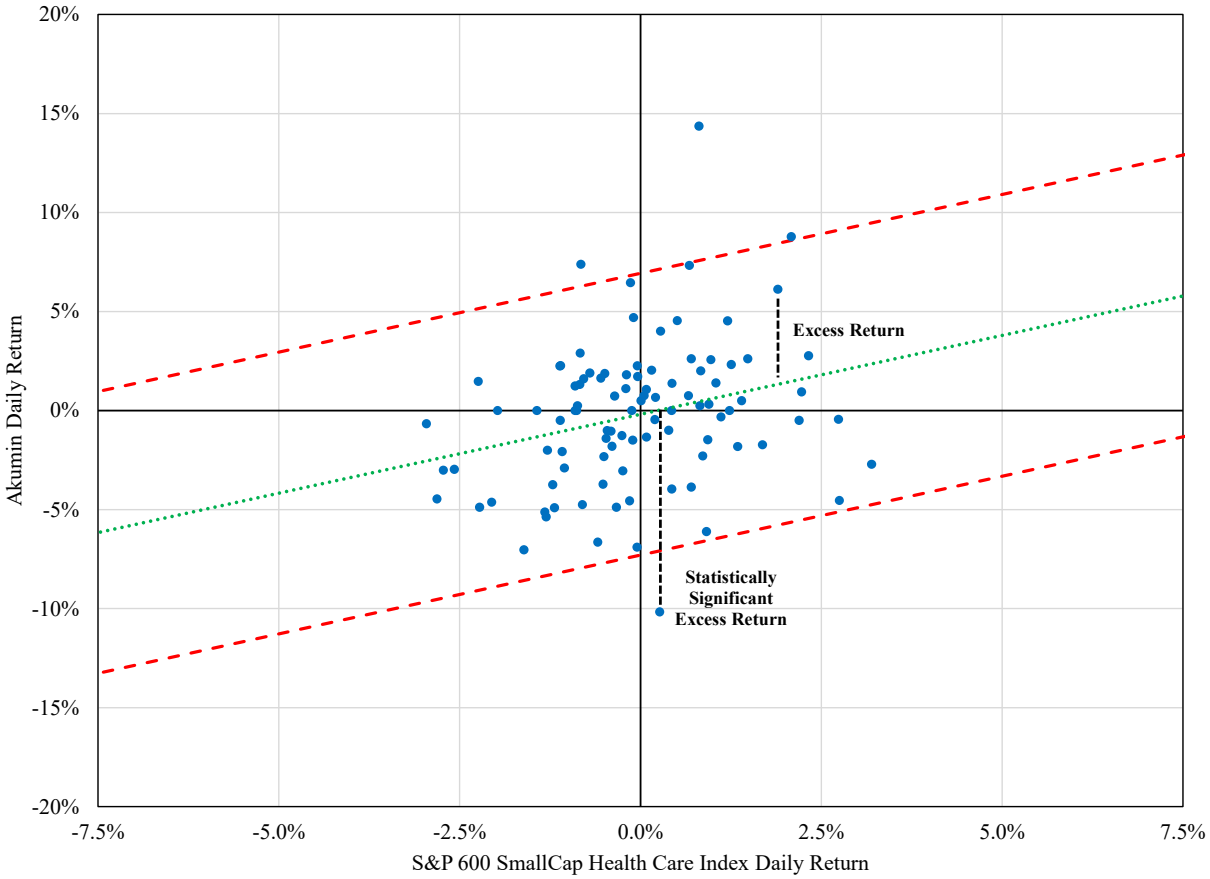
[76] Surana Report, ¶ 78.

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i.e., observations outside of the area between those lines, represent excess returns that are statistically significant.[77]

Figure 3: Illustrative Market Model for Akumin's Common Shares Showing Excess Returns and Statistical Significance Estimated Between June 25, 2021 and December 15, 2021



Notes and Sources:
Data are from Bloomberg.
The red lines indicate the thresholds for statistical significance at the 5 percent level.

85. An alternative way to illustrate the concept of statistical significance in the distribution of excess returns is shown in **Figure 4** below. With a large enough sample, excess returns tend to be distributed approximately normally; that is, they are distributed in a bell-shaped curve, with small values (positive or negative) more probable than very large ones.

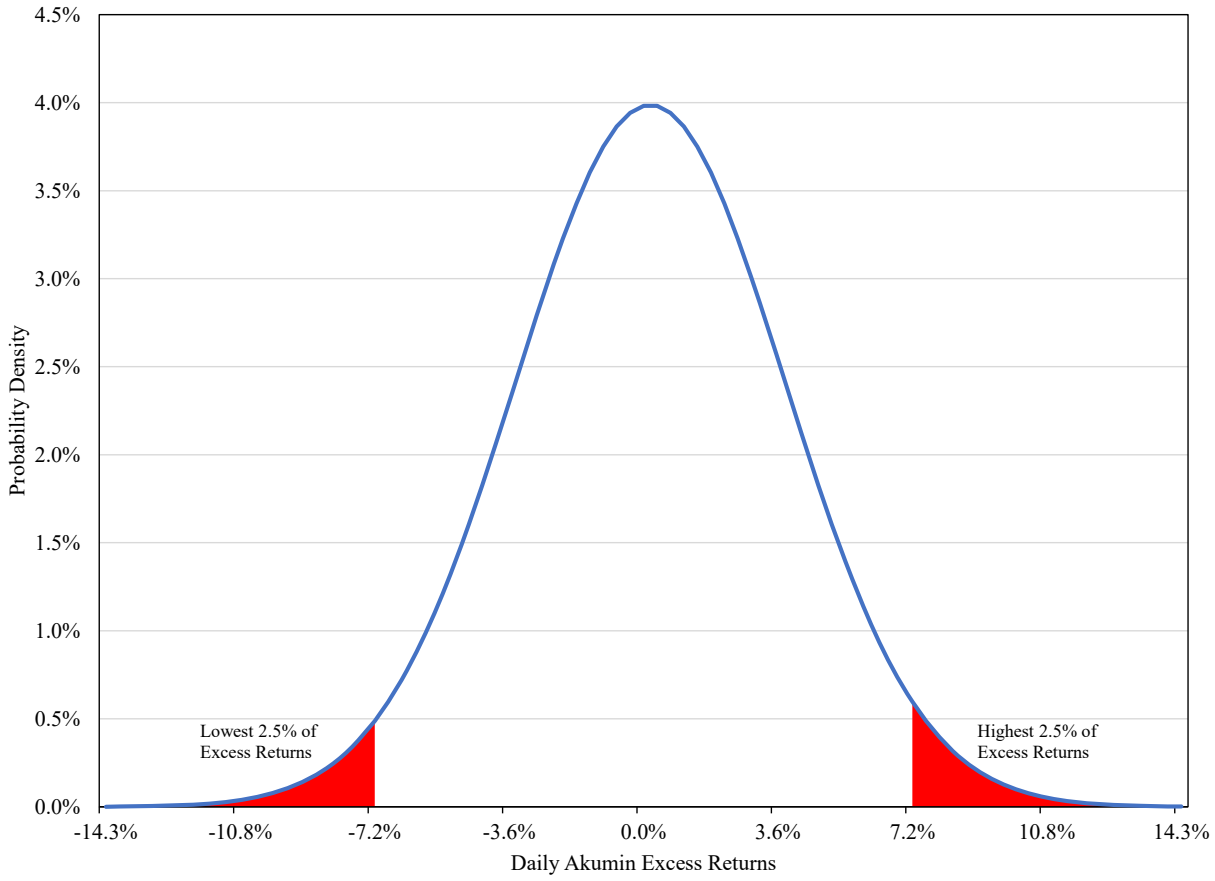
[77] The sample of dates shown in Figure 3 omits certain dates as described in Section 4.4.

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Excess returns large enough in absolute value (i.e., either positive or negative) to fall within one of the red-shaded areas at each tail of the distribution are considered statistically significant. Excess returns falling between the threshold values that demarcate the red-shaded areas are not sufficiently distinguishable from ordinary day-to-day volatility and thus not considered statistically significant. Returns that fall within the positive red-shaded area to the right in Figure 4 (the distribution) correspond to those above the upper red dashed line in Figure 3 (the scatterplot); returns that fall within the negative red-shaded area to the left in Figure 4 correspond to those that fall below the lower red dashed line in Figure 3.

Figure 4: Distribution of Akumin's Daily Excess Returns Given a Market Model for Akumin's Common Shares Estimated Between June 25, 2021 and December 15, 2021



Notes and Sources:
Data are from Bloomberg.

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86. Where an excess return is statistically significant, it might be possible to attribute some or all of that excess return to a disclosure of company-specific information. Any statistically significant excess return following an alleged corrective disclosure, for example, may form the basis for an estimate of the effect the information at issue may have had on the share price. If there is no statistically significant excess return following an alleged corrective disclosure, that may be an objective indication that the misrepresentation alleged to have been corrected is not economically material.

87. One analytical choice in an event study is the determination of the "event window", the period of time required for the share price to absorb new information. As one paper cited by the Surana Report points out, if the information announced is unanticipated, and the market is efficient, it is straightforward to define the beginning of the event window: if the information is value-relevant, a reaction should be observed immediately after the event, because "stock prices react quickly."[78] Often, in an efficient market, the new information will be absorbed into the price within a day. It is possible for new information to take longer to be fully reflected in price, but if so one would expect to observe an indication in the data of a continuing market reaction: a common approach is to check to see if there are statistically significant daily excess returns on days subsequent to the first trading day, and to assume that the price continues to react for as long as consecutive statistically significant daily returns are observed (and there are no additional news items).[79]

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[78] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Application at the Securities and Exchange Commission", *The Business Lawyer*, 49(2), February 1994, p. 558.

[79] See, for example, Expert Report of Frank Torchio, *In Re Bank of America Corp. Securities Litigation*, May 24, 2013: "If a particular material disclosure continues to generate analyst commentary and additional news stories beyond the first event day *and the excess returns are statistically significant in active trading*, then the analyst should consider lengthening the event window to include the effects of this continued market response. Otherwise, improperly excluding a day *with a significant negative excess return* can understate damages, and improperly excluding a day *with a significant positive excess return* can overstate damages." (¶ 74, emphases added).

Similarly, NERA's standard approach is to assume that a price reaction continues for as many days as there is a statistically significant daily price movement (without any new, unrelated company-specific news to otherwise explain the price movement). This approach is articulated in Dmitry Krivin, Robert Patton, Erica Rose, and David Tabak, "Determination of the Appropriate Event Window Length in Individual Stock Event Studies", *SSRN*, November 4, 2003. This paper showed that event windows defined by price movements—either the persistence of statistically significant daily excess returns or intraday price volatility, which are highly correlated—better fit a hypothesized relationship between the size of an earnings surprise and length of time the market required to process the information, than event windows defined by excess trading volumes. This approach has been adopted

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4.4. The Market Model Applied to Akumin

88. As an input to the event studies, and following standard practice as described in the preceding section, I estimated a market model of returns to Akumin common shares. With the benefit of an appropriate market model, one can isolate company-specific price movements from more general market and industry effects.

89. The Surana Report also presents the results of a market model and associated event study for analyzing the returns to Akumin common shares. To minimize differences between the experts, I have largely adopted the Surana Report's market model – though with certain changes as set out here.[80]

90. In particular, for ease of comparison, I have adopted the same explanatory variables presented in the Surana Report, which include the daily returns to the S&P/TSX Composite Index and the S&P 600 SmallCap Health Care Index, and the daily change in the exchange rate between US and Canadian dollar (the "**USD-CAD foreign exchange rate**").[81]

91. However, following usual practice, I measure price changes using natural logarithmic returns (also referred to as "**log returns**") and use log returns to estimate the market model, rather than simple returns as set out in the Surana Report. "Log-returns have the nice property that they can be interpreted as continuously compounded returns… [which] are time-additive…The academic finance literature generally employs the log-return formulation."[82] Log

in academic literature. See, for example, James Koch, Robert N. Fenili, and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?", *Atlantic Economic Journal*, 39, March 2011, pp. 59–70. I note that the Surana Report's discussion of event windows cites to an earlier, more general paper on event studies by Dr. Tabak, but does not discuss the above paper, which Dr. Tabak co-authored and which specifically addresses the subject of event windows. See footnote 156 of the Surana Report which cites to David Tabak and Frederick Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom", *Litigation Services Handbook: The Role of the Financial Expert*, (Weil, Roman L. et al. eds., John Wiley & Sons, Inc.: New York, 3rd ed., 2001), Ch. 19.

[80] I have also tested alternative specifications and find that these do not affect the determination of statistical significance on each event date.

[81] The market model and event study analyses described here were carried out using Akumin's Canadian composite closing prices.

[82] Chris Brooks, *Introductory Econometrics for Finance*, (3rd ed., 2014), pp. 8-9.

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returns are more likely to be normally distributed, which improves the accuracy of statistical significance tests.[83]

92. The effect of external factors on a company's share price and ordinary day-to-day volatility of market prices can vary over time. Accordingly, it is optimal to estimate a market model using data that are representative of market conditions present at the time of the event being analyzed. Again, in order to minimize methodological differences between the experts, I have, like Dr. Surana, estimated a market model over the 120 trading days following the announcement of the agreement for Akumin to acquire Alliance, and then removed from this control period days affected by the alleged corrective disclosure dates, such that the estimation window includes 96 observations.

93. **Table 2**, below, shows the market model that I estimated for the event studies of the Alleged Public Corrective Statements. The three explanatory variables in my model are the daily returns to the S&P/TSX Composite Index, the daily returns to the S&P 600 SmallCap Health Care Index (which are *orthogonalized* to isolate the industry effects from broad market effects measured by the S&P/TSX Composite Index), and the daily change in the USD-CAD foreign exchange rate.[84] The term "orthogonalized" refers to a method that disaggregates daily S&P 600 SmallCap Health Care Index returns into two components: (1) the correlation of changes in the S&P 600 SmallCap Health Care Index with the broad market index (in this case, the S&P/TSX Composite), and (2) the idiosyncratic movement of the health care industry, net of any correlation with the broad market. The orthogonalized S&P 600 SmallCap Health Care Index reflects only (2), the specific effect of industry factors, net of broad market dynamics.[85]

[83] "One benefit of the logarithmic return method [over the simple return] is that in statistical terminology, the transformation makes the distribution of the returns closer to a normal distribution, thus improving the validity of statistical testing." Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Application at the Securities and Exchange Commission", *The Business Lawyer*, 49(2), February 1994, p. 560.

[84] Note that this model differs from the illustrative market model presented in Section 4.3, which included only a single explanatory variable and, as indicated in that section, was provided for explanatory purposes only.

[85] To implement orthogonalization, the returns to the Industry Index are first regressed on the returns to the S&P/TSX Composite Index. In Table 2, the S&P 600 SmallCap Health Care Index returns are the "residuals" from that regression, the quantity corresponding to the actual returns to the S&P 600 SmallCap Health Care Index less the returns of that index that are predicted by the S&P/TSX Composite Index returns.

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Table 2: Market Model of the Relationship Between the Daily Returns to Akumin Common Shares and the S&P/TSX Canadian Composite Index, the S&P 600 SmallCap Health Care Index, and USD-CAD Foreign Exchange Rate Estimated Between June 25, 2021 and December 15, 2021

Daily Return to Akumin's Common Shares	=	(0.0026)	+	1.5732	×	Daily Return to S&P/TSX Composite Index	+	0.7379	×	Daily Return to S&P 600 SmallCap Health Care Index (Orthogonalized)	+	1.0512	×	USD-CAD Exchange Rate
t-Statistic		*(0.718)*		*2.294*	**			*1.860*	*			*1.048*		
						N:		96						
						Adjusted R-Squared:		0.0553						
						Standard Error:		0.0360						

Notes and Sources:
Data are from Bloomberg.
The model is estimated using daily log returns over the period from June 25, 2021 to December 15, 2021, which corresponds to the period considered by the Surana Report.
The S&P/TSX Composite Index is a broad market index.
The S&P 600 SmallCap Health Care Index (also referred to as Industry Index in this report) comprises companies included in the S&P SmallCap 600 that are classified as members of the Health Care sector.
The USD-CAD foreign exchange rate measures the price of one US dollar expressed in terms of Canadian dollars.
A "t-statistic" is a statistical measure of the degree of statistical significance of a regression coefficient of a given explanatory variable (or constant). The t-statistic represents the size of the coefficient relative to its standard deviation (i.e., the amount it varies across observations). A t-statistic greater than approximately +/-1.986 indicates that the coefficient is statistically significant (i.e., implies that a statistical relationship does exist) at the 5 percent level (indicated by two stars). A t-statistic greater than approximately +/-1.662 is statistically significant at the 10 percent level (indicated by one star).

94. The interpretation of the key results from the above table is as follows:

a. The top left number is the "constant" (or "intercept"). A constant of -0.0026, or -0.26 percent, represents the explainable trend in the daily return of Akumin's common shares that is independent of the market or industry factors.

b. The coefficient of 1.5732 on the daily returns to the S&P/TSX Composite Index implies that, holding other factors constant, a positive (negative) return of 1 percent to the S&P/TSX Composite on a given day is on average associated with a positive (negative) return of 1.5732 percent to Akumin's common shares.

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c. The coefficient of 0.7379 on the returns to the S&P 600 SmallCap Health Care Index implies that, holding other factors constant, a positive (negative) 1 percent return to the S&P 600 SmallCap Health Care Index on a given day is on average associated with a positive (negative) return of 0.7379 percent to Akumin's common shares.

d. The coefficient of 1.0512 on the returns to the USD-CAD foreign exchange rate indicates that, holding other factors constant, a positive (negative) 1 percent change to the USD-CAD foreign exchange rate on a given day is on average associated with a positive (negative) return of 1.0512 percent to Akumin's common shares. I have included this variable in the model set out in this section to minimize the differences with the model presented in the Surana Report, but I note that an alternative model which excludes the USD-CAD foreign exchange rate variable presents very similar results to the ones shown in Table 2 above.

e. The adjusted R-squared of 0.0553 shows that jointly the returns to S&P/TSX Composite Index, the S&P 600 SmallCap Health Care, and the USD-CAD foreign exchange rate explain approximately 5.5 percent of the variation in returns to Akumin's common shares.

95. In the following sections, I present an evaluation of the analyses set out in the Surana Report.

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5. The Surana Report's Review of Academic Literature and Analyst Commentary Does Not Support the Conclusion that the Alleged Misrepresentations Would be Expected to Affect Akumin's Share Price

96. Based on a review of academic literature and analyst reports, the Surana Report concludes that the Alleged Misrepresentations "would be expected to have an effect on the market price of Akumin's common stock".[86] The Surana Report states:

> [A]nalyst commentary and academic research indicate that Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, would be expected to have an effect on the market price of Akumin's common stock. Put another way, based on analyst commentary and academic research, had Akumin told the truth in respect of its misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, in my opinion, Akumin's common stock price would have declined.

97. The Surana Report's review of academic papers and analyst reports does not support this conclusion. The academic literature presented in Section V of the Surana Report demonstrates only that, *in general*, financial disclosures by a company are considered by investors in that company's securities, and that security prices *may* react to such disclosures. Likewise, the analyst commentary presented in Section VI of the Surana Report reflects only that analysts covering Akumin during the Proposed Class Period paid attention *generally* to financial metrics such as revenue, accounts receivable, property and equipment and shareholders' equity.

98. However, these observations do not establish that the Alleged Misrepresentations would be expected to significantly affect the price of Akumin's shares.

99. For example, the Surana Report provides a review of academic studies touching on the role of a company's financial statements in determining value, the quality of reported

[86] Surana Report, ¶ 3.

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earnings and their impact on forecasts and valuations, and the importance of external audits to increase earnings quality.

100. While the literature cited by Dr. Surana indicates that financial disclosures by a company may affect the price of its shares, not all such disclosures will affect share price. Whether and to what extent a particular financial disclosure would be expected to affect the price of Akumin's shares depends on factors including the nature, magnitude and context of that disclosure.

101. The relationship between market-adjusted returns and the magnitude and nature of earnings surprises (i.e., incrementally new earnings information) has been well-documented in the academic literature, including the seminal 1968 paper by Ball and Brown to which Dr. Surana cites. As the Surana Report notes, Ball and Brown explored the relationship between earnings disclosures and share price changes.[87] However, not every such disclosure affects share prices, and whether and to what extent an earnings-related or other financial disclosure by a company affects the price of its shares depends on a variety of factors. As reflected in Ball and Brown as well as other academic sources, only if a financial disclosure meaningfully alters the market consensus about the present value of the future cash flows that a company is expected to generate would that disclosure be expected to affect significantly the market price of the company's shares (assuming the shares trade in an efficient market).[88]

102. The Surana Report also cites an academic article by Palmrose *et al*. that analyzes stock price reactions to restatement announcements and finds that "statistically significant negative mean and median market reactions to restatements of annual and quarterly financial statements".[89] However, the Palmrose paper also finds "significant variation in the market response" to restatements and reports that, for 29 percent of the restatement announcements in

[87] Surana Report, ¶ 32, citing Ray Ball and Phillip Brown, "An Empirical Evaluation of Accounting Income Numbers", *The Journal of Accounting Research*, 6(2), Autumn 1968, pp. 159-178.

[88] See, for example, Bradford Cornell, *Corporate Valuation: Tools for Effective Appraisal and Decision Making*, (McGraw-Hill, 1993), p. 104.

[89] Surana Report, ¶ 35, citing Zoe-Vonna Palmrose, Vernon J. Richardson, and Susan Scholz, "Determinants of Market Reactions to Restatement Announcements," *Journal of Accounting and Economics*, 37, 2004, pp. 59–89.

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their sample, the excess return following the announcement is non-negative (zero or positive).[90] The authors indicate this finding may be because "some restatements have very little impact on market perceptions".[91] In short, the paper finds a restatement of a company's financials *may* affect the price of its shares but will not necessarily do so.

103. As discussed above in Section 4.1, the Surana Report also discusses the use of relative value or multiples analysis to assess the implication for value of earnings-related news.[92] Dr. Surana presents a stylized example to illustrate how a change in EBITDA can result in a change to common share value via the application of an EV/EBITDA ratio.[93] In the example, however, the ratio is applied mechanically, whereas in practice relative valuation must take account of other factors bearing on the relationship between accounting variables and value (in the case, between EBITDA and EV). Where the application of a multiple leads to a valuation that differs from the discounted present value of the cash flows expected to accrue to holders of a company's equity, the share price in an efficient market will equate to the present value of the cash flows, not to the value implied by a formulaic application of the multiple.

104. This contextualization of multiples analysis can be found in analyst reports on Akumin. For example, in June 2021, following the announcement of the Alliance acquisition, the Clarus analyst noted that Akumin shares "continue to trade at a substantial valuation discount to RadNet shares" based on multiples include EV/EBITDA, with RadNet trading at EV/EBITDA of 11.9 versus 7.0 for Akumin. As an explanation for why investors found RadNet more attractive on a relative basis, Clarus notes, "an attractive aspect of RadNet has been its larger free cash flow profile than Akumin".[94]

[90] Zoe-Vonna Palmrose, Vernon J. Richardson, and Susan Scholz, "Determinants of Market Reactions to Restatement Announcements," *Journal of Accounting and Economics* 37, 2004, p. 69.

[91] Zoe-Vonna Palmrose, Vernon J. Richardson, and Susan Scholz, "Determinants of Market Reactions to Restatement Announcements," *Journal of Accounting and Economics* 37, 2004, p. 69.

[92] Surana Report, ¶ 36.

[93] Surana Report, ¶ 37.

[94] "Boom! Creates Nationwide U.S. Platform with Alliance Acquisition," Clarus, Securities, June 28, 2021.

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105. The Surana Report's review of analyst commentary emphasizes indications that, before the Alleged Public Corrective Statements were made, analysts focused on the restated line items (e.g., revenue, costs, and shareholder's equity).[95] Again, however, the effect on an analyst's opinion of information relating to one of these items depends on the magnitude, nature, and context of the news. Thus, the fact that analysts paid attention to accounting variables presented on Akumin's income statement and balance sheet does not establish that analysts' valuation would have been affected meaningfully by the specific accounting issues addressed by the restatement.

106. Whether information relating to revenue and earnings would meaningfully alter the market's assessment of a company's value depends on the magnitude and nature of the change, and the degree to which it affects expectations for future performance. The reaction may also depend on other factors that contextualize the metric being considered. These considerations can be seen, for example, in analysts' reactions to the Alleged Public Corrective Statements. Below I provide several examples.

107. The Surana Report points out, correctly, that academic literature indicates that revenue is an important metric considered by investors, and that Akumin revenue was followed and discussed by analysts during the Proposed Class Period. Indeed, beyond total net revenue, analysts focused on the *volume* of services reported (measured in industry-standard Relative Value Units or RVUs[96]) and the amount of revenue recognized by the Company per RVU. Further, when reported RVU differed from an analyst's prior estimates, the *magnitude* of this difference was a consideration in assessing its implications for Akumin's value. On November 15, 2021, for example, Akumin reported 2Q21 service fee revenue per RVU approximately 4.9 percent below the estimate that Canaccord had formulated prior to Akumin's restatement. This miss was described by Canaccord as "not significant".[97]

[95] Surana Report, ¶ 3(c).

[96] Akumin Inc., MD&A (Restated) For the years ended December 31, 2020 and 2019, November 15, 2021, p. 16. See also, "Imagine All the Centres," National Bank, September 25, 2018, p. 26.

[97] "Q2/21: Restatements impact pricing and margin", Canaccord, November 18, 2021.

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108. Analysts also considered context relating to reported revenue. For example, Akumin's Days Sales Outstanding (DSO) were improved by the restatement. Canaccord noted that "DSOs are now a much more manageable 89 days versus the well over 100 days they were trending at prior to the restatements".[98] National Bank noted the DSO improvement.[99]

109. The Surana Report is also correct to state that, in general, earnings metrics are important to investors, and that analysts covering Akumin tracked metrics such as EBITDA and Adjusted EBITDA as well as EBITDA margin and Adjusted EBITDA margin. However, analyst commentary also reflected the importance of context in assessing changes to EBITDA. For example, analysts recognized that the changes to Akumin's EBITDA were due to a *reclassification* of certain costs from capex to opex, which did not affect free cash flow.

110. While analysts acknowledged that the cost reclassification had a "sizable" effect on EBITDA[100] (because opex is subtracted from EBITDA whereas capex is not), analysts also recognized that this change did not change the *magnitude* of reported expenditures. Instead, the expenditures were reclassified: "the revision is simply moving more capex into the opex bucket", Cormark wrote, but ultimately was not altering the level of FCF, the cash generated by the company for shareholders: "In other words, higher opex hits EBITDA, but lower capex leaves a neutral FCF impact."[101] This is a critical consideration, as academic and practitioner literature, discussed above in Section 4.4, indicates FCF is the key variable on which company valuation is based.

111. In a similar vein, Clarus noted "modestly increased corporate expenses" as a consequence of the cost reclassification but pointed to offsetting positive impacts:[102]

a. The negative impacts included "more maintenance costs being expensed on the income statement" (leading to the "modestly increased corporate

[98] "Q2/21: Restatements impact pricing and margin", Canaccord, November 18, 2021.

[99] "Filing of Delayed Q2/2021 Financials Provides Some Clarity", National Bank, November 15, 2021.

[100] "Q2/21: Restatements impact pricing and margin", Canaccord, November 18, 2021.

[101] "High Torque Equity Requires Execution", Cormark, November 17, 2021.

[102] "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2", Clarus, November 16, 2021.

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expenses") as well as "lower net book value of property and equipment on the balance sheet";

b. The positive offsets included "lower depreciation expense" on the income statement and "less capital expenditures on the cash flow statement".

112. Canaccord also pointed to both the negative and offsetting positive factors regarding the reclassification of costs. On one hand, the analyst noted that 2Q21 adjusted EBITDA and adjusted EBITDA margin missed Canaccord's (pre-restatement) estimates "largely due to ~[US]$2.1M/quarter in repair and maintenance costs, that were previously being capitalized, now flowing through the income statement." On the other hand, Canaccord reduced its CAPEX forecast from 6 percent to 2 percent of revenue.[103]

113. Finally, the Surana Report is correct to state that some restatements of prior period financials significantly affect investor perceptions of a firm's outlook. However, this is not always the case and depends on the specific attributes of the restatement. For example, following Akumin's publication of restated financials on November 15, 2021, the analyst at Clarus described the impact of the restatement on its future outlook as "extremely modest".[104]

6. The Surana Report Ignores Akumin's September 1 Disclosure, Which Addressed Market Concerns Generated by the August 15 Disclosure and Was Followed by a Statistically Significant Share Price Increase

114. In this section I discuss the Surana Report's assessment of the August 15 Disclosure and indicate why I disagree with Dr. Surana's conclusions.

[103] "Q2/21: Restatements impact pricing and margin", Canaccord, November 18, 2021.

[104] "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2," Clarus, November 16, 2021.

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6.1. Event Study of Akumin's Share Price Following the August 15 Disclosure

115. On Monday, August 16, 2021, the first trading day after the August 15 Disclosure, Akumin's share price declined by $0.68, from $3.73 at the close of trading on August 13, 2021, to $3.05 at the close of trading on August 16, 2021.

116. **Table 3**, below, shows the event study of the reaction of Akumin's share price, which uses the market model described in Section 4.4 to predict Akumin's return in the absence of Company-specific news, based on the movements of the broad market (the S&P/TSX Composite), Akumin's industry peers (measured by the S&P 600 Health Care Index), and the USD-CAD foreign exchange rate. As can be seen in columns 3 through 7, Akumin's excess share price decline (i.e., adjusted for market, industry, and currency effects on price) on August 16, 2021 was statistically significant at the standard 5 percent level.

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Table 3: Event Study of the Excess Change in Akumin's Share Price Following the Alleged Corrective Disclosure on August 15, 2021

Date	Stock Price	Excess Stock Price Return		t-statistic for Excess Stock Price Return		Cumulative Excess Stock Price Change [3]
		Daily	Cumulative	Daily [1]	Cumulative [2]	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
13-Aug-21	$ 3.73					
16-Aug-21	3.05	-20.36%	-20.36%	(5.66) **	(5.66) **	($0.69)
17-Aug-21	2.84	-6.79%	-27.16%	(1.89) *	(5.34) **	($0.88)
18-Aug-21	2.84	0.91%	-26.25%	0.25	(4.21) **	($0.86)
19-Aug-21	2.72	-4.51%	-30.76%	(1.25)	(4.27) **	($0.98)
20-Aug-21	2.93	6.06%	-24.70%	1.68 *	(3.07) **	($0.81)

Notes and Sources:
Data are from Bloomberg. Prices shown for Akumin are Canadian composite.
Returns are continuously compounded (i.e., logarithmic) returns.
A more detailed version of this table is included in **Exhibit 3**.
[1] Excess return t-statistics are calculated as the daily excess return divided by the standard error of the regression over the estimation period. Two stars (**) represent significance at the 5% level, and one star (*) represents significance at the 10% level.
[2] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by [(the standard error of the regression over the sample period) times (the square root of the number of days cumulated)]. Two stars (**) represents significance at the 5% level, and one star (*) represents significance at the 10% level.
[3] The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

117. The excess movement in Akumin's share price on August 16, 2021 was a decline of 20.36 percent (column 3). Column 7 indicates that, in dollar terms, this excess decline was approximately $0.69 per share.

118. An excess return of this magnitude exceeds the threshold for statistical significance. Column 6 shows the t-statistic associated with this excess price change. As I noted in Section 4.3, the t-statistic is a measure of statistical significance; here, a magnitude of at least 1.986 (positive or negative) corresponds to statistical significance at the 5 percent level. The t-statistic in the first row of column 6, is -5.66 (a double-asterisk, corresponding to statistical significance at the 5 percent level, is shown in column 6).

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6.2. Commentary by Analysts and the Financial Press Does Not Support Dr. Surana's Opinion that the August 15 Disclosure Notified the Market of a Restatement

119. The Surana Report states that Akumin's disclosure that it was reviewing "potential additional credit losses with respect to prior years" had the effect of "putting the market on notice regarding potential adjustments to previously reported accounts receivable for at least two prior years (i.e., 2019 and 2020)".[105] In other words, the Surana Report opines that the August 15 Disclosure put the market on notice of a potential restatement (as opposed to reviewing certain past periods in connection with finalizing the 2Q21 financials).

120. However, the Surana Report does not substantiate this by reference to any analyst reports or market commentary. My review of analyst reports and the financial press following the August 15 Disclosure does not find commentary supporting this view. Similar to Dr. Surana, I located only one analyst report published immediately after the August 15 Disclosure: by National Bank of Canada ("**National Bank**"), dated August 16, 2021.[106] In this report, National Bank states that the credit losses issue disclosed the prior day is "not entirely surprising as AKU's DSO [Days Sales Outstanding], regularly highlighted in our reports, has repeatedly ticked up[,] from 60 days in Q4/2018 to 131 days in Q1/2021."[107]

121. National Bank indicated it would "remain on the sidelines" due to: accounts receivable concerns; elevated leverage; and the pending acquisition of Alliance, about which

[105] Surana Report, ¶¶ 97-98.

[106] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank, August 16, 2021.

[107] Days Sales Outstanding is "a measure of the average number of days it takes a company to collect payment after a sale has been made or a service has been rendered" ("Q1/20: Sales beat and covenant relief send stock up" Canaccord, June 5, 2020) and is defined as the number of days in the period divided by the ratio of total revenue to average receivables. See "Financial Ratio List", available at https://www.cfainstitute.org/-/media/documents/support/programs/cfa/cfa_program_level_ii_financial_ratio_list.pdf. For example, the National Bank report on Akumin published after the November 15 Disclosure indicates post-restatement FY 2020 revenue and A/R of US$245.6 million and US$62.3 million, yielding a DSO figure of 93. See "Filing of Delayed Q2/2021 Financials Provides Some Clarity", National Bank, November 15, 2021.

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National Bank expressed concern.[108] Nowhere in the report does National Bank state that the August 15 Disclosure signaled a potential restatement.[109]

122. I also reviewed articles in the financial press following the August 15 Disclosure. In particular, I reviewed news articles on Akumin from August 15, 2021 to September 1, 2021 from Factiva and Bloomberg.[110] None of the articles indicate that the disclosure that day was interpreted as signaling a potential restatement.

123. Instead, commentary in the articles that I reviewed generally reiterated the contents of the August 15 Disclosure and/or noted the decline in Akumin's share price. This is consistent with the content of the commentary following the August 15 Disclosure that Dr. Surana excerpts in her report.[111]

6.3. The Surana Report Omits that Concern About the Alliance Acquisition and the Pending Application for MCTO Contributed to Akumin's Share Price Decline on August 16, 2021

124. The pending acquisition of Alliance by Akumin provides important context for assessing Akumin's share price decline following the August 15 Disclosure. This important context is not incorporated into Dr. Surana's analysis. As described in Section 3.3, above, on June 25, 2021 Akumin announced that it had entered into an agreement to acquire Alliance. On September 1, 2021, the Company announced that the acquisition had been completed. The August 15 Disclosure falls between those dates, during the period when the acquisition had been

[108] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank, August 16, 2021.

[109] Similarly, I do not find an interpretation of the August 15 Disclosure as signaling a restatement in any of the analyst reports published after August 16, 2021 but before the October 12 Disclosure. See "Completes Alliance Acquisition; Raising Estimates and Target Price", Clarus, September 2, 2021; "Alliance Takeout Closed While Waiting For Delayed Q2/21", Cormark, September 2, 2021; and "Closes acquisition of Alliance Healthcare Services", Canaccord, September 20, 2021.

[110] Factiva is an online news reporting service and archive owned by Dow Jones & Company, Inc. that aggregates news content from nearly 33,000 sources from around the world. I identified seventy news articles on Factiva that had "Akumin" in the headline or body of the article and were published during the period, as well as one Bloomberg article on Akumin.

[111] Surana Report, ¶¶ 86 – 88, 90.

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announced but not yet completed. A review of analyst reports indicates that the August 15 Disclosure was interpreted as creating a risk that the Alliance acquisition would not be completed.

125. The initial announcement of the acquisition on June 25, 2021 had been well received by the market. Analysts generally expressed positive commentary regarding the proposed transaction. Analysts at Canaccord viewed the deal "very positively" as it would create "a preeminent leader in the US outpatient radiology market."[112] Cormark viewed the proposed transaction as "transformational" for Akumin.[113] Analysts with Clarus, which also received the news as a positive for Akumin, noted that the combined entity would be "much more of a match in scale and profitability to key public comp[etitor] RadNet."[114] The analyst at National Bank referred to the acquisition as "transformative", and stated that it was expected to improve earnings and cash flows, though also expressed concerns including the degree of leverage taken on by Akumin to finance the acquisition.[115]

126. In addition to reviewing analyst commentary, I conducted an event study for June 25, 2021 to evaluate the market reaction to the news regarding the proposed transaction, which is set out in **Table 4** below. After accounting for market, industry and exchange rate factors, I find that there was a positive excess return to Akumin's share price on June 25, 2021. This increase was statistically significant at the 5 percent level.

[112] "Enters agreement to acquire Alliance Healthcare Services for $820M," Canaccord, June 25, 2021.

[113] "Transformational Deal For Alliance HealthCare Services," Cormark, June 28, 2021.

[114] "Boom! Creates Nationwide U.S. Platform with Alliance Acquisition," Clarus, June 28, 2021.

[115] "Acquisition Accretive But Already High Leverage Up And Some Concerns on the Target", National Bank, June 27, 2021.

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Table 4: Event Study of the Excess Change in Akumin's Share Price Following the Announcement of the Alliance Acquisition on June 25, 2021

Date	Stock Price	Excess Stock Price Return		t-statistic for Excess Stock Price Return		Cumulative Excess Stock Price Change [3]
		Daily	Cumulative	Daily [1]	Cumulative [2]	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
24-Jun-21	$ 3.81					
25-Jun-21	4.10	7.24%	7.24%	2.01 **	2.01 **	$0.29
28-Jun-21	3.91	-4.08%	3.16%	(1.14)	0.62	$0.13
29-Jun-21	4.00	2.61%	5.77%	0.73	0.93	$0.23
30-Jun-21	3.95	-0.83%	4.93%	(0.23)	0.69	$0.20
2-Jul-21	4.14	5.43%	10.36%	1.51	1.29	$0.43

Notes and Sources:
Data are from Bloomberg. Prices shown for Akumin are Canadian composite.
Returns are continuously compounded (i.e., logarithmic) returns.
A more detailed version of this table is included in **Exhibit 2**.
[1] Excess return t-statistics are calculated as the daily excess return divided by the standard error of the regression over the estimation period. Two stars (**) represent significance at the 5% level, and one star (*) represents significance at the 10% level.
[2] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by [(the standard error of the regression over the sample period) times (the square root of the number of days cumulated)]. Two stars (**) represents significance at the 5% level: one star (*) represents significance at the 10% level.
[3] The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

127. Analyst commentary indicates that the August 15 Disclosure introduced uncertainty regarding the pending Alliance acquisition. National Bank's report on August 16, 2021, expressed concern "related to the accounts receivable disclosure in conjunction with the previously announced acquisition of Alliance and related elevated leverage".[116] A report by Cormark dated September 2, 2021 noted that the closing of the Alliance acquisition "puts an end to perceived risks that the takeout and related financings had material closing risk following the delay of AKU's Q2/21 financials".[117]

[116] Surana Report, ¶ 89.

[117] "Alliance Takeout Closed While Waiting For Delayed Q2/21," Cormark, September 2, 2021.

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128. An additional source of reassurance from the September 1 Disclosure was that the Alliance acquisition was completed on the same financing terms as those announced before the August 15 Disclosure.[118] Analyst commentary indicates that the closing of the Stonepeak financing and other elements of the acquisition, on the terms as described in the initial announcement on June 25, 2021, signalled that the key players involved in the transaction had not changed their assessment of Akumin because of the August 15 Disclosure. One analyst stated: "the signal we now get from closing of the Alliance deal suggests there is no material revenue recognition issue (i.e. Alliance/Tahoe and Stonepeak on the inside with debt and equity stakes in AKU have not delayed/canceled the deal)".[119]

6.4. The Surana Report Ignores the Statistically Significant Akumin Share Price Increase on September 1, 2021

129. There was a statistically significant increase in Akumin's share price following the announcement that the Company completed its acquisition of Alliance. **Table 5** below sets out an event study following the September 1 Disclosure. The excess return to Akumin's share price on September 1, 2021 was an increase of 13.61 percent (column 3). Column 7 indicates that, in dollar terms, this excess price increase was approximately $0.40 per share.

[118] "The Financing Notes, Financing Warrants, Financing Shares, and additional draws were made available on the terms described in Akumin's press release dated June 25, 2021." Akumin Inc., "Akumin Announces Closing of Acquisition of Alliance HealthCare Services and Related Financing", September 1, 2021.

[119] "Alliance Takeout Closed While Waiting For Delayed Q2/21", Cormark, September 2, 2021.

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Table 5: Event Study of the Excess Change in Akumin's Share Price Following the Closing of the Alliance Acquisition on September 1, 2021

Date	Stock Price	Excess Stock Price Return		t-statistic for Excess Stock Price Return				Cumulative Excess Stock Price Change [3]
		Daily	Cumulative	Daily [1]		Cumulative [2]		
(1)	(2)	(3)	(4)	(5)		(6)		(7)
31-Aug-21	$ 2.72							
1-Sep-21	3.14	13.61%	13.61%	3.78	**	3.78	**	$0.40
2-Sep-21	3.15	0.05%	13.66%	0.02		2.68	**	$0.40
3-Sep-21	3.06	-1.76%	11.90%	(0.49)		1.91	*	$0.35
7-Sep-21	2.90	-5.21%	6.69%	(1.45)		0.93		$0.20
8-Sep-21	2.87	-0.72%	5.97%	(0.20)		0.74		$0.18

Notes and Sources:
Data are from Bloomberg. Prices shown for Akumin are Canadian composite.
Returns are continuously compounded (i.e., logarithmic) returns.
A more detailed version of this table is included in **Exhibit 4**.
[1] Excess return t-statistics are calculated as the daily excess return divided by the standard error of the regression over the estimation period. Two stars (**) represent significance at the 5% level, and one star (*) represents significance at the 10% level.
[2] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by [(the standard error of the regression over the sample period) times (the square root of the number of days cumulated)]. Two stars (**) represents significance at the 5% level: one star (*) represents significance at the 10% level.
[3] The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

130. Akumin's statistically significant share price increase and related commentary are in contrast with the opinion set out in the Surana Report that, immediately prior to the October 12 Disclosure, Akumin's share price still reflected "the market's unbiased estimate of the share price consequences from the information in the August 15, 2021 Disclosure".[120] This opinion ignores the September 1 Disclosure, the associated share price increase, and analyst commentary highlighting the reassurance the closing of the Alliance acquisition gave to the market relating to the August 15 Disclosure.

[120] Surana Report, ¶ 100.

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7. The Surana Report Takes an Inconsistent and *Ad Hoc* Approach to Assessing Whether Akumin's Share Price Reacted in a Statistically Significant Manner to the Alleged Public Corrective Statements

131. The Surana Report's analyses of the Alleged Public Corrective Statements – in particular, the October 12 and November 15 Disclosures – are *ad hoc* in their approach and inconsistent with the principles of market efficiency, leading to incorrect conclusions.

132. The October 12 Disclosure was not followed by a statistically significant price decline. The Surana Report's reliance on the October 13 Cormark Report to find that the statistically significant price decline on October 13, 2021 was a reaction to the October 12 Disclosure ignores both the delay in the price reaction, which is inconsistent with Akumin trading in an efficient market, as well as the October 13 Cormark Report's focus on the delay in Akumin's 2Q21 financials and the risk of a general cease trade order as opposed to Akumin's pending restatement.

133. Moreover, contrary to the Surana Report's contention that the November 15 Disclosure had no statistically significant impact on the Akumin share price, the November 15 Disclosure was followed by a statistically significant increase in Akumin's share price. The Surana Report supports its contention that there was not a statistically significant increase in Akumin's share price in response to the November 15 Disclosure by extending the event window to include Akumin's stock returns on November 16, 17, and 18. However, no statistically significant price reactions occurred on these days; accordingly, the Surana Report's claim that the event window should be extended is not substantiated.

7.1. There Was No Statistically Significant Akumin Share Price Decline on October 12, 2021

134. The October 12 Disclosure – Akumin's announcement that its 2Q21 financials would be further delayed and that Akumin would be restating certain prior period financial

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statements – was filed with SEDAR at 7:03 am, approximately two and a half hours before the market opened that day.[121] According to the Surana Report's event study, the excess return on October 12, 2021 was a decline of 2.55 percent. This is well below the 5 percent level of significance. In fact, the "p-value" on this excess return is 0.4838 (48.38 percent), meaning that during this time period there was nearly a 50 percent likelihood of observing an excess return as high or higher than 2.55 percent merely due to general market and industry factors that were not specific to Akumin. To put it another way, the chance of obtaining such a return is approximately the same as the chance of getting heads or tails when flipping a coin.[122]

135. I also find that the October 12, 2021 price reaction was not statistically significant, as shown in **Table 6**.

[121] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", October 12, 2021 (filed on SEDAR at 7:03 ET).

[122] Surana Report, Exhibit 5. The chance of getting either heads or tails from a single coin flip is 1 in 2, or 50 percent.

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Table 6: Event Study of the Excess Change in Akumin's Share Price Following the Alleged Corrective Disclosure on October 12, 2021

Date	Stock Price	Excess Stock Price Return		t-statistic for Excess Stock Price Return		Cumulative Excess Stock Price Change [3]
		Daily	Cumulative	Daily [1]	Cumulative [2]	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
8-Oct-21	$ 3.10					
12-Oct-21	3.01	-2.53%	-2.53%	(0.70)	(0.70)	($0.08)
13-Oct-21	2.74	-9.50%	-12.03%	(2.64) **	(2.36) **	($0.35)
14-Oct-21	2.62	-4.46%	-16.50%	(1.24)	(2.65) **	($0.47)
15-Oct-21	2.55	-2.39%	-18.89%	(0.66)	(2.62) **	($0.53)
18-Oct-21	2.53	-0.67%	-19.55%	(0.19)	(2.43) **	($0.54)

Notes and Sources:
Data are from Bloomberg. Prices shown for Akumin are Canadian composite.
Returns are continuously compounded (i.e., logarithmic) returns.
A more detailed version of this table is included in **Exhibit 5**.
[1] Excess return t-statistics are calculated as the daily excess return divided by the standard error of the regression over the estimation period. Two stars (**) represent significance at the 5% level, and one star (*) represents significance at the 10% level.
[2] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by [(the standard error of the regression over the sample period) times (the square root of the number of days cumulated)]. Two stars (**) represents significance at the 5% level: one star (*) represents significance at the 10% level.
[3] The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

7.2. In an Efficient Market, the Price of a Share Rapidly Responds to Important New Information

136. The Surana Report assesses the efficiency of the market for Akumin shares during the period from June 25, 2021, when Akumin announced its acquisition of Alliance, to November 19, 2021, the final day of the week of the November 15 Disclosure (the "**Surana Analysis Period**"). The Surana Report finds that, during this period, Akumin shares "traded in an informationally efficient market (i.e., the stock price reflected all publicly available

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information) at the time the corrective disclosures were made".[123] In an efficient market, a company's share price quickly incorporates important public information. In a recently published article, Dr. Surana states: "In the context of securities litigation, the market for a stock is said to be efficient if the stock price *quickly* reflects all publicly available information," and that, "stocks traded on open and well-developed markets generally impound information *rapidly*".[124]

137. Other academic studies, including some cited by the Surana Report, have found that the price of an efficiently traded security reacts to value-relevant news within a few hours, and often within minutes.

138. For example, studies have examined the price response to earnings and dividend announcements and concluded that securities prices incorporate news within five to 15 minutes.[125] Other studies have examined the price response to television segments on equity analysts' views of individual stocks (finding that prices respond to these reports "within seconds of initial mention")[126] and to announcements of new equity issuances (finding that prices respond "during the 15 minutes following an announcement").[127]

[123] Surana Report, ¶ 52, footnote 67, and Appendix A.

[124] Sunita Surana, "Informational Efficiency in the Context of Securities Litigation: What Have We Learned?" *University of Illinois Law Review Online*, Fall 2021, p. 335. Emphasis added.

[125] See, for example, James M. Patell and Mark A. Wolfson, "The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements", *Journal of Financial Economics*, 13, 1984, pp. 223-252.

[126] See, for example, Jeffrey A. Busse and T. Clifton Green, "Market efficiency in real time", *Journal of Financial Economics*, 65, 2002, pp. 415-437.

[127] See, for example, Michael J. Barclay and Robert H. Litzenberger, "Announcement Effects of New Equity Issues and the Use of Intraday Price Data", *Journal of Financial Economics*, 21, 1988, pp. 71-99. For additional discussion regarding how prices respond to news see Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance* (McGraw-Hill: New York, 7th ed., 2003), pp. 351-353. The 8th ed. of this textbook is cited in the Surana Report, ¶ 51. ("To analyze the semistrong form of the efficient-market hypothesis, researchers have measured how rapidly security prices respond to different items of news, such as earnings or dividend announcements, news of a takeover, or macroeconomic information. […] A study by Patell and Wolfson shows just how fast prices move when new information becomes available. They found that, when a firm publishes its latest earnings or announces a dividend change, the major part of the adjustment in price occurs within 5 to 10 minutes of the announcement.")

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7.3. Akumin's Share Price Reacted Rapidly to Other Contemporaneous Disclosures

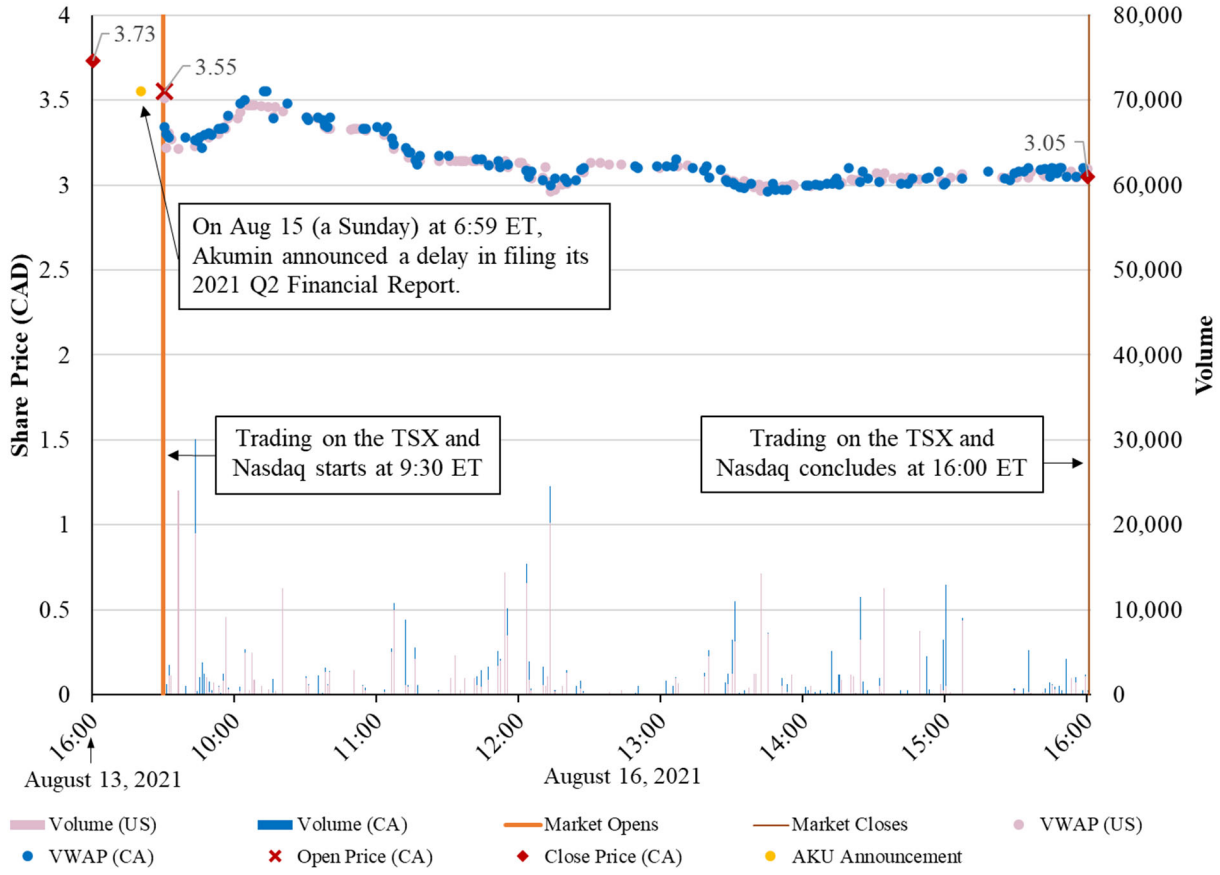
139. Consistent with the literature authored and/or cited by Dr. Surana, Akumin's price reacted swiftly to other disclosures made by Akumin during the Surana Analysis Period.

140. For example, **Figure 5**, below, shows the volume-weighted average price ("**VWAP**") of Akumin's shares, for each minute of trading on August 16, 2021, along with minute-by-minute volume on that date. On this date, the first trading day following the August 15 Disclosure, Akumin's share price, which had closed the prior trading day at $3.73, opened lower, at $3.55, then declined to its end-of-day level of $3.05, by around noon, i.e., within 2.5 hours of trading.

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Figure 5: Akumin Minute-by-Minute Intraday Share Price and Volume
August 16, 2021



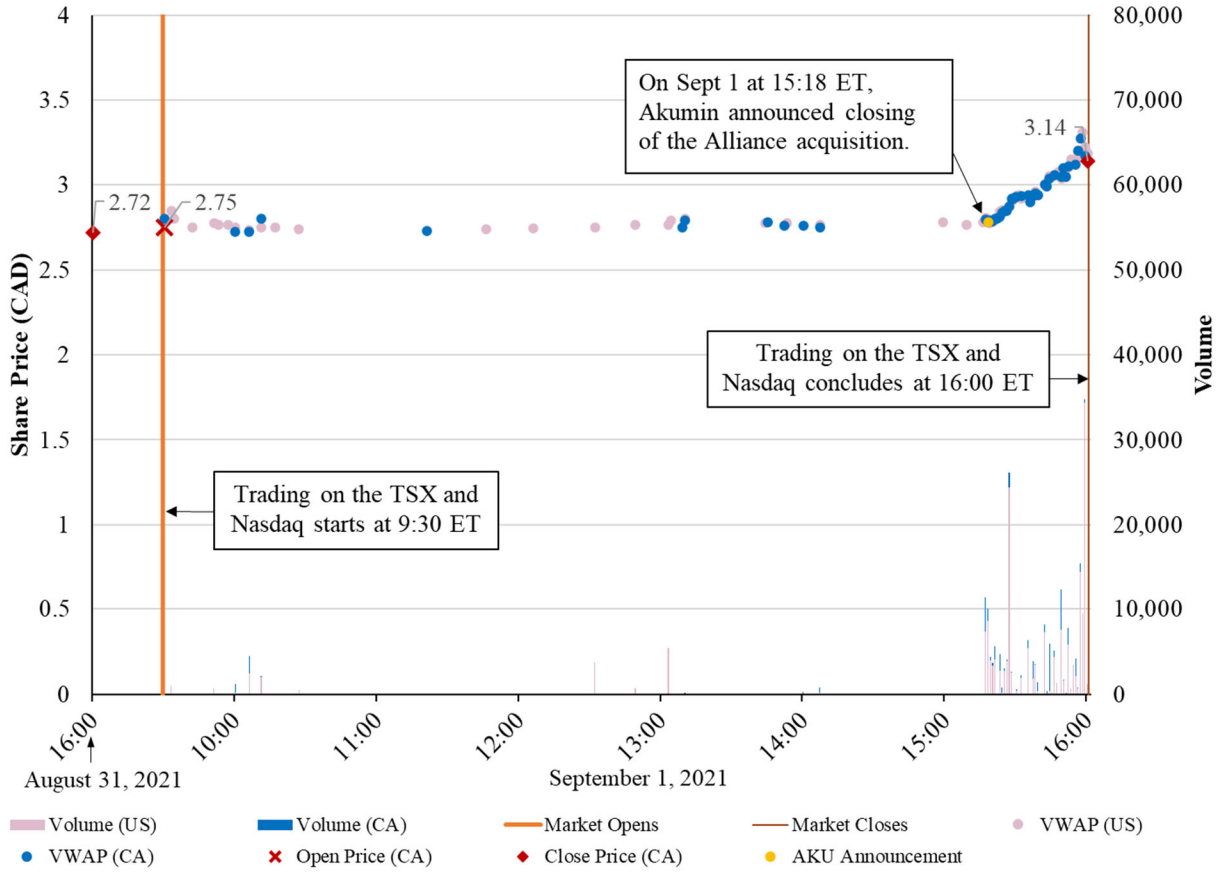
Notes and Sources:
Intraday price data are from Tick Data. Each dot represents the calculated Volume Weighted Average Price (VWAP) for a given minute. VWAPs for trading in the United States are converted to CAD using the daily closing USD-CAD exchange rate.
Daily open and close prices and daily closing USD-CAD exchange rates are from Bloomberg.

141. **Figure 6**, below, shows the minute-by-minute intraday price of Akumin's stock on September 1, 2021 for all minutes during the trading day when the stock traded. Akumin's opening price on this day was at $2.75, close to its price of $2.72 at the prior day's close. It remained close to the opening level until the announcement of the closing of the Alliance acquisition (i.e., the September 1 Disclosure) at 15:18 ET, whereupon the price increased swiftly to close at $3.14, just 42 minutes later. Akumin's price remained at this level, closing at $3.15 on September 2, 2021, just one cent above the September 1 close, indicating that the September 1 Disclosure was effectively impounded into Akumin's price within less than an hour.

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Figure 6: Akumin Minute-by-Minute Intraday Share Price and Volume
September 1, 2021



Notes and Sources:
Intraday price data are from Tick Data. Each dot represents the calculated Volume Weighted Average Price (VWAP) for a given minute. VWAPs for trading in the United States are converted to CAD using the daily closing USD-CAD exchange rate.
Daily open and close prices and daily closing USD-CAD exchange rates are from Bloomberg.

7.4. A Review of Intraday Price Data for October 12, 2021 Confirms That Akumin's Share Price Did Not React to the Company Disclosure That Morning

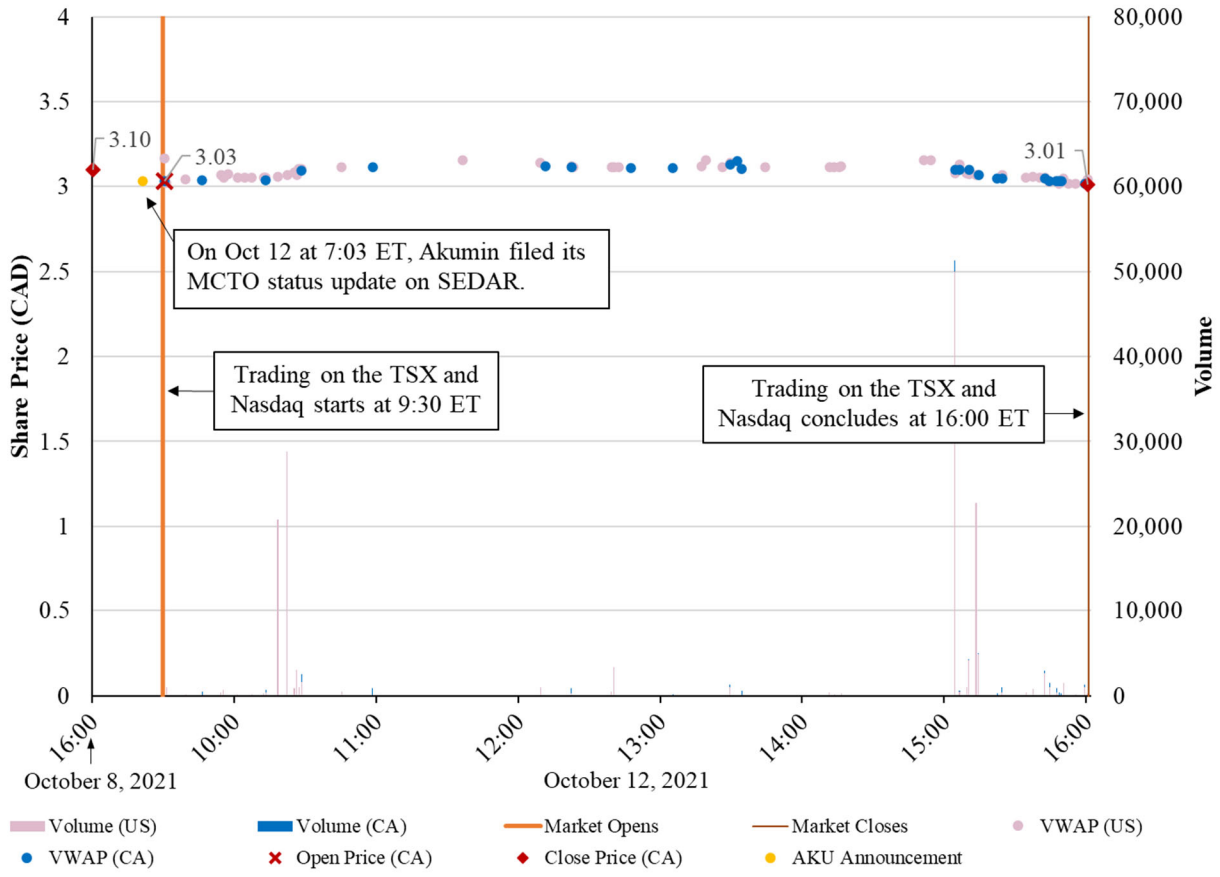
142. A review of intraday data underscores the lack of a share price reaction to the October 12 Disclosure and shows that the Company's share price did not begin to decline until the late morning the next trading day, October 13, 2021. In fact, Akumin's share price was approximately equal to the October 12, 2021 closing price as late as 2:26pm on October 13, 2021, more than one and a half trading days after the announcement was made.

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143. As with the intraday graphs reviewed above, **Figure 7** below shows the VWAP for each minute of trading in Akumin shares, along with minute-by-minute volume, for October 12, 2021 for all minutes the stock traded on this day. Akumin shares closed at $3.10 on October 8, 2021, the last closing price before the October 12 Disclosure was released at 7:03am. The shares opened at $3.03 on October 12, 2021. The price then rose slightly, and for most of the day Akumin shares traded above the prior day's close of $3.10, before closing at $3.01, near the level prevailing when the market opened in the morning. Overall, the stock was essentially flat during the day on October 12, 2021.

Figure 7: Akumin Intraday Stock Price on October 12, 2021



Notes and Sources:
Intraday price data are from Tick Data. Each dot represents the calculated Volume Weighted Average Price (VWAP) for a given minute. VWAPs for trading in the United States are converted to CAD using the daily closing USD-CAD exchange rate.
Daily open and close prices and daily closing USD-CAD exchange rates are from Bloomberg.

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144. This review of intraday data contrasts with the Surana Report's conclusion that a statistically significant price decline was caused by the October 12 Disclosure:

> [O]n October 12, 2021, Akumin provided information on the expected magnitude of the overstatement of its accounts receivable balance (in conjunction with identifying a second type of accounting error). The stock price reacted negatively to this news.[128]

7.5. The October 13 Cormark Report Did Not Provide Additional Allegedly Corrective Information Other Than What Was in the October 12 Disclosure and Did Not Lead to a Swift Reaction in Akumin's Price

145. The Surana Report also states, "On October 13, 2021, after the publication of the Cormark Report detailing the implications of the disclosure on future profitability and as the market continued to digest the information contained in the October 12 Disclosure, Akumin's stock price continued falling".[129]

146. The characterization that Akumin's price "continued" to react on October 13, 2021 to the prior day's disclosure is not credible in view of the fact that the Akumin share price did not experience a statistically significant decline on the date of the announcement and was essentially flat.

147. The Surana Report also opines that the publication of the October 13 Cormark Report, called a "Morning Note", on October 13, 2021, was the cause of that day decline in Akumin's share price:

> In my view, the statistically significant stock price decline on October 13, 2021 was in response to the Cormark report detailing the future economic consequences for Akumin related to the October 12, 2021 Disclosure.[130]

[128] Surana Report, ¶ 100.

[129] Surana Report, ¶ 119.

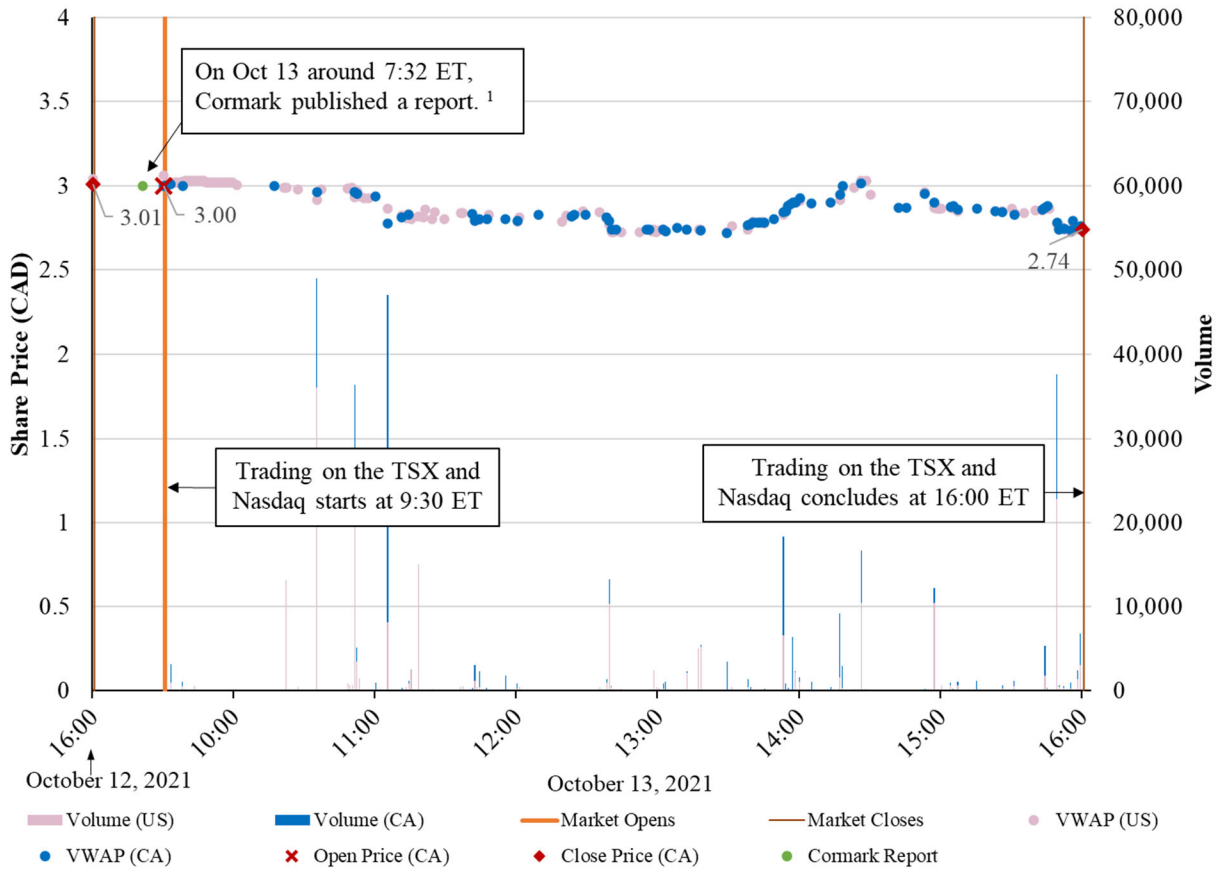
[130] Surana Report, ¶ 128.

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148. The October 13 Cormark Report, a brief report with a single page of substantive text, reduced the analyst's rating and target price. As shown below in Figure 8, the price of Akumin shares did not move quickly in reaction to the October 13 Cormark Report. The October 13 Cormark Report was published by 7:32 am on October 13, 2021, but there is no discernible decline in Akumin's share price until around 11:00 am that day – by which time more than 100,000 shares had changed hands since the open of trading – and Akumin shares traded above the prior day's closing price as late as 2:26 pm.

Figure 8: Akumin Intraday Stock Price on October 13, 2021



Notes and Sources:
Intraday price data are from Tick Data. Each dot represents the calculated Volume Weighted Average Price (VWAP) for a given minute. VWAPs for trading in the United States are converted to CAD using the daily closing USD-CAD exchange rate.
Daily open and close prices and daily closing USD-CAD exchange rates are from Bloomberg.
[1] At 7:32 ET on October 13, 2021, Bloomberg: First Word published a news story summarizing the October 13 Cormark Report.

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149. If the October 13 Cormark Report was providing (negative) news to the market in respect of the October 12 Disclosure that had not been previously understood by investors (a suggestion that I disagree with based on the content of the October 13 Cormark Report), it would be reasonable to expect the price to react more swiftly, based on Dr. Surana's conclusions regarding market efficiency and the observed intraday reaction on August 15, 2021 and September 1, 2021, discussed above.

150. The October 13 Cormark Report reflected the new information provided by Akumin in the October 12 Disclosure, but it did not provide *additional* new information regarding the accounting issues, beyond what was already related by and inferable from the October 12 Disclosure. Specifically, the Cormark analysts state that:

a. Regarding the restatement of revenue and accounts receivable, Cormark expects a "non-material impact" on FY 2020 and 1Q21, with most of the restatement affecting FY 2019 results. In general, the most recent results are most relevant to forward-looking estimates of share price.[131]

b. Consistent with this, the October 13 Cormark Report adjusts expected revenue from the legacy Akumin business downward by 5 percent as a consequence of the restatement.

c. With respect to the reclassification of costs, the October 13 Cormark Report observes that there would be no impact on FCF, though the reclassification would "trigger lower numbers on the operating cash flow and EBITDA lines".[132]

151. Moreover, the October 13 Cormark Report is the second of two analyst reports published after the October 12 Disclosure. The Surana Report acknowledges that National Bank published a report on October 12 commenting on the October 12 Disclosure, the same news items on which the October 13 Cormark Report is focused. The Surana Report attributes the October 13, 2021 share price decline to "the Cormark research report describing the impact of

[131] Surana Report, ¶ 128.

[132] "Reporting Delays Continue", Cormark, October 13, 2021.

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the October 12, 2021 Disclosure on the future profitability of the Company".[133] However, the National Bank report had already provided similar commentary a day prior, noting:[134]

> Although the final impact of the capitalization (vs. expensing) has yet to be determined, we expect the higher operating expenses to impact profitability and potentially result in the acquisition of Alliance being less accretive than originally thought. […] The higher expenses and the writedown of the higher-margin attorney A/R will likely impact Akumin's margins in coming quarters.

152. The October 13 Cormark Report indicates that the October 12 Disclosure "has an incrementally negative impact on our outlook", and its investment conclusion highlights the continuing uncertainty: "We expect the stock to remain under pressure near term, but see quick re-rate potential [i.e., potential for investors to reevaluate] if the accounting issues resolve as outlined in our forecast."

153. The October 13 Cormark Report also expressed concern it was "not certain" that the MCTO (which prohibited Akumin management from trading in the Company's shares, pending the reporting delays, but allows trading by others) would not be extended, in which case the result would be a general cease trade order on all trading in Akumin shares in Canada.

7.6. The Surana Report Finds a Statistically Significant Share Price *Increase* Following the November 15 Disclosure

154. The November 15 Disclosure – Akumin's financial statements, MD&As, and CEO and CFO certifications containing the restatement of Akumin's prior period financial statements, MD&As, and CEO and CFO certifications, and a press release by Akumin announcing these restatements as well as the release of its 2Q21 financials – was published in the early morning of November 15, 2021, at or around 7:02 a.m., before the market opened.[135] According to the Surana Report's event study, the excess return on November 15, 2021, the first trading day following the November 15 Disclosure, was positive and highly statistically

[133] Surana Report, ¶ 127.

[134] "Filing of Q2/2021 financials delayed to November with a writedown of up to 32% of A/R," National Bank, October 12, 2021.

[135] Akumin Inc., "Akumin Announces Second Quarter 2021 Financial Results and Filing of Restated Financial Statements", November 15, 2021 (filed on SEDAR at 7:02 ET).

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significant: well above the threshold for statistical significance at the 5 percent level (and the 1 percent level).[136]

155. In my event study, I obtain similar results, as reflected in **Table 7**:

Table 7: Event Study of the Excess Change in Akumin's Share Price Following the Alleged Corrective Disclosure on November 15, 2021

Date	Stock Price	Excess Stock Price Return		t-statistic for Excess Stock Price Return		Cumulative Excess Stock Price Change [3]
		Daily	Cumulative	Daily [1]	Cumulative [2]	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
12-Nov-21	$ 2.32					
15-Nov-21	2.64	14.20%	14.20%	3.94 **	3.94 **	$0.36
16-Nov-21	2.55	-3.98%	10.22%	(1.11)	2.01 **	$0.25
17-Nov-21	2.41	-5.43%	4.79%	(1.51)	0.77	$0.12
18-Nov-21	2.33	-2.19%	2.60%	(0.61)	0.36	$0.07
19-Nov-21	2.18	-6.24%	-3.64%	(1.73) *	(0.45)	($0.08)

Notes and Sources:
Data are from Bloomberg. Prices shown for Akumin are Canadian composite.
Returns are continuously compounded (i.e., logarithmic) returns.
A more detailed version of this table is included in **Exhibit 7**.
[1] Excess return t-statistics are calculated as the daily excess return divided by the standard error of the regression over the estimation period. Two stars (**) represent significance at the 5% level, and one star (*) represents significance at the 10% level.
[2] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by [(the standard error of the regression over the sample period) times (the square root of the number of days cumulated)]. Two stars (**) represents significance at the 5% level: one star (*) represents significance at the 10% level.
[3] The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

[136] Surana Report, Exhibit 5.

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7.7. The Surana Report's Arguments for Extending the Event Window for the November 15 Disclosure Do Not Withstand Close Examination

156. Notwithstanding the Surana Report's finding of a statistically significant share price increase on November 15, 2021, the Surana Report ultimately concludes that there was no statistically significant price decline in response to the November 15 Disclosure. Dr. Surana obtains this result by extending her event window to include returns over the following three trading days: November 16, 17 and 18, 2021.[137]

157. However, as can be seen from column (5) in Table 7 above, none of the price declines on November 16, 17, and 18, 2021 is statistically significant, which would be expected if Akumin's price were continuing to incorporate the news. Dr. Surana's apparent rationale for including these additional dates is that analysts published reports on Akumin on each date and that there was above average trading average across these days.[138] However, neither rationale withstands careful scrutiny.

7.7.1. Analyst Reports

158. The Surana Report justifies including November 16-18, 2021 as part of the time period over which the price of Akumin shares reacted to the November 15 Disclosure partly on the basis of analyst reports having been published on each of these dates.[139]

159. To assess whether an analyst report potentially contributed new information, it should first be assessed whether there is a statistically significant share price movement in response to the publication of the analyst report. For example, Frank C. Torchio, President of Forensic Economics, Inc., has indicated that continued analyst coverage *may* be a basis for

[137] Surana Report, ¶ 155.

[138] Surana Report, ¶¶ 61, 159, 163.

[139] Surana Report, ¶ 163.

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considering days beyond the "standard"[140] one-day event window *if statistically significant returns are observed*:

> If a particular material disclosure continues to generate analyst commentary and additional news stories beyond the first event day ***and the excess returns are statistically significant in active trading***, then the analyst should consider lengthening the event window to include the effects of this continued market response.[141]

160. This is consistent with common practice, including by NERA, in determining the appropriate event window length, as discussed above in Section 4.3. However, as noted above, the daily returns to Akumin's share price on November 16, 17 and 18 were not statistically significant.

161. An assessment of whether a company's share price is reacting to an analyst report should also consider whether the tone of the analyst report (positive or negative) is consistent with the direction of the observed price movement (up or down). For at least one of the dates in question (November 17), and arguably two (November 16 and 17), the direction of the (statistically insignificant) price movement is not consistent with the tenor of the report issued that day.

7.7.1.1. The November 16, 2021 Clarus Report

162. Dr. Surana states: "On November 16, 2021, analysts at Clarus Securities issued a research report. This report is not available to me."[142] Despite not knowing the content of this analyst report, the Surana Report extends the window of time over which Akumin's share price reacted, to include this date.

163. While reducing its target price modestly from US$8.00 to US$7.50 (the latter value still approximately 3.5 times Akumin's market price[143]), Clarus stated, "We expect

[140] Expert Report of Frank Torchio, *In Re Bank of America Corp. Securities Litigation*, May 24, 2013, ¶¶ 197, 217, 226, 244, 260 (all examples of the one-day event window being described as "standard").

[141] Expert Report of Frank Torchio, *In Re Bank of America Corp. Securities Litigation*, May 24, 2013, ¶ 74.

[142] Surana Report, ¶ 152.

[143] Clarus reports a then-current market price of US$2.15, and $7.50/$2.15 = 3.49.

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Akumin to be one of the top-performing stocks in our coverage universe in 2022 and we reiterate our Buy rating." Clarus also said the restatement had an "extremely modest" effect on its outlook. [144]

164. There was no statistically significant price movement on November 16, 2021.

7.7.1.2. The November 17, 2021 Cormark Report

165. On November 17, 2021, Cormark released a morning note commenting on the November 15 Disclosure.[145] By the Surana Report's logic, this report justifies including a share price decline on the date of its publication as part of a continuing price response to the November 15 Disclosure.

166. However, the Cormark report released on November 17, 2021 *increased* the analyst's target price, to US$4.25 from US$3.75 previously. With respect to the restatement, Cormark's commentary indicates that the final revenue adjustment "does not trigger a forecast change" as it was in line with what Cormark previously had estimated. With respect to the restatement of costs from capitalized to operating, Cormark noted that the amount to be reclassified was larger than it had previously guessed but emphasized that this would have no effect on FCF. As described above in Section 4.1, FCF is the key variable that is forecast in a DCF model. "[T]he change has no FCF impact given the revision is simply moving more capex into the opex bucket", Cormark wrote. "In other words, higher opex hits EBITDA, but lower capex leaves a neutral FCF impact."[146]

167. The conclusion of the November 17, 2021 Cormark report emphasized the "potential upside combined with our liquidity comfort" and maintained its prior rating.[147] The Surana Report does not explain how a report with a positive outlook and target price increase led to a (statistically insignificant) decline in Akumin's share price.

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[144] "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2," Clarus, November 16, 2021.

[145] "High Torque Equity Requires Execution", Cormark, November 17, 2021.

[146] "High Torque Equity Requires Execution", Cormark, November 17, 2021.

[147] "High Torque Equity Requires Execution", Cormark, November 17, 2021.

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168. There was no statistically significant price movement on November 17, 2021.

7.7.1.3. The November 18, 2021 Canaccord Report

169. Dr. Surana states: "On November 18, 2021, analysts at Canaccord Genuity published a report discussing the Q2 2021 results and their new forecasts." The Surana Report indicates that the analysts at Canaccord "lowered their price target for Akumin stock from US$5.75 to US$5.00 per share while maintaining their Buy rating." [148]

170. I note that the report re-iterated information that was released as part of the November 15 Disclosure, three days earlier, and that there was no statistically significant movement in Akumin's price on this date. Further, the new target price by Canaccord analysts was well above the then-current trading price and also higher than the target price in the Cormark report from the previous day.

171. There was no statistically significant price movement on November 18, 2021.

7.7.2. Trading Volume Over the Period November 15-18, 2021

172. The Surana Report also attempts to support its position that Akumin shares took four days to react to the November 15 Disclosure by referencing the level of trading volume: "The average daily combined trading volume in Canada and the US of 157,107 shares during November 15-18, 2021 was 1.1 times the average daily volume in the Pre-Disclosure Period" (with the Pre-Disclosure Period defined here as June 25, 2021 to August 13, 2021).[149]

173. It is instructive to review volume on each date individually:

a. Trading volume on November 15, 2021, the day of the Company disclosure, was 353,484 shares, 2.4 times the average of 147,761 shares

[148] Surana Report, ¶ 154.

[149] Surana Report, ¶ 155.

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during what the Surana Report defines as the Pre-Disclosure Period (i.e., from June 25, 2021 to August 13, 2021).[150]

b. However, trading volume on November 16, 2021 was only 162,020 shares, not meaningfully different from the average daily volume in the Surana Report's Pre-Disclosure Period.

c. Daily trading volume on November 17 and 18, 2021 was 61,633 and 51,290 shares respectively, well *below* the average of 147,761 shares the Surana Report's Pre-Disclosure Period.

174. The elevated volume on November 15, 2021 appears consistent with the finding of a statistically significant price increase on that day as the price absorbed the November 15 Disclosure. On November 16-18, 2021, however, trading volume was at or below the average levels measured by Dr. Surana. This is not consistent with Dr. Surana's opinion that Akumin's price was continuing to react to the November 15 Disclosure on these three days.

7.7.3. Conclusion

175. The November 15 Disclosure was followed by a one-day statistically significant *increase* in Akumin's share price. Dr. Surana does not state this directly in her conclusion. Instead, she expands her event window to four days and states that the "[t]he cumulative excess stock-price return over the November 15-18, 2021 event window is not statistically significant at the 5% level".[151] In my opinion, Dr. Surana's inclusion of the days between November 16 to November 18 in her assessment of the significance of the November 15 Disclosure on Akumin share price is incorrect as there were no statistically significant price movements on these dates.

176. In addition, while the Surana Report justifies extension of the event window due to the publication of analyst reports on those days, and references the level of trading volume, the lack of statistically significant price movements on these days is not consistent with the analyst

[151] Surana Report, ¶ 163.

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reports providing value-relevant information to the market, the movements of Akumin's price on these dates are sometimes inconsistent with the tone of the reports that Dr. Surana indicates caused them, and volume on these dates was around or below the average level (as measured by Dr. Surana). In light of these considerations, using the extended event window is inconsistent with Dr. Surana's own opinion that the market for Akumin's shares was efficient.

8. There Was No Statistically Significant Response to the November 8 Disclosure, which for the First Time Quantified the Impact of the Cost Reclassification

177. As discussed in Section 3.5.3 above, on November 8, 2021 Akumin provided a further update on the status of the MCTO granted by the OSC in August 2021. The Company reiterated the information from the October 12 Disclosure, and added for the first time its estimate of the quantitative impact of correcting the accounting issue of capitalizing rather than expensing certain repair and maintenance costs related to its legacy business (i.e., not Alliance). Akumin indicated that the correction was expected to result in a reduction of approximately US$18.8 million (from US$79.2 million to US$60.4 million) in net book value of property and equipment as at June 30, 2021 compared to the value originally reported as of March 31, 2021.[152]

178. The Surana Report presents an event study finding that the November 8 Disclosure was not followed by a statistically significant price change.[153] Dr. Surana opines that, "[t]he lack of a statistically significant stock price response to the November 8, 2021 Disclosure indicates that the negative impact of this disclosure was already incorporated into Akumin's stock price following the October 12, 2021 Disclosure."[154]

179. I agree with the Surana Report that there was no statistically significant price change in Akumin's share price following the November 8 Disclosure. However, I disagree with

[152] Akumin Inc., "Akumin Provides Bi-Weekly MCTO Status Update", November 8, 2021 (filed on SEDAR at 7:02 ET).

[153] Surana Report, ¶ 139.

[154] Surana Report, ¶ 142.

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the Surana Report's contention that this lack of a statistically significant stock price response indicates that any impact of the November 8 Disclosure was already incorporated into Akumin's share price following the October 12 Disclosure.

180. First, as set out above, there was no statistically significant price decline following the October 12 Disclosure. Furthermore, given that the November 8 Disclosure was the first time that the Company provided a quantitative assessment of the impact of correcting the accounting issue of capitalizing rather than expensing certain repair and maintenance costs related to its legacy business, the market could not have reacted to this news following the October 12 Disclosure. The lack of a statistically significant movement in Akumin's share price in response to the November 8 Disclosure provides an objective indication that the market did not consider the restatement in respect of this issue to be economically material.

181. I present the event study and review of analyst commentary following the November 8 Disclosure in the subsections below.

8.1. Event Study of Akumin's Common Share Price on November 8, 2021

182. On November 8, 2021, Akumin's share price increased by $0.03, from $2.16 at the close of trading on the previous trading day, November 5, to $2.19 at the close of trading on November 8.

183. **Table 8**, below, shows the event study of the reaction of Akumin's share price, which uses my market model to predict Akumin's return in the absence of Company-specific news, based on the movements of the broad market (the S&P/TSX Composite), health care sector (the S&P 600 Health Care Index), and the currency (USD-CAD foreign exchange rate). As can be seen in columns 3 through 7, Akumin's excess share price increase (i.e., adjusted for market, industry, and currency effects on price) on November 8, 2021 was not statistically significant.

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Table 8: Event Study of the Excess Change in Akumin's Share Price Following the Alleged Corrective Disclosure on November 8, 2021

Date	Stock Price	Excess Stock Price Return		t-statistic for Excess Stock Price Return		Cumulative Excess Stock Price Change [3]
		Daily	Cumulative	Daily [1]	Cumulative [2]	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
5-Nov-21	$ 2.16					
8-Nov-21	2.19	1.18%	1.18%	0.33	0.33	$0.03
9-Nov-21	2.14	-1.76%	-0.58%	(0.49)	(0.11)	($0.01)
10-Nov-21	2.17	2.22%	1.64%	0.62	0.26	$0.04
11-Nov-21	2.32	5.55%	7.19%	1.54	1.00	$0.17
12-Nov-21	2.32	-0.14%	7.05%	(0.04)	0.88	$0.17

Notes and Sources:
Data are from Bloomberg. Prices shown for Akumin are Canadian composite.
Returns are continuously compounded (i.e., logarithmic) returns.
A more detailed version of this table is included in **Exhibit 6**.
[1] Excess return t-statistics are calculated as the daily excess return divided by the standard error of the regression over the estimation period. Two stars (**) represent significance at the 5% level, and one star (*) represents significance at the 10% level.
[2] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by [(the standard error of the regression over the sample period) times (the square root of the number of days cumulated)]. Two stars (**) represents significance at the 5% level: one star (*) represents significance at the 10% level.
[3] The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

8.2. Commentary From Analysts and News Coverage

184. I have identified only one analyst report issued by National Bank on November 8, 2021.[155] The analysts noted that:

> [The capitalization (vs. expensing) of repair and maintenance capex] suggests that, alongside the writedown of the higher-margin attorney A/R, the margins of AKU legacy operations will likely decrease in the coming quarters.

[155] "Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization," National Bank, November 8, 2021.

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185. The analysts with National Bank maintained their recommendation on Akumin shares but reduced the target price "to reflect the heightened uncertainty on assumptions regarding the legacy AKU business."[156]

186. Further, National Bank analysts noted the Company disclosed that the practice of the capitalization (instead of expensing) of repair and maintenance costs is related to its legacy operations rather than the Alliance acquisition and noted that "[t]he correction of these practices is expected to result in […] a ~US$19 mln writedown."[157]

187. The November 8 Disclosure was followed by news coverage that was limited to either reporting the content of the Company's news release or mentioning the target price change at National Bank just discussed.

9. Analyst Commentary Indicates the Resolution of Uncertainty Contributed to the Statistically Significant Akumin Share Price Increase Following the November 15 Disclosure

188. The statistically significant Akumin share price increase on November 15, 2021, as described above in Section 7, implies that the information conveyed by the November 15 Disclosure was considered by the market to be positive as compared to the mix of information immediately preceding the announcement. To evaluate the market's reaction to this disclosure, I reviewed the analyst reports published on and immediately after November 15, 2021.[158]

189. As discussed above in Section 3.5.4, in the November 15 Disclosure Akumin also announced 2Q21 financial results (after a delay of approximately three months). Akumin also disclosed its final restated financials for FY 2019, FY 2020, and 1Q21 and published the

[156] "Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization," National Bank, November 8, 2021.

[157] "Q3/21 Filings Delayed to Dec. 15, 2021; PPE Writedown on Excess Capitalization," National Bank, November 8, 2021.

[158] This includes a report published by Clarus, which Dr. Surana indicates was not available to her at the time of filing her report in this matter.

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Business Acquisition Report, which included Alliance's results for the quarter ending June 2021 (i.e., Alliance's 2Q21).[159] 2Q21 was the final quarter for which separate results would be published for Akumin and Alliance.[160]

190. I agree with certain of the conclusions expressed in the Surana Report relating to the reaction of Akumin's share price to aspects of the November 15 Disclosure. In particular, I agree that:

a. The impact of the restatement on Akumin's financials was in line with what had been reported in the October 12 Disclosure and November 8 Disclosure.[161]

b. The Company's 2Q21 financial results were "mixed", with some aspects exceeding and some missing expectations.[162]

191. Alliance's 2Q21 financial results were also described as "solid" and otherwise as moderately positive.[163]

192. My review of analyst commentary indicates that the resolution of the uncertainty and delay relating to the Company's financials, as a consequence of the publication of the 2Q21 financials and restatement contributed to the statistically significant Akumin share price increase on November 15, 2021. For example:

a. National Bank's August 16, 2021 report mentioned the delay in reporting of the 2Q21 financials disclosed the prior day (along with debt levels and

[159] Akumin Inc., Form 51-102F4: Business Acquisition Report, dated November 15, 2021.

[160] Akumin Inc., Condensed Consolidated Financial Statements (Unaudited) dated September 30, 2021, filed December 13, 2021.

[161] Surana Report, ¶ 158.

[162] Surana Report, ¶¶ 150, 154.

[163] "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2", Clarus, November 16, 2021; "High Torque Equity Requires Execution", Cormark, November 17, 2021.

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the pending Alliance acquisition) as a reason it was remaining "on the sidelines";[164]

b. On September 20, 2021, Canaccord wrote, "the stock is likely to remain under pressure until AKU files its Q2/21 results".[165]

c. On October 13, 2021, Cormark's investment conclusion for Akumin was: "We expect the stock to remain under pressure near term, but see quick re-rate potential if the accounting issues resolve as outlined in our forecast."[166]

193. In addition, Moody's, evaluating and rating Akumin's debt, highlighted continuing delays as a negative factor in its assessment of Akumin. On September 15, 2021, Moody's lowered its outlook on Akumin to negative from stable, stating that this change "reflects the continued delay in Akumin's Q2 2021 filings, which increases risks in Moody's assessment of liquidity and governance." Moody's noted "a reduction in the amount available to draw under the company's revolving credit facility to [US]$10 million from $55 million, announced on September 13th."[167]

194. On October 14, 2021, following the October 12 Disclosure, which included a further delay in financial reporting, Moody's highlighted the risks and distraction associated with a "prolonged focus on reviewing and restating prior reporting periods".[168]

195. Moreover, commentary following November 15 is consistent with a positive effect from this uncertainty having been resolved by the publication of the Company's delayed

[164] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank, August 16, 2021.

[165] "Closes acquisition of Alliance Healthcare Services," Canacord, September 20, 2021.

[166] "Reporting Delays Continue," Cormark, October 13, 2021.

[167] "Moody's affirms Akumin's B3 CFR; changes outlook to negative", Moody's Investors Service, September 15, 2021.

[168] "Moody's says Akumin's filing delay and accounting review are credit negative", Moody's Investors Service, October 14, 2021.

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2Q21 financials and the restatement. National Bank titled its report following the November 15 Disclosure, "Filing of Delayed Q2/2021 Financials Provides Some Clarity". The analyst stated:

> [T]he filing of re-stated financials provides clarity (on receivables, costs, margins) for which we tick our target EV/EBITDA multiple up to 7.5x (was 7x) […].[169]

196. Consistent with the above-referenced comment by Moody's indicating that the distraction of the reporting delays had "heighten[ed] integration risks surrounding the recent acquisition of Alliance", following the restatement on November 15, 2021, analyst commentary highlighted the future opportunities associated with the combined entity. For example, Clarus stated, "[t]he Alliance acquisition is nothing short of transformative for Akumin, adding substantial scale in radiology, a new high-margin business line in oncology clinics, and diversification of payers".[170]

197. In short, Akumin's share price increase on November 15, 2021 is consistent with analyst commentary indicating that uncertainty and distraction had weighed on Akumin's price during the period over which the 2Q21 financials were delayed, and that this uncertainty was largely resolved by the November 15 Disclosure, allowing the Company to focus on integrating Alliance.

198. In conclusion, based on a review of the Company disclosure and analyst reaction, the resolution of uncertainty attendant on Akumin's delayed 2Q21 financials and the restatement contributed to the statistically significant excess share price increase of 14.2 percent following the November 15 Disclosure.

[169] "Filing of Delayed Q2/2021 Financials Provides Some Clarity", National Bank, November 15, 2021. Emphasis added. National Bank left its target price at US$2.00; the analyst noted a cautious outlook due to "very elevated leverage and concerns regarding the Alliance acquisition".

[170] "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2", Clarus, November 16, 2021. The analyst also noted that, during the previous month, a direct competitor of Alliance had sold for a higher price, relative to EBITDA, by comparison to which Akumin's acquisition of Alliance appeared favourably priced.

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Robert Patton
Managing Director

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Exhibit 1
Akumin, Inc.
Breakdown of Trading Volume During the Proposed Class Period and Surana Analysis Period

Date [1]	Canadian Composite Volume [2]	US Composite Volume	Total Volume	Percent of Total Volume in Canada	Percent of Total Volume in US
(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
Full Proposed Class Period (15-May-19 - 12-Nov-21)					
Total	45,445,227	34,158,993	79,604,220	57.09 %	42.91 %
Surana Analysis Period (25-Jun-21 - 19-Nov-21)					
Total	4,077,507	11,158,698	15,236,205	26.76 %	73.24 %
15-May-19	44,263	-	44,263	100.00 %	- %
16-May-19	37,321	-	37,321	100.00	-
17-May-19	14,100	-	14,100	100.00	-
20-May-19	-	-	-	-	-
21-May-19	12,932	-	12,932	100.00	-
22-May-19	-	-	-	-	-
23-May-19	-	-	-	-	-
24-May-19	5,000	900	5,900	84.75	15.25
27-May-19	200	-	200	100.00	-
28-May-19	20,305	-	20,305	100.00	-
29-May-19	112,850	2,000	114,850	98.26	1.74
30-May-19	77,500	50,600	128,100	60.50	39.50
31-May-19	22,500	-	22,500	100.00	-
3-Jun-19	215,520	-	215,520	100.00	-
4-Jun-19	14,100	-	14,100	100.00	-
5-Jun-19	98,800	4,400	103,200	95.74	4.26
6-Jun-19	247,479	1	247,480	100.00	0.00
7-Jun-19	65,350	-	65,350	100.00	-
10-Jun-19	13,000	-	13,000	100.00	-
11-Jun-19	7,033	6,635	13,668	51.46	48.54
12-Jun-19	10,000	15,000	25,000	40.00	60.00
13-Jun-19	13,630	-	13,630	100.00	-
14-Jun-19	5,564	-	5,564	100.00	-
17-Jun-19	4,659	-	4,659	100.00	-
18-Jun-19	3,000	-	3,000	100.00	-
19-Jun-19	7,463	-	7,463	100.00	-
20-Jun-19	11,552	3,567	15,119	76.41	23.59
21-Jun-19	18,000	-	18,000	100.00	-
24-Jun-19	4,000	-	4,000	100.00	-
25-Jun-19	3,245	300	3,545	91.54	8.46
26-Jun-19	29,675	1,000	30,675	96.74	3.26
27-Jun-19	23,124	1,000	24,124	95.85	4.15
28-Jun-19	24,900	1,000	25,900	96.14	3.86
1-Jul-19	-	-	-	-	-
2-Jul-19	1,540	-	1,540	100.00	-
3-Jul-19	29,200	10,000	39,200	74.49	25.51
4-Jul-19	7,400	-	7,400	100.00	-
5-Jul-19	49,718	23,000	72,718	68.37	31.63
8-Jul-19	15,970	-	15,970	100.00	-
9-Jul-19	-	-	-	-	-
10-Jul-19	3,700	1,000	4,700	78.72	21.28
11-Jul-19	12,065	-	12,065	100.00	-
12-Jul-19	20,300	-	20,300	100.00	-
15-Jul-19	12,150	-	12,150	100.00	-
16-Jul-19	4,500	-	4,500	100.00	-
17-Jul-19	3,549	-	3,549	100.00	-
18-Jul-19	2,000	-	2,000	100.00	-

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(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
19-Jul-19	1,600	-	1,600	100.00 %	- %
22-Jul-19	13,000	-	13,000	100.00	-
23-Jul-19	7,900	-	7,900	100.00	-
24-Jul-19	306,205	-	306,205	100.00	-
25-Jul-19	27,532	-	27,532	100.00	-
26-Jul-19	85,750	7,500	93,250	91.96	8.04
29-Jul-19	-	-	-	-	-
30-Jul-19	27,000	-	27,000	100.00	-
31-Jul-19	8,950	-	8,950	100.00	-
1-Aug-19	20,000	-	20,000	100.00	-
2-Aug-19	1,800	-	1,800	100.00	-
5-Aug-19	-	100	100	-	100.00
6-Aug-19	18,790	-	18,790	100.00	-
7-Aug-19	1,675	-	1,675	100.00	-
8-Aug-19	25,138	-	25,138	100.00	-
9-Aug-19	8,950	-	8,950	100.00	-
12-Aug-19	1,700	-	1,700	100.00	-
13-Aug-19	23,950	500	24,450	97.96	2.04
14-Aug-19	30,000	-	30,000	100.00	-
15-Aug-19	9,700	-	9,700	100.00	-
16-Aug-19	11,100	1,000	12,100	91.74	8.26
19-Aug-19	11,800	2,000	13,800	85.51	14.49
20-Aug-19	2,000	-	2,000	100.00	-
21-Aug-19	500	500	1,000	50.00	50.00
22-Aug-19	5,590	-	5,590	100.00	-
23-Aug-19	-	-	-	-	-
26-Aug-19	8,350	-	8,350	100.00	-
27-Aug-19	53,800	-	53,800	100.00	-
28-Aug-19	9,910	-	9,910	100.00	-
29-Aug-19	9,960	-	9,960	100.00	-
30-Aug-19	47,900	-	47,900	100.00	-
3-Sep-19	2,200	-	2,200	100.00	-
4-Sep-19	31,500	-	31,500	100.00	-
5-Sep-19	115,739	-	115,739	100.00	-
6-Sep-19	29,300	630	29,930	97.90	2.10
9-Sep-19	88,300	-	88,300	100.00	-
10-Sep-19	33,486	-	33,486	100.00	-
11-Sep-19	2,408	-	2,408	100.00	-
12-Sep-19	11,900	500	12,400	95.97	4.03
13-Sep-19	22,571	6	22,577	99.97	0.03
16-Sep-19	7,300	-	7,300	100.00	-
17-Sep-19	19,400	4,031	23,431	82.80	17.20
18-Sep-19	17,800	1,000	18,800	94.68	5.32
19-Sep-19	74,291	-	74,291	100.00	-
20-Sep-19	2,000	100	2,100	95.24	4.76
23-Sep-19	80,600	-	80,600	100.00	-
24-Sep-19	2,425	-	2,425	100.00	-
25-Sep-19	19,800	-	19,800	100.00	-
26-Sep-19	64,500	-	64,500	100.00	-
27-Sep-19	51,800	-	51,800	100.00	-
30-Sep-19	17,075	-	17,075	100.00	-
1-Oct-19	48,357	-	48,357	100.00	-
2-Oct-19	25,500	400	25,900	98.46	1.54
3-Oct-19	12,502	4,000	16,502	75.76	24.24
4-Oct-19	10,400	7,900	18,300	56.83	43.17

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(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
7-Oct-19	13,535	1,285	14,820	91.33 %	8.67 %
8-Oct-19	9,400	3,700	13,100	71.76	28.24
9-Oct-19	23,650	9,000	32,650	72.43	27.57
10-Oct-19	31,195	4,600	35,795	87.15	12.85
11-Oct-19	213,200	24,700	237,900	89.62	10.38
14-Oct-19	-	-	-	-	-
15-Oct-19	3,000	-	3,000	100.00	-
16-Oct-19	215,679	1,000	216,679	99.54	0.46
17-Oct-19	924,585	700	925,285	99.92	0.08
18-Oct-19	20,600	-	20,600	100.00	-
21-Oct-19	28,490	-	28,490	100.00	-
22-Oct-19	27,100	1,000	28,100	96.44	3.56
23-Oct-19	1,650	-	1,650	100.00	-
24-Oct-19	33,496	-	33,496	100.00	-
25-Oct-19	54,700	1,100	55,800	98.03	1.97
28-Oct-19	27,675	-	27,675	100.00	-
29-Oct-19	3,700	-	3,700	100.00	-
30-Oct-19	48,500	-	48,500	100.00	-
31-Oct-19	23,216	-	23,216	100.00	-
1-Nov-19	13,800	1,000	14,800	93.24	6.76
4-Nov-19	3,600	500	4,100	87.80	12.20
5-Nov-19	22,100	300	22,400	98.66	1.34
6-Nov-19	1,800	1,000	2,800	64.29	35.71
7-Nov-19	7,000	100	7,100	98.59	1.41
8-Nov-19	575	105	680	84.56	15.44
11-Nov-19	23,900	-	23,900	100.00	-
12-Nov-19	29,950	-	29,950	100.00	-
13-Nov-19	428,204	8,280	436,484	98.10	1.90
14-Nov-19	355,626	10,313	365,939	97.18	2.82
15-Nov-19	806,485	6,977	813,462	99.14	0.86
18-Nov-19	211,869	-	211,869	100.00	-
19-Nov-19	55,412	200	55,612	99.64	0.36
20-Nov-19	196,542	1,800	198,342	99.09	0.91
21-Nov-19	70,922	-	70,922	100.00	-
22-Nov-19	64,250	-	64,250	100.00	-
25-Nov-19	58,613	50	58,663	99.91	0.09
26-Nov-19	25,409	-	25,409	100.00	-
27-Nov-19	41,800	50	41,850	99.88	0.12
28-Nov-19	91,595	-	91,595	100.00	-
29-Nov-19	9,603	250	9,853	97.46	2.54
2-Dec-19	70,204	-	70,204	100.00	-
3-Dec-19	9,497	100	9,597	98.96	1.04
4-Dec-19	66,361	-	66,361	100.00	-
5-Dec-19	194,558	-	194,558	100.00	-
6-Dec-19	1,084,295	-	1,084,295	100.00	-
9-Dec-19	106,444	-	106,444	100.00	-
10-Dec-19	688,583	-	688,583	100.00	-
11-Dec-19	479,511	5,500	485,011	98.87	1.13
12-Dec-19	91,828	3,892	95,720	95.93	4.07
13-Dec-19	63,515	-	63,515	100.00	-
16-Dec-19	121,393	-	121,393	100.00	-
17-Dec-19	126,616	4,300	130,916	96.72	3.28
18-Dec-19	197,191	-	197,191	100.00	-
19-Dec-19	106,160	6,200	112,360	94.48	5.52
20-Dec-19	32,900	-	32,900	100.00	-

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(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
23-Dec-19	72,938	2,000	74,938	97.33 %	2.67 %
24-Dec-19	21,709	-	21,709	100.00	-
26-Dec-19	-	3,000	3,000	-	100.00
27-Dec-19	16,100	-	16,100	100.00	-
30-Dec-19	76,493	11,100	87,593	87.33	12.67
31-Dec-19	27,950	-	27,950	100.00	-
2-Jan-20	37,243	15,000	52,243	71.29	28.71
3-Jan-20	141,077	12,800	153,877	91.68	8.32
6-Jan-20	19,450	-	19,450	100.00	-
7-Jan-20	217,257	24,600	241,857	89.83	10.17
8-Jan-20	762,575	5,400	767,975	99.30	0.70
9-Jan-20	126,680	19,600	146,280	86.60	13.40
10-Jan-20	474,995	3,225	478,220	99.33	0.67
13-Jan-20	86,960	7,659	94,619	91.91	8.09
14-Jan-20	73,332	1,500	74,832	98.00	2.00
15-Jan-20	25,797	100	25,897	99.61	0.39
16-Jan-20	79,793	144	79,937	99.82	0.18
17-Jan-20	36,760	250	37,010	99.32	0.68
20-Jan-20	27,840	-	27,840	100.00	-
21-Jan-20	583,480	750	584,230	99.87	0.13
22-Jan-20	145,120	400	145,520	99.73	0.27
23-Jan-20	511,723	6,655	518,378	98.72	1.28
24-Jan-20	141,851	6,400	148,251	95.68	4.32
27-Jan-20	151,155	-	151,155	100.00	-
28-Jan-20	85,393	14,250	99,643	85.70	14.30
29-Jan-20	48,910	2,500	51,410	95.14	4.86
30-Jan-20	15,174	-	15,174	100.00	-
31-Jan-20	68,595	-	68,595	100.00	-
3-Feb-20	23,702	2,500	26,202	90.46	9.54
4-Feb-20	18,165	-	18,165	100.00	-
5-Feb-20	21,957	-	21,957	100.00	-
6-Feb-20	6,545	-	6,545	100.00	-
7-Feb-20	61,691	-	61,691	100.00	-
10-Feb-20	104,600	2,000	106,600	98.12	1.88
11-Feb-20	27,070	1,300	28,370	95.42	4.58
12-Feb-20	55,065	-	55,065	100.00	-
13-Feb-20	54,650	7,000	61,650	88.65	11.35
14-Feb-20	57,068	38	57,106	99.93	0.07
18-Feb-20	638,454	41,700	680,154	93.87	6.13
19-Feb-20	608,173	2,100	610,273	99.66	0.34
20-Feb-20	256,846	-	256,846	100.00	-
21-Feb-20	487,362	900	488,262	99.82	0.18
24-Feb-20	130,278	18,150	148,428	87.77	12.23
25-Feb-20	236,074	500	236,574	99.79	0.21
26-Feb-20	32,188	28	32,216	99.91	0.09
27-Feb-20	147,460	18,750	166,210	88.72	11.28
28-Feb-20	47,690	3,311	51,001	93.51	6.49
2-Mar-20	144,275	-	144,275	100.00	-
3-Mar-20	16,823	3,500	20,323	82.78	17.22
4-Mar-20	56,103	-	56,103	100.00	-
5-Mar-20	33,826	420	34,246	98.77	1.23
6-Mar-20	100,300	-	100,300	100.00	-
9-Mar-20	102,404	-	102,404	100.00	-
10-Mar-20	42,568	-	42,568	100.00	-
11-Mar-20	58,150	21,270	79,420	73.22	26.78

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Date [1]	Canadian Composite Volume [2]	US Composite Volume	Total Volume	Percent of Total Volume in Canada	Percent of Total Volume in US
(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
12-Mar-20	61,210	300	61,510	99.51 %	0.49 %
13-Mar-20	94,430	3,200	97,630	96.72	3.28
16-Mar-20	22,656	-	22,656	100.00	-
17-Mar-20	72,675	-	72,675	100.00	-
18-Mar-20	95,163	-	95,163	100.00	-
19-Mar-20	101,856	15,505	117,361	86.79	13.21
20-Mar-20	1,626,001	-	1,626,001	100.00	-
23-Mar-20	74,328	16,200	90,528	82.10	17.90
24-Mar-20	531,832	13,300	545,132	97.56	2.44
25-Mar-20	78,365	30,410	108,775	72.04	27.96
26-Mar-20	69,420	1,000	70,420	98.58	1.42
27-Mar-20	12,349	-	12,349	100.00	-
30-Mar-20	22,430	-	22,430	100.00	-
31-Mar-20	14,950	-	14,950	100.00	-
1-Apr-20	35,625	12,000	47,625	74.80	25.20
2-Apr-20	152,816	-	152,816	100.00	-
3-Apr-20	28,585	100	28,685	99.65	0.35
6-Apr-20	205,110	-	205,110	100.00	-
7-Apr-20	78,895	13,500	92,395	85.39	14.61
8-Apr-20	219,350	-	219,350	100.00	-
9-Apr-20	311,031	200	311,231	99.94	0.06
13-Apr-20	28,012	-	28,012	100.00	-
14-Apr-20	7,126	-	7,126	100.00	-
15-Apr-20	4,273	1,380	5,653	75.59	24.41
16-Apr-20	13,383	3,000	16,383	81.69	18.31
17-Apr-20	22,100	400	22,500	98.22	1.78
20-Apr-20	17,609	-	17,609	100.00	-
21-Apr-20	2,163	-	2,163	100.00	-
22-Apr-20	2,348	-	2,348	100.00	-
23-Apr-20	16,000	-	16,000	100.00	-
24-Apr-20	2,300	-	2,300	100.00	-
27-Apr-20	10,363	-	10,363	100.00	-
28-Apr-20	17,401	5,200	22,601	76.99	23.01
29-Apr-20	52,950	1,400	54,350	97.42	2.58
30-Apr-20	7,100	-	7,100	100.00	-
1-May-20	94,555	400	94,955	99.58	0.42
4-May-20	255,300	-	255,300	100.00	-
5-May-20	48,708	100	48,808	99.80	0.20
6-May-20	20,153	150	20,303	99.26	0.74
7-May-20	15,510	-	15,510	100.00	-
8-May-20	2,445	400	2,845	85.94	14.06
11-May-20	20,100	-	20,100	100.00	-
12-May-20	53,970	200	54,170	99.63	0.37
13-May-20	16,900	-	16,900	100.00	-
14-May-20	126,224	2,500	128,724	98.06	1.94
15-May-20	6,461	-	6,461	100.00	-
18-May-20	-	-	-	-	-
19-May-20	55,443	-	55,443	100.00	-
20-May-20	83,816	2,016	85,832	97.65	2.35
21-May-20	6,500	350	6,850	94.89	5.11
22-May-20	27,320	400	27,720	98.56	1.44
25-May-20	22,400	-	22,400	100.00	-
26-May-20	7,891	1,800	9,691	81.43	18.57
27-May-20	13,800	3,500	17,300	79.77	20.23
28-May-20	30,982	31,946	62,928	49.23	50.77

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(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
29-May-20	27,764	-	27,764	100.00 %	- %
1-Jun-20	4,507	3,300	7,807	57.73	42.27
2-Jun-20	7,123	400	7,523	94.68	5.32
3-Jun-20	380,602	120,539	501,141	75.95	24.05
4-Jun-20	274,605	1,100	275,705	99.60	0.40
5-Jun-20	907,105	3,119	910,224	99.66	0.34
8-Jun-20	286,652	1,010	287,662	99.65	0.35
9-Jun-20	124,847	5,100	129,947	96.08	3.92
10-Jun-20	12,585	3,678	16,263	77.38	22.62
11-Jun-20	42,618	5,750	48,368	88.11	11.89
12-Jun-20	38,042	-	38,042	100.00	-
15-Jun-20	23,468	2,511	25,979	90.33	9.67
16-Jun-20	141,078	2,350	143,428	98.36	1.64
17-Jun-20	14,125	2,000	16,125	87.60	12.40
18-Jun-20	12,510	-	12,510	100.00	-
19-Jun-20	39,449	395	39,844	99.01	0.99
22-Jun-20	21,770	3,910	25,680	84.77	15.23
23-Jun-20	21,897	6,792	28,689	76.33	23.67
24-Jun-20	37,227	12	37,239	99.97	0.03
25-Jun-20	64,247	30,000	94,247	68.17	31.83
26-Jun-20	6,980	600	7,580	92.08	7.92
29-Jun-20	9,672	400	10,072	96.03	3.97
30-Jun-20	2,700	600	3,300	81.82	18.18
1-Jul-20	-	1,050	1,050	-	100.00
2-Jul-20	5,785	-	5,785	100.00	-
3-Jul-20	120,706	-	120,706	100.00	-
6-Jul-20	29,573	5,700	35,273	83.84	16.16
7-Jul-20	43,042	-	43,042	100.00	-
8-Jul-20	45,041	-	45,041	100.00	-
9-Jul-20	55,210	27,400	82,610	66.83	33.17
10-Jul-20	21,895	11,346	33,241	65.87	34.13
13-Jul-20	17,069	-	17,069	100.00	-
14-Jul-20	53,770	380	54,150	99.30	0.70
15-Jul-20	81,755	8,800	90,555	90.28	9.72
16-Jul-20	53,900	-	53,900	100.00	-
17-Jul-20	27,121	250	27,371	99.09	0.91
20-Jul-20	282,363	600	282,963	99.79	0.21
21-Jul-20	10,125	-	10,125	100.00	-
22-Jul-20	102,155	-	102,155	100.00	-
23-Jul-20	46,358	-	46,358	100.00	-
24-Jul-20	53,270	11,400	64,670	82.37	17.63
27-Jul-20	138,271	200	138,471	99.86	0.14
28-Jul-20	7,045	1,000	8,045	87.57	12.43
29-Jul-20	18,590	100	18,690	99.46	0.54
30-Jul-20	45,164	250	45,414	99.45	0.55
31-Jul-20	26,770	10,900	37,670	71.06	28.94
3-Aug-20	-	-	-	-	-
4-Aug-20	39,737	29,800	69,537	57.15	42.85
5-Aug-20	24,656	5,510	30,166	81.73	18.27
6-Aug-20	389,074	-	389,074	100.00	-
7-Aug-20	70,106	33,200	103,306	67.86	32.14
10-Aug-20	132,459	45,745	178,204	74.33	25.67
11-Aug-20	107,235	1,300	108,535	98.80	1.20
12-Aug-20	115,270	100	115,370	99.91	0.09
13-Aug-20	1,981,689	17,012	1,998,701	99.15	0.85

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Date [1]	Canadian Composite Volume [2]	US Composite Volume	Total Volume	Percent of Total Volume in Canada	Percent of Total Volume in US
(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
14-Aug-20	73,710	10	73,720	99.99 %	0.01 %
17-Aug-20	67,017	3,000	70,017	95.72	4.28
18-Aug-20	55,618	1,012	56,630	98.21	1.79
19-Aug-20	96,766	1,000	97,766	98.98	1.02
20-Aug-20	50,054	390	50,444	99.23	0.77
21-Aug-20	554,185	2,610	556,795	99.53	0.47
24-Aug-20	28,913	300	29,213	98.97	1.03
25-Aug-20	129,487	2,030	131,517	98.46	1.54
26-Aug-20	130,355	10	130,365	99.99	0.01
27-Aug-20	38,061	-	38,061	100.00	-
28-Aug-20	180,942	-	180,942	100.00	-
31-Aug-20	100,199	-	100,199	100.00	-
1-Sep-20	135,075	1,165	136,240	99.14	0.86
2-Sep-20	12,600	100	12,700	99.21	0.79
3-Sep-20 [3]	123,925	13,287	137,212	90.32	9.68
4-Sep-20	18,470	12,830	31,300	59.01	40.99
8-Sep-20 [4]	72,291	9,199	81,490	88.71	11.29
9-Sep-20	9,010	8,527	17,537	51.38	48.62
10-Sep-20	2,700	16,194	18,894	14.29	85.71
11-Sep-20	10,750	406	11,156	96.36	3.64
14-Sep-20	84,943	137,368	222,311	38.21	61.79
15-Sep-20	182,744	302,507	485,251	37.66	62.34
16-Sep-20	61,474	501,111	562,585	10.93	89.07
17-Sep-20	7,300	1,621	8,921	81.83	18.17
18-Sep-20	15,712	72,774	88,486	17.76	82.24
21-Sep-20	29,550	23,615	53,165	55.58	44.42
22-Sep-20	14,191	7,934	22,125	64.14	35.86
23-Sep-20	138,110	95,548	233,658	59.11	40.89
24-Sep-20	16,745	30,100	46,845	35.75	64.25
25-Sep-20	5,296	14,038	19,334	27.39	72.61
28-Sep-20	112,025	71,703	183,728	60.97	39.03
29-Sep-20	45,890	18,828	64,718	70.91	29.09
30-Sep-20	20,695	12,172	32,867	62.97	37.03
1-Oct-20	34,850	32,655	67,505	51.63	48.37
2-Oct-20	2,571	6,701	9,272	27.73	72.27
5-Oct-20	7,391	15,391	22,782	32.44	67.56
6-Oct-20	9,142	18,110	27,252	33.55	66.45
7-Oct-20	33,795	1,357,298	1,391,093	2.43	97.57
8-Oct-20	24,213	37,826	62,039	39.03	60.97
9-Oct-20	143,935	174,319	318,254	45.23	54.77
12-Oct-20	-	85	85	-	100.00
13-Oct-20	36,260	341,756	378,016	9.59	90.41
14-Oct-20	10,614	38,458	49,072	21.63	78.37
15-Oct-20	40,203	116,138	156,341	25.71	74.29
16-Oct-20	77,499	108,776	186,275	41.60	58.40
19-Oct-20	38,093	158,748	196,841	19.35	80.65
20-Oct-20	49,143	362,717	411,860	11.93	88.07
21-Oct-20	24,672	136,056	160,728	15.35	84.65
22-Oct-20	6,648	11,796	18,444	36.04	63.96
23-Oct-20	31,055	361,596	392,651	7.91	92.09
26-Oct-20	17,925	12,128	30,053	59.64	40.36
27-Oct-20	25,005	84,110	109,115	22.92	77.08
28-Oct-20	68,402	162,658	231,060	29.60	70.40
29-Oct-20	18,025	115,103	133,128	13.54	86.46
30-Oct-20	15,995	61,613	77,608	20.61	79.39

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(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
2-Nov-20	13,925	74,281	88,206	15.79 %	84.21 %
3-Nov-20	12,519	21,217	33,736	37.11	62.89
4-Nov-20	26,109	107,430	133,539	19.55	80.45
5-Nov-20	53,650	133,895	187,545	28.61	71.39
6-Nov-20	10,600	14,638	25,238	42.00	58.00
9-Nov-20	20,073	73,257	93,330	21.51	78.49
10-Nov-20	13,984	113,756	127,740	10.95	89.05
11-Nov-20	25,284	106,940	132,224	19.12	80.88
12-Nov-20	23,803	53,481	77,284	30.80	69.20
13-Nov-20	16,596	64,404	81,000	20.49	79.51
16-Nov-20	24,587	41,513	66,100	37.20	62.80
17-Nov-20	26,550	32,238	58,788	45.16	54.84
18-Nov-20	33,449	53,783	87,232	38.34	61.66
19-Nov-20	15,090	19,222	34,312	43.98	56.02
20-Nov-20	25,878	66,926	92,804	27.88	72.12
23-Nov-20	1,349,885	748,204	2,098,089	64.34	35.66
24-Nov-20	13,974	18,328	32,302	43.26	56.74
25-Nov-20	18,100	11,621	29,721	60.90	39.10
26-Nov-20	4,200	-	4,200	100.00	-
27-Nov-20	7,730	33,791	41,521	18.62	81.38
30-Nov-20	20,831	40,986	61,817	33.70	66.30
1-Dec-20	77,055	29,122	106,177	72.57	27.43
2-Dec-20	8,256	17,245	25,501	32.38	67.62
3-Dec-20	55,862	42,872	98,734	56.58	43.42
4-Dec-20	26,629	11,947	38,576	69.03	30.97
7-Dec-20	13,811	30,254	44,065	31.34	68.66
8-Dec-20	20,648	70,654	91,302	22.62	77.38
9-Dec-20	47,576	889	48,465	98.17	1.83
10-Dec-20	58,894	53,910	112,804	52.21	47.79
11-Dec-20	44,860	263,473	308,333	14.55	85.45
14-Dec-20	31,488	66,491	97,979	32.14	67.86
15-Dec-20	63,963	162,641	226,604	28.23	71.77
16-Dec-20	19,106	178,860	197,966	9.65	90.35
17-Dec-20	26,300	72,789	99,089	26.54	73.46
18-Dec-20	10,103	31,477	41,580	24.30	75.70
21-Dec-20	25,645	60,302	85,947	29.84	70.16
22-Dec-20	6,100	23,657	29,757	20.50	79.50
23-Dec-20	3,231	21,544	24,775	13.04	86.96
24-Dec-20	13,420	38,619	52,039	25.79	74.21
28-Dec-20	-	10,330	10,330	-	100.00
29-Dec-20	43,716	299,626	343,342	12.73	87.27
30-Dec-20	7,600	43,275	50,875	14.94	85.06
31-Dec-20	14,700	30,612	45,312	32.44	67.56
4-Jan-21	16,240	5,371	21,611	75.15	24.85
5-Jan-21	52,550	52,066	104,616	50.23	49.77
6-Jan-21	28,528	52,611	81,139	35.16	64.84
7-Jan-21	29,673	134,238	163,911	18.10	81.90
8-Jan-21	8,062	32,307	40,369	19.97	80.03
11-Jan-21	8,337	16,031	24,368	34.21	65.79
12-Jan-21	4,937	13,629	18,566	26.59	73.41
13-Jan-21	9,700	62,011	71,711	13.53	86.47
14-Jan-21	95,657	29,032	124,689	76.72	23.28
15-Jan-21	185,650	6,725	192,375	96.50	3.50
18-Jan-21	5,285	-	5,285	100.00	-
19-Jan-21	279,089	103,934	383,023	72.86	27.14

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(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
20-Jan-21	16,980	26,737	43,717	38.84 %	61.16 %
21-Jan-21	15,715	27,393	43,108	36.45	63.55
22-Jan-21	1,296,660	1,287,485	2,584,145	50.18	49.82
25-Jan-21	23,196	11,715	34,911	66.44	33.56
26-Jan-21	62,822	61,842	124,664	50.39	49.61
27-Jan-21	10,756	40,560	51,316	20.96	79.04
28-Jan-21	20,772	16,803	37,575	55.28	44.72
29-Jan-21	11,125	40,018	51,143	21.75	78.25
1-Feb-21	20,231	18,900	39,131	51.70	48.30
2-Feb-21	4,115	2,764	6,879	59.82	40.18
3-Feb-21	10,742	21,406	32,148	33.41	66.59
4-Feb-21	12,903	11,361	24,264	53.18	46.82
5-Feb-21	3,420	30,909	34,329	9.96	90.04
8-Feb-21	12,442	19,853	32,295	38.53	61.47
9-Feb-21	14,178	87,232	101,410	13.98	86.02
10-Feb-21	29,612	152,537	182,149	16.26	83.74
11-Feb-21	21,887	87,788	109,675	19.96	80.04
12-Feb-21	48,651	141,100	189,751	25.64	74.36
16-Feb-21	30,460	241,796	272,256	11.19	88.81
17-Feb-21	650,931	3,324,983	3,975,914	16.37	83.63
18-Feb-21	233,212	307,190	540,402	43.16	56.84
19-Feb-21	135,730	318,342	454,072	29.89	70.11
22-Feb-21	68,626	150,536	219,162	31.31	68.69
23-Feb-21	148,163	271,699	419,862	35.29	64.71
24-Feb-21	44,370	62,053	106,423	41.69	58.31
25-Feb-21	23,892	43,319	67,211	35.55	64.45
26-Feb-21	30,312	33,772	64,084	47.30	52.70
1-Mar-21	50,906	76,143	127,049	40.07	59.93
2-Mar-21	24,034	53,424	77,458	31.03	68.97
3-Mar-21	32,126	38,606	70,732	45.42	54.58
4-Mar-21	27,620	99,074	126,694	21.80	78.20
5-Mar-21	54,992	191,073	246,065	22.35	77.65
8-Mar-21	53,299	82,630	135,929	39.21	60.79
9-Mar-21	22,602	62,234	84,836	26.64	73.36
10-Mar-21	45,840	43,066	88,906	51.56	48.44
11-Mar-21	23,198	62,654	85,852	27.02	72.98
12-Mar-21	7,322	11,947	19,269	38.00	62.00
15-Mar-21	19,506	16,652	36,158	53.95	46.05
16-Mar-21	5,684	68,383	74,067	7.67	92.33
17-Mar-21	35,633	128,575	164,208	21.70	78.30
18-Mar-21	19,564	47,707	67,271	29.08	70.92
19-Mar-21	14,213	34,487	48,700	29.18	70.82
22-Mar-21	16,334	81,600	97,934	16.68	83.32
23-Mar-21	19,767	31,087	50,854	38.87	61.13
24-Mar-21	19,798	25,717	45,515	43.50	56.50
25-Mar-21	7,477	18,005	25,482	29.34	70.66
26-Mar-21	9,891	26,642	36,533	27.07	72.93
29-Mar-21	3,880	8,440	12,320	31.49	68.51
30-Mar-21	7,815	63,958	71,773	10.89	89.11
31-Mar-21	6,062	19,690	25,752	23.54	76.46
1-Apr-21	290,558	896,022	1,186,580	24.49	75.51
5-Apr-21	65,681	142,547	208,228	31.54	68.46
6-Apr-21	18,520	25,258	43,778	42.30	57.70
7-Apr-21	12,058	69,803	81,861	14.73	85.27
8-Apr-21	9,063	424,697	433,760	2.09	97.91

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Exhibit 1
Akumin, Inc.
Breakdown of Trading Volume During the Proposed Class Period and Surana Analysis Period

Date [1]	Canadian Composite Volume [2]	US Composite Volume	Total Volume	Percent of Total Volume in Canada	Percent of Total Volume in US
(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
9-Apr-21	18,192	56,558	74,750	24.34 %	75.66 %
12-Apr-21	81,971	84,416	166,387	49.27	50.73
13-Apr-21	15,968	21,750	37,718	42.34	57.66
14-Apr-21	29,265	43,458	72,723	40.24	59.76
15-Apr-21	33,972	913,320	947,292	3.59	96.41
16-Apr-21	28,728	44,476	73,204	39.24	60.76
19-Apr-21	22,003	30,128	52,131	42.21	57.79
20-Apr-21	40,977	26,118	67,095	61.07	38.93
21-Apr-21	29,575	51,037	80,612	36.69	63.31
22-Apr-21	31,697	41,206	72,903	43.48	56.52
23-Apr-21	19,700	20,146	39,846	49.44	50.56
26-Apr-21	52,449	17,652	70,101	74.82	25.18
27-Apr-21	7,250	40,150	47,400	15.30	84.70
28-Apr-21	22,019	16,694	38,713	56.88	43.12
29-Apr-21	11,348	25,114	36,462	31.12	68.88
30-Apr-21	19,610	23,077	42,687	45.94	54.06
3-May-21	20,270	14,157	34,427	58.88	41.12
4-May-21	44,557	80,496	125,053	35.63	64.37
5-May-21	11,175	25,177	36,352	30.74	69.26
6-May-21	16,450	26,856	43,306	37.99	62.01
7-May-21	9,250	19,291	28,541	32.41	67.59
10-May-21	11,510	13,165	24,675	46.65	53.35
11-May-21	5,100	18,502	23,602	21.61	78.39
12-May-21	12,571	32,651	45,222	27.80	72.20
13-May-21	14,500	20,644	35,144	41.26	58.74
14-May-21	7,003	96,708	103,711	6.75	93.25
17-May-21	14,774	58,205	72,979	20.24	79.76
18-May-21	9,134	19,116	28,250	32.33	67.67
19-May-21	11,140	24,767	35,907	31.02	68.98
20-May-21	77,216	69,120	146,336	52.77	47.23
21-May-21	11,139	13,163	24,302	45.84	54.16
24-May-21	-	32,618	32,618	-	100.00
25-May-21	29,106	25,708	54,814	53.10	46.90
26-May-21	8,630	45,448	54,078	15.96	84.04
27-May-21	10,070	23,295	33,365	30.18	69.82
28-May-21	18,100	31,758	49,858	36.30	63.70
31-May-21	11,000	-	11,000	100.00	-
1-Jun-21	100,950	33,575	134,525	75.04	24.96
2-Jun-21	37,394	31,482	68,876	54.29	45.71
3-Jun-21	9,500	20,651	30,151	31.51	68.49
4-Jun-21	7,605	52,249	59,854	12.71	87.29
7-Jun-21	61,478	160,928	222,406	27.64	72.36
8-Jun-21	27,122	1,034,700	1,061,822	2.55	97.45
9-Jun-21	65,985	78,383	144,368	45.71	54.29
10-Jun-21	46,861	27,881	74,742	62.70	37.30
11-Jun-21	30,310	21,487	51,797	58.52	41.48
14-Jun-21	30,274	20,056	50,330	60.15	39.85
15-Jun-21	10,950	14,087	25,037	43.74	56.26
16-Jun-21	6,913	10,822	17,735	38.98	61.02
17-Jun-21	9,970	23,184	33,154	30.07	69.93
18-Jun-21	9,500	10,682	20,182	47.07	52.93
21-Jun-21	3,400	9,160	12,560	27.07	72.93
22-Jun-21	26,092	14,552	40,644	64.20	35.80
23-Jun-21	5,240	10,848	16,088	32.57	67.43
24-Jun-21	31,309	50,011	81,320	38.50	61.50

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Date [1]	Canadian Composite Volume [2]	US Composite Volume	Total Volume	Percent of Total Volume in Canada	Percent of Total Volume in US
(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
25-Jun-21	128,438	1,153,840	1,282,278	10.02 %	89.98 %
28-Jun-21	27,793	181,087	208,880	13.31	86.69
29-Jun-21	16,715	56,780	73,495	22.74	77.26
30-Jun-21	35,525	1,885,881	1,921,406	1.85	98.15
1-Jul-21	-	55,412	55,412	-	100.00
2-Jul-21	18,872	69,456	88,328	21.37	78.63
5-Jul-21	1,263	-	1,263	100.00	-
6-Jul-21	4,990	74,026	79,016	6.32	93.68
7-Jul-21	3,400	31,505	34,905	9.74	90.26
8-Jul-21	36,627	30,957	67,584	54.19	45.81
9-Jul-21	6,200	31,796	37,996	16.32	83.68
12-Jul-21	1,000	8,452	9,452	10.58	89.42
13-Jul-21	10,823	68,228	79,051	13.69	86.31
14-Jul-21	16,780	19,596	36,376	46.13	53.87
15-Jul-21	7,400	32,164	39,564	18.70	81.30
16-Jul-21	3,300	7,412	10,712	30.81	69.19
19-Jul-21	9,090	19,431	28,521	31.87	68.13
20-Jul-21	10,590	13,107	23,697	44.69	55.31
21-Jul-21	7,620	3,031	10,651	71.54	28.46
22-Jul-21	8,800	10,298	19,098	46.08	53.92
23-Jul-21	1,730	4,956	6,686	25.87	74.13
26-Jul-21	19,100	37,535	56,635	33.72	66.28
27-Jul-21	1,100	19,395	20,495	5.37	94.63
28-Jul-21	6,100	5,806	11,906	51.23	48.77
29-Jul-21	7,800	15,824	23,624	33.02	66.98
30-Jul-21	14,123	516,399	530,522	2.66	97.34
2-Aug-21	-	7,296	7,296	-	100.00
3-Aug-21	15,820	29,905	45,725	34.60	65.40
4-Aug-21	12,706	22,844	35,550	35.74	64.26
5-Aug-21	5,840	31,568	37,408	15.61	84.39
6-Aug-21	1,793	10,610	12,403	14.46	85.54
9-Aug-21	2,330	9,794	12,124	19.22	80.78
10-Aug-21	28,496	41,935	70,431	40.46	59.54
11-Aug-21	8,020	17,602	25,622	31.30	68.70
12-Aug-21	13,500	35,204	48,704	27.72	72.28
13-Aug-21	16,052	17,724	33,776	47.52	52.48
16-Aug-21	152,499	335,020	487,519	31.28	68.72
17-Aug-21	118,983	367,996	486,979	24.43	75.57
18-Aug-21	27,995	105,324	133,319	21.00	79.00
19-Aug-21	22,285	151,846	174,131	12.80	87.20
20-Aug-21	119,221	437,706	556,927	21.41	78.59
23-Aug-21	29,765	58,789	88,554	33.61	66.39
24-Aug-21	19,847	30,514	50,361	39.41	60.59
25-Aug-21	2,956	19,781	22,737	13.00	87.00
26-Aug-21	11,956	56,545	68,501	17.45	82.55
27-Aug-21	41,051	71,685	112,736	36.41	63.59
30-Aug-21	22,517	96,427	118,944	18.93	81.07
31-Aug-21	19,443	60,400	79,843	24.35	75.65
1-Sep-21	39,561	192,443	232,004	17.05	82.95
2-Sep-21	76,024	376,490	452,514	16.80	83.20
3-Sep-21	29,739	75,377	105,116	28.29	71.71
7-Sep-21	45,769	233,608	279,377	16.38	83.62
8-Sep-21	19,955	90,405	110,360	18.08	81.92
9-Sep-21	41,199	98,228	139,427	29.55	70.45
10-Sep-21	42,882	101,316	144,198	29.74	70.26

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Date [1]	Canadian Composite Volume [2]	US Composite Volume	Total Volume	Percent of Total Volume in Canada	Percent of Total Volume in US
(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)
13-Sep-21	25,283	74,416	99,699	25.36 %	74.64 %
14-Sep-21	42,097	130,769	172,866	24.35	75.65
15-Sep-21	20,810	96,484	117,294	17.74	82.26
16-Sep-21	13,009	33,039	46,048	28.25	71.75
17-Sep-21	14,503	14,847	29,350	49.41	50.59
20-Sep-21	19,680	12,330	32,010	61.48	38.52
21-Sep-21	19,909	13,247	33,156	60.05	39.95
22-Sep-21	47,656	6,557	54,213	87.91	12.09
23-Sep-21	11,065	8,837	19,902	55.60	44.40
24-Sep-21	20,150	13,141	33,291	60.53	39.47
27-Sep-21	17,192	33,782	50,974	33.73	66.27
28-Sep-21	52,263	45,657	97,920	53.37	46.63
29-Sep-21	18,492	4,035	22,527	82.09	17.91
30-Sep-21	38,689	37,332	76,021	50.89	49.11
1-Oct-21	21,742	25,704	47,446	45.82	54.18
4-Oct-21	22,649	39,219	61,868	36.61	63.39
5-Oct-21	4,518	3,437	7,955	56.79	43.21
6-Oct-21	14,844	15,274	30,118	49.29	50.71
7-Oct-21	13,455	16,262	29,717	45.28	54.72
8-Oct-21	12,590	10,193	22,783	55.26	44.74
11-Oct-21	-	4,711	4,711	-	100.00
12-Oct-21	13,116	158,445	171,561	7.65	92.35
13-Oct-21	154,516	214,471	368,987	41.88	58.12
14-Oct-21	83,729	111,664	195,393	42.85	57.15
15-Oct-21	37,157	71,087	108,244	34.33	65.67
18-Oct-21	37,343	24,972	62,315	59.93	40.07
19-Oct-21	72,163	173,058	245,221	29.43	70.57
20-Oct-21	1,029,039	425,619	1,454,658	70.74	29.26
21-Oct-21	81,179	88,597	169,776	47.82	52.18
22-Oct-21	77,446	103,004	180,450	42.92	57.08
25-Oct-21	36,477	167,859	204,336	17.85	82.15
26-Oct-21	43,121	155,229	198,350	21.74	78.26
27-Oct-21	27,305	77,562	104,867	26.04	73.96
28-Oct-21	21,045	38,997	60,042	35.05	64.95
29-Oct-21	14,547	11,776	26,323	55.26	44.74
1-Nov-21	14,008	16,723	30,731	45.58	54.42
2-Nov-21	16,943	97,973	114,916	14.74	85.26
3-Nov-21	25,111	32,466	57,577	43.61	56.39
4-Nov-21	14,565	16,138	30,703	47.44	52.56
5-Nov-21	8,657	13,959	22,616	38.28	61.72
8-Nov-21	41,929	50,708	92,637	45.26	54.74
9-Nov-21	9,905	62,145	72,050	13.75	86.25
10-Nov-21	97,573	235,881	333,454	29.26	70.74
11-Nov-21	31,939	65,274	97,213	32.85	67.15
12-Nov-21	33,450	58,540	91,990	36.36	63.64
15-Nov-21	53,934	299,550	353,484	15.26	84.74
16-Nov-21	74,659	87,361	162,020	46.08	53.92
17-Nov-21	24,252	37,381	61,633	39.35	60.65
18-Nov-21	21,719	29,571	51,290	42.35	57.65
19-Nov-21	36,701	56,659	93,360	39.31	60.69

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Date [1]	Canadian Composite Volume [2]	US Composite Volume	Total Volume	Percent of Total Volume in Canada	Percent of Total Volume in US
(1)	(2)	(3)	(4) = (2) + (3)	(5) = (2) / (4)	(6) = (3) / (4)

Notes and Sources:

Data are from Bloomberg L.P.

[1] Includes both Canadian and US trading days.

[2] Includes volume for USD-denominated shares listed on the TSX.

[3] At the start of trading on September 3, 2020, Akumin common shares were listed in the U.S. on the NASDAQ.

[4] After the close of trading on September 8, 2020, USD-denominated Akumin common shares were delisted from the TSX.

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Exhibit 2
Akumin Inc.
Calculation of the Excess Share Price Change Following the Announcement of the Alliance Acquisition on June 25, 2021

Date	Closing Share Price	Share Price Return	S&P/TSX Composite Index Return[1]	S&P 600 Health Care Index Net Return[2]	Daily FX Rate Change[3]	Predicted Return[4]	Excess Return	t-statistic for Excess Return[5]	Cumulative Excess Return	t-statistic for Cumulative Excess Return[6]	Cumulative Share Price Reaction to Disclosure[7]
(1)	(2)	(3) ln[(2)/prev(2)]	(4)	(5)	(6)	(7)	(8) (3)-(7)	(9)	(10) (8)+prev(10)	(11)	(12)
24-Jun-21	$ 3.81										
25-Jun-21	4.10	7.3%	0.1%	0.6%	(0.3%)	0.1%	7.2%	2.012 **	7.2%	2.012 **	$ 0.29
28-Jun-21	3.91	(4.7%)	(0.4%)	(0.2%)	0.4%	(0.7%)	(4.1%)	(1.135)	3.2%	0.620	0.13
29-Jun-21	4.00	2.3%	0.2%	(1.3%)	0.5%	(0.3%)	2.6%	0.725	5.8%	0.925	0.23
30-Jun-21	3.95	(1.3%)	(0.0%)	(0.1%)	(0.0%)	(0.4%)	(0.8%)	(0.231)	4.9%	0.685	0.20
2-Jul-21	4.14	4.7%	0.3%	(0.4%)	(0.6%)	(0.7%)	5.4%	1.508	10.4%	1.287	0.43

Notes and Sources:

Data were obtained from Bloomberg L.P. Akumin prices are Canadian composite closing prices.

[1] Returns to the S&P/TSX Composite Total Return Index, a broad market index.

[2] Returns to the S&P 600 Health Care Total Return Index. Returns are net of the returns to the broad market index (orthogonalized).

[3] Change in the currency exchange rate (the value of one US$ in terms of C$).

[4] Returns are predicted using daily returns as a function of the daily returns on the S&P/TSX Composite Total Return Index, the S&P 600 Health Care Total Return Index, and the Daily FX Rate Change. The regression model is estimated over the period from June 25, 2021 to December 15, 2021 (120 trading days minus impact dates of Alleged Public Corrective Statements and subsequent 4 trading days as described in the Surana Report).

[5] "t-Statistics" are statistical measures of the degree of significance of the excess returns to Akumin's shares and are calculated as the excess return divided by the standard error of the regression.
An excess return with a t-statistic of greater than approximately +/- 1.99 is statistically significant at the 5% level (indicated by two stars).
An excess return with a t-statistic greater than approximately +/- 1.66 is statistically significant at the 10% level (indicated by one star).

[6] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by the standard error of the regression over the sample period times the square root of the number of days cumulated. Two stars indicate significance at the 5% level, and one star indicates significance at the 10% level.

[7] Calculated using the formula: $-(1-\exp((9)+s^2\times(\text{Days})/2))\times\$3.81$, where s represents the standard error of the regression. The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

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Exhibit 3
Akumin Inc.
Calculation of the Excess Share Price Change Following the Alleged Public Corrective Statement on August 15, 2021

Date	Closing Share Price	Share Price Return	S&P/TSX Composite Index Return[1]	S&P 600 Health Care Index Net Return[2]	Daily FX Rate Change[3]	Predicted Return[4]	Excess Return	t-statistic for Excess Return[5]	Cumulative Excess Return	t-statistic for Cumulative Excess Return[6]	Cumulative Share Price Reaction to Disclosure[7]
(1)	(2)	(3) ln[(2)/prev(2)]	(4)	(5)	(6)	(7)	(8) (3)-(7)	(9)	(10) (8)+prev(10)	(11)	(12)
13-Aug-21	$ 3.73										
16-Aug-21	3.05	(20.1%)	(0.2%)	0.3%	0.5%	0.2%	(20.4%)	(5.658) **	(20.4%)	(5.658) **	$ (0.69)
17-Aug-21	2.84	(7.1%)	(0.6%)	0.5%	0.4%	(0.3%)	(6.8%)	(1.888) *	(27.2%)	(5.336) **	(0.88)
18-Aug-21	2.84	0.0%	(0.3%)	(0.6%)	0.2%	(0.9%)	0.9%	0.252	(26.2%)	(4.211) **	(0.86)
19-Aug-21	2.72	(4.3%)	(0.4%)	(0.4%)	1.3%	0.2%	(4.5%)	(1.254)	(30.8%)	(4.274) **	(0.98)
20-Aug-21	2.93	7.4%	0.6%	1.0%	(0.1%)	1.4%	6.1%	1.684 *	(24.7%)	(3.069) **	(0.81)

Notes and Sources:

Data were obtained from Bloomberg L.P. Akumin prices are Canadian composite closing prices.

[1] Returns to the S&P/TSX Composite Total Return Index, a broad market index.

[2] Returns to the S&P 600 Health Care Total Return Index. Returns are net of the returns to the broad market index (orthogonalized).

[3] Change in the currency exchange rate (the value of one US$ in terms of C$).

[4] Returns are predicted using daily returns as a function of the daily returns on the S&P/TSX Composite Total Return Index, the S&P 600 Health Care Total Return Index, and the Daily FX Rate Change. The regression model is estimated over the period from June 25, 2021 to December 15, 2021 (120 trading days minus impact dates of Alleged Public Corrective Statements and subsequent 4 trading days as described in the Surana Report).

[5] "t-Statistics" are statistical measures of the degree of significance of the excess returns to Akumin's shares and are calculated as the excess return divided by the standard error of the regression.
An excess return with a t-statistic of greater than approximately +/- 1.99 is statistically significant at the 5% level (indicated by two stars).
An excess return with a t-statistic greater than approximately +/- 1.66 is statistically significant at the 10% level (indicated by one star).

[6] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by the standard error of the regression over the sample period times the square root of the number of days cumulated. Two stars indicate significance at the 5% level, and one star indicates significance at the 10% level.

[7] Calculated using the formula: $-(1-\exp((9)+s^2\times(\text{Days})/2))\times\$3.73$, where s represents the standard error of the regression. The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

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Exhibit 4
Akumin Inc.
Calculation of the Excess Share Price Change Following the Closing of the Alliance Acquisition on September 1, 2021

Date	Closing Share Price	Share Price Return	S&P/TSX Composite Index Return[1]	S&P 600 Health Care Index Net Return[2]	Daily FX Rate Change[3]	Predicted Return[4]	Excess Return	t-statistic for Excess Return[5]	Cumulative Excess Return	t-statistic for Cumulative Excess Return[6]	Cumulative Share Price Reaction to Disclosure[7]
(1)	(2)	(3) ln[(2)/prev(2)]	(4)	(5)	(6)	(7)	(8) (3)-(7)	(9)	(10) (8)+prev(10)	(11)	(12)
31-Aug-21	$ 2.72										
1-Sep-21	3.14	14.4%	0.5%	0.2%	0.0%	0.8%	13.6%	3.781 **	13.6%	3.781 **	$ 0.40
2-Sep-21	3.15	0.3%	0.5%	0.4%	(0.5%)	0.3%	0.1%	0.015	13.7%	2.684 **	0.40
3-Sep-21	3.06	(2.9%)	0.1%	(1.1%)	(0.2%)	(1.1%)	(1.8%)	(0.489)	11.9%	1.909 *	0.35
7-Sep-21	2.90	(5.4%)	(0.1%)	(1.1%)	1.0%	(0.2%)	(5.2%)	(1.447)	6.7%	0.930	0.20
8-Sep-21	2.87	(1.0%)	(0.3%)	0.1%	0.3%	(0.3%)	(0.7%)	(0.201)	6.0%	0.742	0.18

Notes and Sources:

Data were obtained from Bloomberg L.P. Akumin prices are Canadian composite closing prices.

[1] Returns to the S&P/TSX Composite Total Return Index, a broad market index.

[2] Returns to the S&P 600 Health Care Total Return Index. Returns are net of the returns to the broad market index (orthogonalized).

[3] Change in the currency exchange rate (the value of one US$ in terms of C$).

[4] Returns are predicted using daily returns as a function of the daily returns on the S&P/TSX Composite Total Return Index, the S&P 600 Health Care Total Return Index, and the Daily FX Rate Change. The regression model is estimated over the period from June 25, 2021 to December 15, 2021 (120 trading days minus impact dates of Alleged Public Corrective Statements and subsequent 4 trading days as described in the Surana Report).

[5] "t-Statistics" are statistical measures of the degree of significance of the excess returns to Akumin's shares and are calculated as the excess return divided by the standard error of the regression.
An excess return with a t-statistic of greater than approximately +/- 1.99 is statistically significant at the 5% level (indicated by two stars).
An excess return with a t-statistic greater than approximately +/- 1.66 is statistically significant at the 10% level (indicated by one star).

[6] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by the standard error of the regression over the sample period times the square root of the number of days cumulated. Two stars indicate significance at the 5% level, and one star indicates significance at the 10% level.

[7] Calculated using the formula: $-(1-\exp((9)+s^2\times(\text{Days})/2))\times\$2.72$, where s represents the standard error of the regression. The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

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Exhibit 5
Akumin Inc.
Calculation of the Excess Share Price Change Following the Alleged Public Corrective Statement on October 12, 2021

Date	Closing Share Price	Share Price Return	S&P/TSX Composite Index Return[1]	S&P 600 Health Care Index Net Return[2]	Daily FX Rate Change[3]	Predicted Return[4]	Excess Return	t-statistic for Excess Return[5]	Cumulative Excess Return	t-statistic for Cumulative Excess Return[6]	Cumulative Share Price Reaction to Disclosure[7]
(1)	(2)	(3) ln[(2)/prev(2)]	(4)	(5)	(6)	(7)	(8) (3)-(7)	(9)	(10) (8)+prev(10)	(11)	(12)
8-Oct-21	$ 3.10										
12-Oct-21	3.01	(2.9%)	0.1%	(0.4%)	(0.0%)	(0.4%)	(2.5%)	(0.703)	(2.5%)	(0.703)	$ (0.08)
13-Oct-21	2.74	(9.4%)	0.9%	(1.1%)	(0.2%)	0.1%	(9.5%)	(2.640) **	(12.0%)	(2.364) **	(0.35)
14-Oct-21	2.62	(4.5%)	1.0%	(0.9%)	(0.6%)	(0.0%)	(4.5%)	(1.241)	(16.5%)	(2.646) **	(0.47)
15-Oct-21	2.55	(2.7%)	0.5%	(1.2%)	(0.0%)	(0.3%)	(2.4%)	(0.664)	(18.9%)	(2.624) **	(0.53)
18-Oct-21	2.53	(0.8%)	0.3%	(0.5%)	0.1%	(0.1%)	(0.7%)	(0.185)	(19.6%)	(2.430) **	(0.54)

Notes and Sources:

Data were obtained from Bloomberg L.P. Akumin prices are Canadian composite closing prices.

[1] Returns to the S&P/TSX Composite Total Return Index, a broad market index.

[2] Returns to the S&P 600 Health Care Total Return Index. Returns are net of the returns to the broad market index (orthogonalized).

[3] Change in the currency exchange rate (the value of one US$ in terms of C$).

[4] Returns are predicted using daily returns as a function of the daily returns on the S&P/TSX Composite Total Return Index, the S&P 600 Health Care Total Return Index, and the Daily FX Rate Change. The regression model is estimated over the period from June 25, 2021 to December 15, 2021 (120 trading days minus impact dates of Alleged Public Corrective Statements and subsequent 4 trading days as described in the Surana Report).

[5] "t-Statistics" are statistical measures of the degree of significance of the excess returns to Akumin's shares and are calculated as the excess return divided by the standard error of the regression.
An excess return with a t-statistic of greater than approximately +/- 1.99 is statistically significant at the 5% level (indicated by two stars).
An excess return with a t-statistic greater than approximately +/- 1.66 is statistically significant at the 10% level (indicated by one star).

[6] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by the standard error of the regression over the sample period times the square root of the number of days cumulated. Two stars indicate significance at the 5% level, and one star indicates significance at the 10% level.

[7] Calculated using the formula: $-(1-\exp((9)+s^2\times(\text{Days})/2))\times\$3.10$, where s represents the standard error of the regression. The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

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Exhibit 6
Akumin Inc.
Calculation of the Excess Share Price Change Following the Alleged Public Corrective Statement on November 8, 2021

Date	Closing Share Price	Share Price Return	S&P/TSX Composite Index Return[1]	S&P 600 Health Care Index Net Return[2]	Daily FX Rate Change[3]	Predicted Return[4]	Excess Return	t-statistic for Excess Return[5]	Cumulative Excess Return	t-statistic for Cumulative Excess Return[6]	Cumulative Share Price Reaction to Disclosure[7]
(1)	(2)	(3) ln[(2)/prev(2)]	(4)	(5)	(6)	(7)	(8) (3)-(7)	(9)	(10) (8)+prev(10)	(11)	(12)
5-Nov-21	$ 2.16										
8-Nov-21	2.19	1.4%	0.5%	(0.2%)	(0.1%)	0.2%	1.2%	0.329	1.2%	0.329	$ 0.03
9-Nov-21	2.14	(2.3%)	0.2%	(0.7%)	(0.0%)	(0.5%)	(1.8%)	(0.489)	(0.6%)	(0.113)	(0.01)
10-Nov-21	2.17	1.4%	(0.6%)	(0.1%)	0.4%	(0.8%)	2.2%	0.616	1.6%	0.263	0.04
11-Nov-21	2.32	6.7%	0.6%	(0.3%)	0.7%	1.1%	5.5%	1.541	7.2%	0.999	0.17
12-Nov-21	2.32	0.0%	0.9%	(1.1%)	(0.2%)	0.1%	(0.1%)	(0.038)	7.1%	0.876	0.17

Notes and Sources:

Data were obtained from Bloomberg L.P. Akumin prices are Canadian composite closing prices.

[1] Returns to the S&P/TSX Composite Total Return Index, a broad market index.

[2] Returns to the S&P 600 Health Care Total Return Index. Returns are net of the returns to the broad market index (orthogonalized).

[3] Change in the currency exchange rate (the value of one US$ in terms of C$).

[4] Returns are predicted using daily returns as a function of the daily returns on the S&P/TSX Composite Total Return Index, the S&P 600 Health Care Total Return Index, and the Daily FX Rate Change. The regression model is estimated over the period from June 25, 2021 to December 15, 2021 (120 trading days minus impact dates of Alleged Public Corrective Statements and subsequent 4 trading days as described in the Surana Report).

[5] "t-Statistics" are statistical measures of the degree of significance of the excess returns to Akumin's shares and are calculated as the excess return divided by the standard error of the regression.
An excess return with a t-statistic of greater than approximately +/- 1.99 is statistically significant at the 5% level (indicated by two stars).
An excess return with a t-statistic greater than approximately +/- 1.66 is statistically significant at the 10% level (indicated by one star).

[6] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by the standard error of the regression over the sample period times the square root of the number of days cumulated. Two stars indicate significance at the 5% level, and one star indicates significance at the 10% level.

[7] Calculated using the formula: $-(1-\exp((9)+s^2\times(\text{Days})/2))\times\$2.16$, where s represents the standard error of the regression. The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

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Exhibit 7
Akumin Inc.
Calculation of the Excess Share Price Change Following the Alleged Public Corrective Statement on November 15, 2021

Date	Closing Share Price	Share Price Return	S&P/TSX Composite Index Return[1]	S&P 600 Health Care Index Net Return[2]	Daily FX Rate Change[3]	Predicted Return[4]	Excess Return	t-statistic for Excess Return[5]	Cumulative Excess Return	t-statistic for Cumulative Excess Return[6]	Cumulative Share Price Reaction to Disclosure[7]
(1)	(2)	(3) ln[(2)/prev(2)]	(4)	(5)	(6)	(7)	(8) (3)-(7)	(9)	(10) (8)+prev(10)	(11)	(12)
12-Nov-21	$ 2.32										
15-Nov-21	2.64	12.9%	(0.4%)	(0.1%)	(0.3%)	(1.3%)	14.2%	3.944 **	14.2%	3.944 **	$ 0.36
16-Nov-21	2.55	(3.5%)	0.2%	0.2%	0.3%	0.5%	(4.0%)	(1.105)	10.2%	2.008 **	0.25
17-Nov-21	2.41	(5.6%)	(0.3%)	0.1%	0.4%	(0.2%)	(5.4%)	(1.509)	4.8%	0.768	0.12
18-Nov-21	2.33	(3.4%)	(0.1%)	(1.0%)	(0.1%)	(1.2%)	(2.2%)	(0.608)	2.6%	0.361	0.07
19-Nov-21	2.18	(6.7%)	(0.4%)	0.2%	0.3%	(0.4%)	(6.2%)	(1.735) *	(3.6%)	(0.453)	(0.08)

Notes and Sources:

Data were obtained from Bloomberg L.P. Akumin prices are Canadian composite closing prices.

[1] Returns to the S&P/TSX Composite Total Return Index, a broad market index.

[2] Returns to the S&P 600 Health Care Total Return Index. Returns are net of the returns to the broad market index (orthogonalized).

[3] Change in the currency exchange rate (the value of one US$ in terms of C$).

[4] Returns are predicted using daily returns as a function of the daily returns on the S&P/TSX Composite Total Return Index, the S&P 600 Health Care Total Return Index, and the Daily FX Rate Change. The regression model is estimated over the period from June 25, 2021 to December 15, 2021 (120 trading days minus impact dates of Alleged Public Corrective Statements and subsequent 4 trading days as described in the Surana Report).

[5] "t-Statistics" are statistical measures of the degree of significance of the excess returns to Akumin's shares and are calculated as the excess return divided by the standard error of the regression.
An excess return with a t-statistic of greater than approximately +/- 1.99 is statistically significant at the 5% level (indicated by two stars).
An excess return with a t-statistic greater than approximately +/- 1.66 is statistically significant at the 10% level (indicated by one star).

[6] Cumulative excess return t-statistics are calculated as the cumulative excess return divided by the standard error of the regression over the sample period times the square root of the number of days cumulated. Two stars indicate significance at the 5% level, and one star indicates significance at the 10% level.

[7] Calculated using the formula: $-(1-\exp((9)+s^2\times(\text{Days})/2))\times\$2.32$, where s represents the standard error of the regression. The boxed number is the statistically significant cumulative share price change at the end of the event window (if any). The event window is defined as the lesser of the number of consecutive days with statistically significant daily excess returns at the 5 percent level or the number of days before additional company specific news is disclosed to the market.

Tab 19

Court File No. CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

TERRY LONGAIR

Plaintiff

and

AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP

Defendants

Proceeding under the *Class Proceedings Act, 1992*

Expert Reply Report of Sunita Surana, Ph.D.

November 20, 2023

TABLE OF CONTENTS

I INTRODUCTION AND SUMMARY OF OPINIONS 1

II QUALIFICATIONS, COMPENSATION, MATERIALS CONSIDERED AND ASSUMPTIONS 12

A. Qualifications and Compensation 12

B. Materials Considered 12

C. Assumptions 13

III AREAS OF AGREEMENT OR UNCONSTESTED ISSUES 13

IV MR. PATTON'S OVERARCHING CONCLUSION IS DISCONNECTED FROM THE ALLEGATIONS AND UNSUPPORTED BY DECADES OF WIDELY-ACCEPTED ACADEMIC LITERATURE 15

V LENGTH OF EVENT WINDOWS 21

A. Multi-Day Event Windows Are Widely Accepted and Used, Are Consistent with an Efficient Market, and Are Supported by Decades of Well-Regarded Academic Literature 22

B. The Literature Mr. Patton Cites Demonstrates that Stock Prices Can Take More Than a Single Day to Fully Reflect New Information 28

C. Mr. Patton's Mechanical Rule for Determining Event Windows Is Inconsistent with Decades of Academic Literature 31

D. Conclusion 36

VI THE AUGUST 15, 2021 DISCLOSURE 36

A. The August 15, 2021 Disclosure Was Related to the Alleged Misrepresentation Regarding Overstatement of Accounts Receivable and Mr. Patton's Attempt to Disassociate the Disclosure from the Resultant Restatement Is Misguided 38

B. After Accounting for Market, Industry and Exchange Rate Factors, Akumin's Stock Price After the Alliance Acquisition Was Completed on September 1, 2021 Was at Almost the Same Level as It Was After the Close on August 16, 2021 ... 43

VII THE OCTOBER 12, 2021 DISCLOSURE 54

A. Mr. Patton's Claim that A Multi-Day Event Window Is Inconsistent with an Efficient Market Stands in Stark Contrast with Decades of Academic Research; His Proposed Mechanical Approach Is Unsupported by the Sole Paper Mr. Patton Provides as Support 55

B. After the October 12, 2021 Disclosure, the Cormark Report Issued the Next Day Was the First Analyst Report to Update Its Forecasts, Lower Its Investment Rating, and Lower Its Price Target 59

C. Improper Capitalization of Expenses Simultaneously Increases Net Income (in the Period of Improper Capitalization) and Assets and Distorts the True Financial Strength of a Company 66

VIII THE NOVEMBER 8, 2021 DISCLOSURE 74

A. Corrective Disclosures Are Often Not Mirror Images and a Full Correction of a Prior Misrepresentation 75

B. Improper Capitalization of Repair and Maintenance Costs Is Not an Innocuous Accounting Error 78

IX THE NOVEMBER 15, 2021 DISCLOSURE 79

A. Multi-Day Event Windows Are Commonly Accepted and Used, Supported by Decades of Academic Scholarship, Whereas Mr. Patton's Mechanical Approach to Event Windows Is Unsupported 81

B. Mr. Patton's Explanation for the Price Increase on November 15, 2021 Ignores the Complete Price Reversal as the Market Fully Digested the Information 84

X MR. PATTON'S CRITICISMS RELATED TO MY DISCUSSION OF ACADEMIC LITERATURE AND ANALYST FOCUS ON KEY FINANCIAL METRICS ARE MISGUIDED 85

A. Academic Literature and Analyst Commentary During the Class Period Are Consistent with the Results of My Event Studies 86

B. Academic Literature Is Relevant to Understanding Expected Price Reactions . 88

C. Mr. Patton's Selective Reference to Analyst Commentary Belies the Importance of the Misrepresentations to Investors 92

I INTRODUCTION AND SUMMARY OF OPINIONS

1. I have been retained by counsel for the Plaintiff, Kalloghlian Myers LLP ("**Counsel**"), in the above-captioned proceeding. Previously in this proceeding, I submitted an Expert Report dated February 17, 2023 (the "**Surana Report**") in which I was asked to:

(a) Provide my opinion on whether analyst commentary and academic research indicate that the alleged misrepresentations made by Akumin Inc. ("**Akumin**" or the "**Company**") concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim,[1] would be expected to have an effect on the market price of Akumin's common stock.

(b) Calculate the 10-day volume weighted average common stock price after each public correction alleged in the Statement of Claim.

(c) Provide my opinion on whether the public corrections, as alleged in the Statement of Claim, had an effect on the price of Akumin's common stock. In so doing, explain whether the alleged public corrections corresponded to Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim.[2]

[1] Amended Statement of Claim in the above captioned proceeding, dated February 17, 2023 ("**Statement of Claim**"). The Class Period is defined as the period from May 15, 2019 at 7:46 am ET to November 15, 2021 at 7:04 am ET. Statement of Claim, ¶ 2.

[2] Surana Report, ¶ 1.

2. In summary, in the Surana Report, in response to the questions above, I opined as follows:

(a) In my opinion, analyst commentary and academic research indicate that Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, would be expected to have an effect on the market price of Akumin's common stock. Put another way, based on analyst commentary and academic research, had Akumin told the truth in respect to its misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, in my opinion, Akumin's common stock price would have declined. My opinion is based on:

(i) commentary by security analysts during the Class Period illustrating their reliance on Akumin's historical results and management guidance as well as their focus on the Company's accounts receivable and operating expenses; and

(ii) the academic literature on the importance of unanticipated earnings disclosures and restatements of historic financials.

(b) Akumin's 10-day volume weighted average common stock price:

(i) after the alleged public correction on August 15, 2021 was $2.90 per share, $0.83 per share or 22.1% lower than the closing price of $3.73 per share prior to the disclosure;

(ii) after the alleged public correction on October 12, 2021 was $2.34 per share, $0.76 per share or 24.5% lower than the closing price of $3.10 per share prior to the disclosure;

(iii) after the alleged public correction on November 8, 2021 was $2.37 per share, $0.21 per share or 9.7% higher than the closing price of $2.16 per share prior to the disclosure; and

(iii) after the alleged public correction on November 15, 2021 was $2.30 per share, $0.02 per share or 0.7% lower than the closing price of $2.32 per share prior to the disclosure.

(c) The public corrections on August 15, 2021 and October 12, 2021, as alleged in the Statement of Claim, caused statistically significant declines (at the 5% level) in the price of Akumin's common stock amid higher-than-normal trading volume. Commentary by security analysts and financial press reporting contemporaneously with the alleged public corrections underscores the significance of these alleged public corrections to Akumin's common stock.

The alleged public corrections on November 8, 2021 and November 15, 2021 (including follow-on analyst commentary) did not result in statistically significant declines in the price of Akumin's common stock. The lack of a statistically significant stock price response following these disclosures is consistent with the market having generally anticipated the information

from these disclosures after the August 15, 2021 and October 12, 2021 disclosures.

(d) The alleged public corrections corresponded with Akumin's Class Period misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim.[3]

3. On September 19, 2023, the Defendants submitted the expert report of Mr. Robert Patton (the "**Patton Report**") providing comments in response to the opinions expressed in the Surana Report.[4] For this report (the "**Surana Reply Report**"), I have been asked to evaluate and reply to the Patton Report.[5]

4. After reviewing the Patton Report, I maintain the opinions expressed in the Surana Report. In the following sections of this report, I provide detailed responses to the opinions expressed in the Patton Report. In summary, my responses to the Patton Report are as follows:

(a) I do not agree with Mr. Patton's opinion that "***none*** of the Company's disclosures ***relating*** to the restatement resulted in a statistically significant decline in Akumin's share price."[6] In forming this opinion, Mr. Patton either attempts to disassociate a corrective disclosure from the resulting restatement, advances an unsupported theory for event windows, or minimizes the significance of the allegations in this

[3] Surana Report, ¶ 3.

[4] *See*, *e.g.*, Patton Report, ¶ 2.

[5] In this report, unless otherwise stated, defined terms have the same meaning as ascribed to them in the Surana Report.

[6] Patton Report, ¶ 11 (emphasis added).

case. The import of Mr. Patton's opinion is that disclosures that related to the alleged misrepresentations concerning an accounts receivable overstatement as large as 27.0% to 32.2% of the previously reported accounts receivable balance, and improper capitalization of expenses of 23.7% of the previously reported net book value of property and equipment[7] are not value-relevant information for Akumin's stock price. I do not agree with this opinion. As I explained in the Surana Report, by the time Akumin filed its restated financial statements and related documents, Akumin's stock price had already incorporated the effects of the improper accounting.

(b) Mr. Patton's mechanical rule for determining the length of an event window that relies solely on the statistical significance of ***daily*** excess stock price returns is contradicted by decades of well-established academic literature. It is commonly recognized that stock price reactions can take longer than a day to fully reflect value-relevant information and, as such, to understand the full effect of the information, it is often appropriate to consider longer event windows. Even the sole paper Mr. Patton offers as support for his methodology contradicts his approach.

[7] Surana Report, ¶ 108 ("… assuming no change in accounts receivable between March 31, 2021 and June 30, 2021, the Company expected a reduction in the accounts receivable balance as of March 31, 2021 of between US$25.9 million and US$30.9 million, or 27.0% to 32.2% of the balance."); Surana Report, ¶ 134 ("… assuming no change in net book value of property and equipment between March 31, 2021 and June 30, 2021, US$18.8 million in expenses had been improperly capitalized."). 23.7% is equal to US$18.8 million divided by net book value of property and equipment of US$79.2 million as of March 31, 2021.

(c) Mr. Patton's discussion of stock price reactions within minutes of dissemination of information and his implication that examination of price movements beyond the first day is improper and, should a price reaction extend beyond the first day, that such a reaction cannot be reconciled with an efficient market, is contradicted by decades of well-established academic literature. Even the few articles Mr. Patton cites in support of his view do not suggest that, in an efficient market, the price reaction to an event must be completed within minutes or even a single day; to the contrary, these articles demonstrate that it may take more than a single day for the full price response to be reflected in the stock price.

(d) Mr. Patton tries to disassociate the August 15, 2021 Disclosure from the restatement of prior financials even though this disclosure was related to Akumin's Class Period misrepresentations that "required" the restatement of prior financials and related documents.[8] Mr. Patton, on the other hand, states the disclosure could have alerted the market that Akumin was "reviewing certain past periods in connection with finalizing the 2Q21 financials,"[9] suggesting that somehow the disclosure of potential credit losses informed the market that the disclosure entailed just a review and no financial consequences. The excess price decline, after accounting for market, industry and exchange rate factors, of -18.5% based on my model and -20.4% based on Mr. Patton's model, which represents the market's consensus

[8] "Akumin Provides Bi-weekly MCTO Status Update," *Canada NewsWire*, October 12, 2021, 7:00 am.

[9] Patton Report, ¶ 119.

view of the disclosure, is consistent with my interpretation of the August 15, 2021 Disclosure, not Mr. Patton's view.[10]

(e) The Patton Report states that as of August 16, 2021 there was concern about the completion of the Alliance acquisition due to the August 15, 2021 Disclosure and suggests that the stock price increase on September 1, 2021 when the deal completed was a reversal, at least in part, of the decline on August 16, 2021. Mr. Patton does not provide any contemporaneous support or empirical analysis to support his opinion. An analysis of Akumin's stock price shows that after accounting for market, industry and exchange rate factors, Akumin's stock price after the Alliance acquisition was completed on September 1, 2021 (*i.e.*, after the stock price had increased upon the completion of the deal and there was no longer any uncertainty about deal completion) was at almost the same level as it was after the close on August 16, 2021 when my event window for the August 15, 2021 Disclosure is complete.

(f) Mr. Patton's conclusion that the October 12, 2021 Disclosure was not associated with a statistically significant Akumin share price decline improperly excludes the full price impact from this disclosure. The Patton Report improperly ignores the price reaction to the disclosure as the information was digested by market participants following the release of the Cormark analyst report on October 13, 2021, which contained new, value relevant information, including revised forecasts, investment rating and price target for Akumin's stock. Mr. Patton's

[10] As in the Surana Report, the exchange rate denotes one US$ in terms of C$.

argument that the use of a two-day event window after the October 12, 2021 Disclosure is inconsistent with an efficient market is contradicted by decades of academic literature. While Mr. Patton concludes that the price reaction on October 12-13, 2021 should be ignored, he offers no alternate explanation for the large stock price decline over this event window.

(g) Although Mr. Patton does not explicitly state it, the Patton Report implies that improper capitalization of repair and maintenance expenses is not value-relevant information to Akumin's share price. I disagree. Understanding this accounting impropriety requires consideration of a number of factors associated with improper capitalization of expenses: (1) it masks the true riskiness of the cash flows; (2) it artificially inflates the true value of a firm's assets and gives a false impression to the market of the firm's true value; (3) it artificially inflates earnings in the period of improper capitalization and results in inflated valuations based on earnings multiples (consistent with a lower value based on a discounted cash flow analysis); (4) it distorts the net debt to EBITDA multiple often used by market participants to gauge the leverage of a company; and (5) it is considered to be one of the most common ways companies artificially inflate earnings.

(h) Mr. Patton opines that because the amount of the improperly capitalized expenses was first disclosed on November 8, 2021, this means that the "the market could not have reacted to this news following the October 12 Disclosure."[11] This opinion ignores that the market reacts to negative information even when the precise scope

[11] Patton Report, ¶ 180.

or impact of that negative information is not fully known. The resulting stock price reflects the market consensus expectation of the impact of the negative information. If, when full disclosure is made, the negative information is revealed to be largely within the pre-existing market consensus expectation, then it is likely that the full disclosure of the negative information will not have an additional impact on the stock price. Mr. Patton appears to be requiring a "mirror image" of a misrepresentation in a corrective disclosure and also a full correction for the disclosure to count as a public correction of a prior misrepresentation. In my experience, it is not often that a corrective disclosure is a mirror image of a misrepresentation.

(i) Mr. Patton's suggestion that the statistically insignificant price reaction over the November 15-18, 2021 event window, in which the price reaction on November 16-18, 2021 reversed the initial price reaction on November 15, 2021, should be ignored because each day between November 16-18, 2021 did not result in a statistically significant price movement is contradicted by decades of academic research. Mr. Patton provides no alternate explanation for the complete price reversal and the cumulative statistically insignificant return. As I stated in the Surana Report, I note that the revisions in the restated financial statements were in line with the prior August 15, 2021, October 12, 2021 and November 8, 2021 Disclosures, and the results for Q2 2021 were mixed.[12] The date of the restatement was known, as were the nature of the accounting errors and the related amounts.[13]

[12] Surana Report, ¶ 162.

[13] Surana Report, ¶ 162.

There was also no other confounding information during my event window of November 15-18, 2021. A statistically insignificant price response is consistent with this. Mr. Patton's analysis does not account for the full digestion by the market of the information released as information flow continued with the release of analyst reports.

(j) I disagree with Mr. Patton's contention that my "review of academic literature and analyst commentary ***does not support*** the conclusion that the alleged misrepresentations ***would be expected*** to affect Akumin's share price"[14] because the prices of securities do not respond in every case to financial disclosures. Mr. Patton's argument appears to disregard the basic premise that in empirical research, it virtually is never the case that a result holds for all securities studied. Yet, empirical research is conducted because it informs us what the ***expected*** outcome of an event is. Further, my review of literature and analyst commentary during the Class Period was not done in a vacuum where the actual stock price response was not measured when the corrective disclosures corrected the prior misrepresentations. I conducted detailed event studies of all four corrective disclosures, the results of which were consistent with findings in academic research. The significant price reactions to the August 15, 2021 and October 12, 2021 Corrective Disclosures; contemporaneous commentary by research analysts as well as the ratings agency, Moody's, concerning these disclosures; findings of academic studies on issues relevant here; and commentary by security analysts during the

[14] Patton Report, Section 2.1 heading (formatting adjusted, emphasis added).

> Class Period illustrating their reliance on Akumin's historical results and management guidance as well as their focus on the Company's key financial metrics including accounts receivable, revenue and operating expenses – all combined form the basis of my view that had Akumin told the truth in respect to the alleged misrepresentations, Akumin's common stock price would have declined.

5. The analyses presented in this report apply generally-accepted and widely-used economic, financial and statistical analyses and are based upon my professional knowledge and experience, as well as on a review of documents and information relevant to this matter.[15]

6. My opinions are based on information available to me as of the date of this report. I reserve the right to amend my conclusions to reflect new information available to me, information provided by other experts in the litigation, future rulings from the court in this action or any motions and trial proceedings.

7. This report is organized as follows. In Section II, I present my qualifications, compensation, and materials considered, and state the assumptions for my analyses in the Surana Report and this reply report. In Section III, I state the areas of agreement between the Surana Report and the Patton Report. In Section IV, I provide my responses to Mr. Patton's opinion that none of the Company's disclosures relating to the restatement resulted in a statistically significant decline in Akumin's share price. In Section V, I provide my responses to Mr. Patton's views about the appropriate length of event windows. In Sections VI, VII, VIII and IX, I provide my responses

[15] In this report, unless otherwise specified, the currency is in Canadian dollars, stock prices are Canadian composite prices retrieved from Bloomberg and time stamps reflect Eastern Time.

to Mr. Patton's criticisms related to the August 15, 2021, October 12, 2021, November 8, 2021, and November 15, 2021 disclosures, respectively. In Section X, I provide my responses to Mr. Patton's criticisms related to my discussion of academic literature and analyst focus on key financial metrics.

8. I have prepared this report having regard to the duty set out in Rule 4.1 of the *Ontario Rules of Civil Procedure*. A signed acknowledgment of the expert's duty was filed with the Surana Report.

II QUALIFICATIONS, COMPENSATION, MATERIALS CONSIDERED AND ASSUMPTIONS

A. Qualifications and Compensation

9. My qualifications, compensation and resume are set forth in the Surana Report.[16] My updated resume is attached as **Exhibit 1**.

B. Materials Considered

10. I have cited in the text of this report specific documents and information that I relied upon in reaching my conclusions. A complete list of documents I considered in forming my opinions is provided in **Exhibit 2**, which also includes the materials I relied on for the Surana Report. Unless otherwise stated, I have assumed the accuracy and completeness of the materials relied on for this report.

[16] My compensation is in no way contingent or based on the opinions expressed in this report or the outcome of this or any other matter. All the opinions in the Surana Report and the Surana Reply Report are my own.

C. Assumptions

11. For the purposes of my analyses and responses to the Patton Report, I assume that the Plaintiff will ultimately prevail in establishing that Akumin made untrue statements relating to accounts receivable, revenue, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim.[17] The Statement of Claim describes what Akumin should have publicly disclosed instead of its alleged untrue statements concerning accounts receivable, revenue, property and equipment, and total shareholders' equity.[18] For the purposes of this report, I have assumed that these allegations are true.

III AREAS OF AGREEMENT OR UNCONSTESTED ISSUES

12. There are several areas of agreement or uncontested issues between the Surana Report and the Patton Report. These include:

13. **The Event Study Approach**: In the Surana Report, I explained that event studies can be used to measure the effect of misrepresentations and omissions on share prices as the misrepresentations and omissions and their economic effects are revealed to the market through public disclosures.[19] I then conducted event studies of the four public disclosures that allegedly corrected the misrepresentations as alleged in the Statement of Claim.[20] It appears that Mr. Patton

[17] The detailed allegations are contained in the Statement of Claim, ¶¶ 43-57.

[18] Statement of Claim, ¶¶ 43-57.

[19] Surana Report, Section VII.

[20] Surana Report, Section VIII. I also noted that in published academic research, event studies are conducted for different types of securities, including stocks that trade on the Over-the-Counter ("**OTC**") market and securities that do not trade every day. I also showed that Akumin common stock traded in an informationally efficient market (*i.e.*, the stock price reflected all publicly available information) at the time the corrective disclosures were made. Surana Report, footnote 67. Mr. Patton agrees with my conclusion regarding market efficiency of Akumin stock.

agrees that the event study approach provides an appropriate methodology to conduct such an analysis.[21]

14. **Market Model**: In the Surana Report, I estimated a market model for Akumin common stock as part of my event study analysis to isolate the firm-specific effect of an event from other factors, namely the market, industry and exchange rate effects that may cause a change in the security's price.[22] Mr. Patton largely adopts my market model, including the proxies for the market and the industry as well as the estimation period.[23] I have identified two minor differences between the market model I estimated and the one estimated by Mr. Patton.[24] These differences have little practical bearing on the calculated excess returns from my market model versus his. In **Exhibit 3**, I compare the excess returns computed from my market model versus the excess returns computed from Mr. Patton's market model for all dates presented in the exhibits (2 through 7) of the Patton Report.

15. **Statistical Significance:** Mr. Patton and I agree on the statistical significance of the price declines of Akumin shares on all dates that are relevant for the analyses conducted in the Surana Report and the Patton Report. *See* **Exhibit 3**.

Patton Report, ¶ 30. Mr. Patton also agrees that event studies can be conducted for securities that "exhibit some degree of efficiency." Patton Report, footnote 72.

[21] Patton Report, Section 4.3.

[22] Surana Report, Section VII.C.

[23] Patton Report, ¶ 89.

[24] First, Mr. Patton uses log returns while I use simple returns. Second, Mr. Patton uses orthogonalized industry returns while I use industry returns net of market returns. Patton Report, ¶¶ 91, 93; Surana Report, Exhibits 4-5. I note that orthogonalization has no impact on the calculation of excess returns.

16. **Content of the Corrective Disclosures:** Mr. Patton and I agree that the August 15, 2021 Disclosure informed the market "regarding an accounting issue that related to revenue and accounts receivable"[25] that was related to potential additional credit losses with respect to prior years, a resulting delay in the filing of the Q2 2021 financials and related documents, and the application to the OSC for the imposition of a management cease trade order ("MCTO") throughout the duration of the default.[26] In general, Mr. Patton and I agree about the contents of each of the four corrective disclosures: the August 15, 2021 Disclosure; the October 12, 2021 Disclosure; the November 8, 2021 Disclosure; and the November 15, 2021 Disclosure.[27]

IV MR. PATTON'S OVERARCHING CONCLUSION IS DISCONNECTED FROM THE ALLEGATIONS AND UNSUPPORTED BY DECADES OF WIDELY-ACCEPTED ACADEMIC LITERATURE

17. In the first section after the introduction to the Patton Report, in a section titled "Summary of Conclusions," Mr. Patton opines that "***none*** of the Company's disclosures ***relating*** to the restatement resulted in a statistically significant decline in Akumin's share price,"[28] a conclusion for which he provides the following reasoning:

> A careful review of Akumin disclosures, share price data (including minute-by-minute intraday prices), and analyst commentary shows that (a) the Company's news release on August 15, 2021, was not understood by the market to relate to an upcoming restatement; (b) the Company's news releases on October 12 and November 8, 2021 were not followed by statistically significant price declines; and (c) when the restatement itself was issued on November 15, 2021, the

[25] Patton Report, ¶ 22.

[26] Patton Report, ¶¶ 22, 56; Surana Report, ¶¶ 97-98.

[27] Patton Report, ¶¶ 55-69; Surana Report, ¶¶ 83-85, 105-110, 134-135; 145-148.

[28] Patton Report, ¶ 11 (emphasis added).

> release was immediately followed by a statistically significant increase in Akumin's share price.[29]

18. While I will provide detailed responses in the rest of the report to Mr. Patton's arguments related to the alleged corrective disclosures that underlie his opinion, in this section I discuss the import of this overarching conclusion of the Patton Report.[30]

19. *First*, in forming this opinion, Mr. Patton contends that Akumin's August 15, 2021 Disclosure concerning accounts receivable was ***unrelated*** to the restatement when in fact, as Akumin later confirmed, a restatement was "required" because of the issues related to the recording of the accounts receivable.[31] Notwithstanding the causation between the overstatement

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[29] Patton Report, ¶ 11.

[30] The Patton Report also states: "The Surana Report sets out the opinion that Akumin's disclosure of a restatement of certain prior period financial statements in the Alleged Public Corrective Statements caused a decline in the price of its shares." Patton Report, ¶ 11. This is not what the Surana Report says. The Surana Report does not state that the disclosure of the restatement *per se* caused a decline in Akumin's stock price. As I explained in the Surana Report, by the time of the actual restatement on November 15, 2021, the truth about the misrepresentations had already been revealed to the market and impounded in Akumin's stock price. Whether or not the Company disclosures explicitly mentioned a restatement, the corrective disclosures on August 15, 2021, October 12, 2021 (including the follow-on analyst commentary on October 13, 2021), and November 8, 2021 were related to the alleged misrepresentations that led to the restatement of prior financials.

[31] In particular, Akumin's press release stated:

"For the period ended June 30, 2021, in conjunction with performing its period-end review of accounts receivable and performing additional review of historical collection rates using its enhanced reporting and analytics tools, Akumin identified issues in the recording of write-offs and cash collections on acquired ***accounts receivable balances*** impacting current and prior periods. In addition, during the review the Company noted that estimates of historical implicit price concessions and expected collection rates were not reflective of the actual cash collections which were occurring and Akumin has determined that a material change to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 ***is required***. Under ASC 250, Accounting Changes and Error Corrections, this change is considered an error for accounting purposes and ***thus a restatement*** of (i) Akumin's annual financial statements for the period ended December 31, 2020 and December 31, 2019, and (ii) Akumin's interim financial statements for the period ended March 31, 2021, in each case together with their related management's discussion and analysis (collectively, the "Restated Filings"), ***will be***

of the accounts receivable and the required restatement confirmed by Akumin itself, Mr. Patton's analysis is also disconnected from the allegations in this case that Akumin misrepresented its accounts receivable, a misrepresentation that was partially corrected via the August 15, 2021 Disclosure.[32] I discuss this further in Section VI.

20. *Second*, Mr. Patton's conclusion that the October 12, 2021 Disclosure was not associated with a statistically significant Akumin share price decline improperly excludes the full price impact from this disclosure. The Patton Report improperly ignores the price reaction to the disclosure as the information was digested by market participants following the release of the Cormark analyst report on October 13, 2021. The Cormark report contained new, value relevant information after which Akumin's shares experienced a statistically significant excess share price decline. The two-day excess return of -11.5%, after accounting for market, industry and exchange rate factors, is statistically significant at the 5% level, meaning that the hypothesis that this stock price decline was a random fluctuation can be rejected with 95% confidence. The Cormark report stated that the "released details on the accounting issues" by Akumin "ha[d] an incrementally negative impact on [their] outlook," made changes to their forecasts to reflect the disclosed accounting errors and lowered their investment rating and price target for Akumin stock.[33]

required, which Restated Filings will also account for certain adjustments for the tax impact of these changes, previously uncorrected immaterial misstatements, and other items impacted by the correction of the error. Although the quantum of the adjustments is still being finalized, it is currently expected that the changes in the Restated Filings will result in an accounts receivable balance as at June 30, 2021 of between $65.0 million and $70.0 million as compared to Akumin's previously reported March 31, 2021 accounts receivable balance of $95.9 million." *See* "Akumin Provides Bi-weekly MCTO Status Update," *Canada NewsWire*, October 12, 2021, 7:00 am (the "October 12, 2021 Press Release") (emphasis added).

[32] *See*, *e.g.*, Statement of Claim, ¶¶ 43, 71-73, and Surana Report, ¶ 17.

[33] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

21. It is well-documented in the economic literature that security analysts play a crucial role in the interpretation, evaluation and dissemination of information relevant for a firm's future prospects and that their earnings forecasts, investment recommendations, price targets and the content and tone of their research reports are considered important by investors and can significantly impact stock prices.[34] Furthermore, Mr. Patton does not provide any alternate explanation for the statistically significant excess price decline (net of market, industry, and exchange rate movements) during the October 12-13, 2021 event window. Instead, Mr. Patton advances a theory for event windows based on a mechanical daily rule that is contradicted by decades of well-established academic research and disregards the facts and circumstances specific to the events. Even the sole paper Mr. Patton cites in support of his mechanical approach to event windows does not support his theory. I discuss this further in Sections V and VII.

22. *Third*, the Patton Report suggests that improper capitalization of expenses is not value-relevant information to Akumin's share price. In so doing, he minimizes the effects of an improper accounting treatment that in the period of reclassification simultaneously inflates net income and assets and is widely recognized as one of the top accounting improprieties investigated by regulators. I discuss this further in Sections VII and VIII.

23. *Fourth*, Mr. Patton's conclusion improperly excludes the full price impact of the November 15, 2021 disclosure, ignoring follow-on analyst commentary and an insignificant price reaction over a multi-day event window consistent with the release of no new information about the previously disclosed accounting improprieties that resulted in the restatement and mixed results

[34] *See*, *e.g.*, Paul Asquith, Michael B. Mikhail, and Andrea S. Au, "Information content of equity analyst reports," *Journal of Financial Economics* 75, 2005, 245-282.

for 2Q 2021.[35] Based on my review, there was no other confounding information during this time period and Mr. Patton does not provide any alternate explanation for the complete price reversal over the multi-day event window. I discuss this further in Sections V and IX.

24. Based on the above (where Mr. Patton either attempts to disassociate a disclosure from the resulting restatement, advances an unsupported theory for event windows, or minimizes the significance of the allegations), the import of Mr. Patton's overarching conclusion is that the restatement (which was a result of an accounts receivable overstatement as large as US$25.9 million to US$30.9 million, or 27.0% to 32.2% of the previously reported accounts receivable balance, and improper capitalization of expenses of US$18.8 million, or 23.7% of the previously reported net book value of property and equipment)[36] resulted in a statistically significant price ***increase***. I do not agree with this conclusion.

25. The flaw in Mr. Patton's conclusion can be illustrated by the following simple example. Consider that on Day 1, a company announces that because of improper accounting, its net income was overstated by 65% in its prior filings for the past three years. In response to this announcement, the company's stock price declines by 40% (after adjusting for market and industry factors). In its announcement on Day 1, the company does not explicitly mention anything about a restatement of prior financials to correct for the accounting errors. Then, on Day 15, the company

[35] Surana Report, Section VIII.D.

[36] Surana Report, ¶ 108 ("… assuming no change in accounts receivable between March 31, 2021 and June 30, 2021, the Company expected a reduction in the accounts receivable balance as of March 31, 2021 of between US$25.9 million and US$30.9 million, or 27.0% to 32.2% of the balance."); Surana Report, ¶ 134 ("… assuming no change in net book value of property and equipment between March 31, 2021 and June 30, 2021, US$18.8 million in expenses had been improperly capitalized."). 23.7% is equal to US$18.8 million divided by net book value of property and equipment of US$79.2 million as of March 31, 2021.

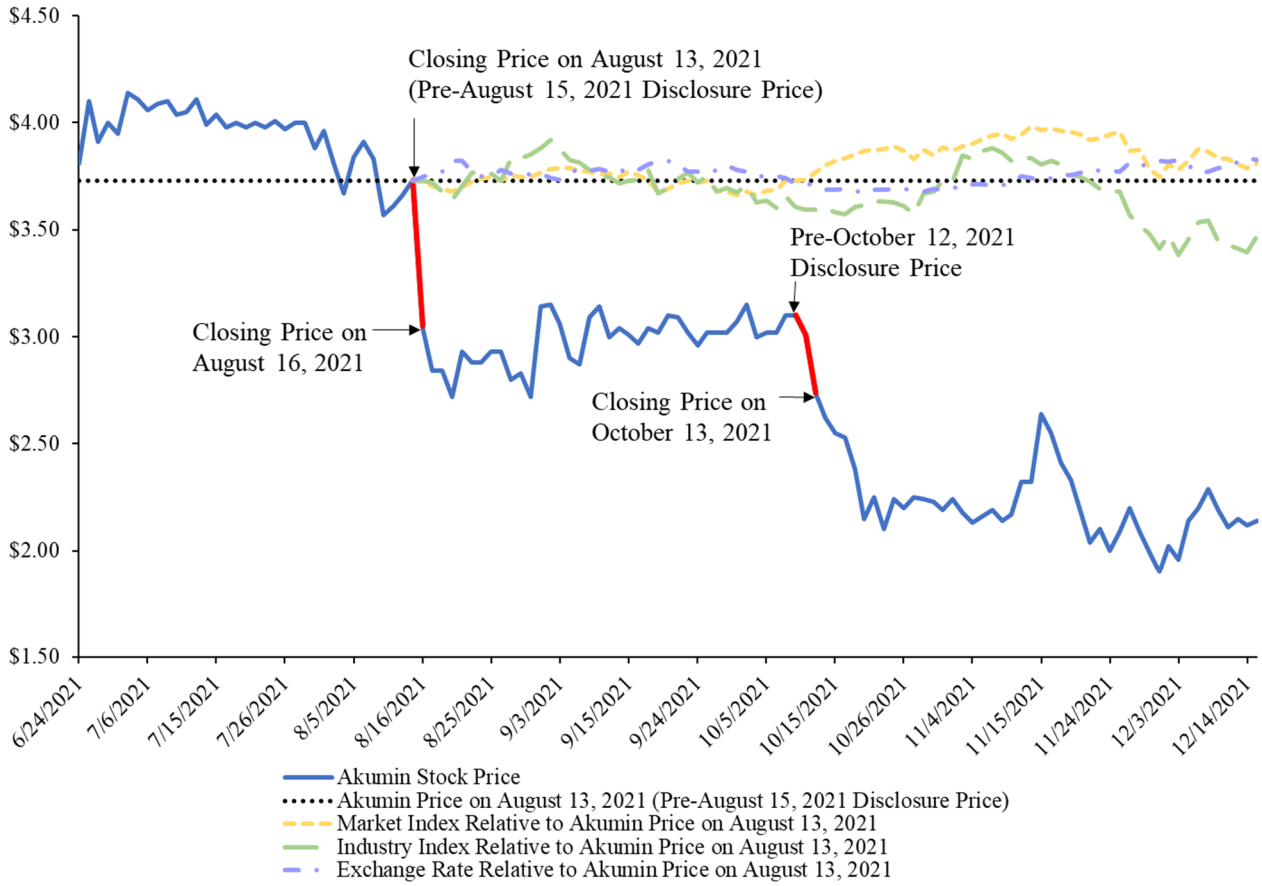
files restated financial statements to correct for the errors of the previously announced improper accounting. The company's stock price declines by a statistically insignificant amount of 1% (after adjusting for market and industry factors). Following the logic underlying Mr. Patton's overarching conclusion, the restatement had no effect on the stock price because when the restatement occurred on Day 15, the company's stock price response was not statistically significant. While literally true, the flaw in Mr. Patton's logic that attempts to sever the link between the restatement and the cause of the restatement is plain to see: by the time the company filed its restated financial statements, the stock price had already incorporated the effects of the improper accounting.

26. In the face of Mr. Patton's reframing the question in terms of a restatement *per se*, it bears repeating that the Plaintiff's allegations concern accounting errors related to overstated accounts receivable and improper capitalization of repair and maintenance expenses that resulted in the restatement of financial statements, not simply the act of filing the restated financials.[37]

27. The figure below shows Akumin's stock price from June 24, 2021 to December 15, 2021. After the first corrective disclosure, nearly one-fifth of the company's market capitalization was wiped out on August 16, 2021. And after the second corrective disclosure (including the follow-on analyst commentary), the stock price experienced a two-day cumulative decline of 11.5% on October 12-13, 2021, after accounting for market, industry and exchange rate factors. The sheer magnitude of these price impacts demonstrates the importance of the disclosures to investors and is consistent with the conclusion that Akumin's untrue statements that were publicly corrected by these disclosures had a significant effect on the price of Akumin's shares.

[37] Surana Report, ¶¶ 17-18.

FIGURE 1
AKUMIN STOCK PRICE (JUNE 24, 2021 TO DECEMBER 15, 2021)



V LENGTH OF EVENT WINDOWS

28. Several of Mr. Patton's criticisms can be distilled down to his view of how event windows should be determined when conducting event studies. First, Mr. Patton's approach to determining the length of an event window focuses solely on the statistical significance of ***daily*** excess returns within an event window and assumes away all facts and circumstances relevant to an event.[38] Second, Mr. Patton's approach assumes that an efficient market requires a price reaction within minutes of dissemination of information and, in essence, implies that examination

[38] Patton Report, ¶ 87.

of price movements beyond the first day is improper, and that should a price reaction extend beyond the first day, such a reaction cannot be reconciled with an efficient market.[39]

29. I disagree with Mr. Patton's approach. As I discuss below, Mr. Patton's view is contradicted by decades of well-established academic literature as well as practices commonly accepted and employed in event studies for securities litigation. Further, the few papers Mr. Patton cites in support of his view do not suggest that, in an efficient market, the price reaction to an event must be completed within minutes or even a single day. To the contrary, these papers demonstrate that it may take more than a single day for the full price response to be reflected in the stock price.

A. Multi-Day Event Windows Are Widely Accepted and Used, Are Consistent with an Efficient Market, and Are Supported by Decades of Well-Regarded Academic Literature

30. Consideration of multi-day event windows is a generally accepted practice and consistent with the well-established event study methodology that has been employed for decades. It is commonly recognized that stock price reactions can often take longer than a day to fully reflect value-relevant information and, as such, to understand the ***full effect*** of the information, it is often appropriate to consider event windows longer than a day. For example, in the widely cited article by Professor MacKinlay (1997), which Mr. Patton refers to for "a discussion of the event study technique and its uses,"[40] the author explains that, in practice, event windows often include multiple days:

> The initial task of conducting an event study is to define the event of interest and identify the period over which the security prices of the firms involved in this event will be examined - the event window. For example, if one is looking at the information content

[39] Patton Report, ¶¶ 31.a, 131, 149.

[40] Patton Report, footnote 70.

> of an earnings with daily data, the event will be the earnings announcement and the event window will include the one day of the announcement. It is customary to define the event window to be larger than the specific period of interest. This permits examination of periods surrounding the event. In practice, the period of interest is often expanded to multiple days, including at least the day of the announcement and the day after the announcement.[41]

31. Professor MacKinlay contrasts the "relatively short time period" over which the effect of an event is measured in an event study analysis with other types of analyses where the period of observation spans months or even years:

> The usefulness of such a study comes from the fact that, given rationality in the marketplace, the effects of an event will be reflected immediately in security prices. Thus a measure of the event's economic impact can be constructed using security prices observed over a relatively short time period. In contrast, direct productivity related measures may require many months or even years of observation.[42]

32. Mr. Patton, on the other hand, argues that should the stock price take more than a few minutes to respond to information that it must be "inconsistent with the principles of market efficiency."[43] Mr. Patton, in essence, suggests that markets need to be nearly perfectly efficient. To support his argument, Mr. Patton refers to an article I authored in which I noted that in an

[41] MacKinlay (1997) provides an example of an event study in which the author considers an event window of 41 days. *See* Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35, March 1997, 13-39, at 14-15 (emphasis added) and 16-17. *See also* John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, at 151.

[42] Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35, March 1997, 13-39, at 13 (emphasis added). *See also* John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, at 149.

[43] Patton Report, ¶¶ 31.a, 131, 148-149.

informationally efficient market, stock prices react quickly to publicly available information.[44] However, Mr. Patton draws exactly the wrong inference the paper was written to address and dispel. In the paper, I explained that "it is important to recognize that even in the most developed markets, frictions such as trading costs and costs of gathering information exist, in varying degrees, for all stocks" and that "the notion of 'perfect efficiency is an unrealistic benchmark that is unlikely to hold in practice.'"[45] I further stated:

> Indeed, informational efficiency "does not require that markets be *anywhere near perfectly efficient*." Courts and financial economists are in agreement on this. Therefore, any argument that absence of perfect efficiency implies that the market does not adequately impound information is misguided. Such an argument is also inconsistent with the decision in *Basic*, reaffirmed in *Halliburton II*, which noted that the presumption of reliance is based on "the *fairly modest premise* that 'market professionals generally consider most publicly announced material statements about companies, thereby affecting stock market prices.'"[46]

33. Thus, Mr. Patton's reference to the words "quickly" and "rapidly" in my article, without any context, is misleading.[47] It is also misinformed because when economists refer to a "quick" or "rapid" price response, they do not mean that the price reaction must be completed within minutes. In academic event studies, it is common to adopt multi-day event windows

[44] Patton Report, footnote 124. Sunita Surana, "Informational Efficiency in the Context of Securities Litigation: What Have We Learned?" *University of Illinois Law Review Online* 334-341, Fall 2021.

[45] Sunita Surana, "Informational Efficiency in the Context of Securities Litigation: What Have We Learned?" *University of Illinois Law Review Online* 334-341, Fall 2021, at 335 citing John Y. Campbell, Andrew W. Lo, and A. Craig MacKinlay, The Econometrics of Financial Markets, Princeton University Press, 1997, at 24.

[46] Sunita Surana, "Informational Efficiency in the Context of Securities Litigation: What Have We Learned?" *University of Illinois Law Review Online* 334-341, Fall 2021, at 335-336 (emphasis added and in original, footnotes omitted).

[47] Patton Report, ¶ 136.

because economists realize that markets are not perfectly efficient. For example, MacKinlay (1997) explains that it is "typical" to consider multi-day event windows:

> Even if the event being considered is an announcement on given date it is typical to set the event window length to be larger than one. This facilitates the use of abnormal returns around the event day in the analysis.[48]

34. In the context of securities litigation, Mitchell and Netter (1994) note that while stock prices generally respond "quickly" to new information, "there is substantial variation in the complexity of determining the length of an event window" and the authors address the appropriateness of multi-day windows:

> Fama noted that, while no market is perfectly efficient, the idea that prices ***quickly*** adjust to the release new information is a useful tool to analyze many situations, especially when information and transactions costs are low, as in the United States stock market…
>
> With respect to securities fraud cases, there is substantial variation in the complexity of determining the length of an event window… The main advice is to carefully identify the exact dates during which the information in question reached the market, and then restrict the window to a short period if possible, generally two or three days around each release of new information.[49]

35. Similarly, Tabak and Dunbar (2001), while also defining an efficient market as one in which stock prices respond "quickly" to new information, address the appropriateness of longer event windows to allow for the "market's ongoing adjustment to the news":

> Event studies of the type used in litigation rely on two well-accepted principles: first, the semi-strong version of the Efficient Market

[48] *See*, *e.g.*, A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35(1), March 1997, 13-39 at 19 (emphasis added).

[49] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, at 545, 559 (emphasis added).

> Hypothesis, which states that stock prices in an actively traded security reflect all publicly available information and respond ***quickly*** to new information; second, the price of an efficiently traded stock is equal to the present value of the discounted future stream of free cash flow…
>
> The end of the event window is somewhat more arbitrary. In securities fraud cases, many experts have adopted the convention of looking at one-day, two-day, or five-day periods following an announcement. The most recent academic pronouncement expresses support for the shorter one-day or two-day window, though it recognizes that in practice, analysts often use longer windows. Occasionally, there is another news announcement, or confounding event, within the event window. When this occurs, the event window is often cut short so that it does not include the effects of the confounding event.
>
> The longer the event window, the more likely it incorporates all of the prior leakage and the market's ongoing adjustment to the news, but also the more likely it picks up other effects unrelated to the event under consideration. Deciding on the length of the event window is thus one of the most important considerations in performing an event study.[50]

36. As the passage above suggests, a lack of important confounding information during a multi-day event window can often allow for the incorporation of the full effects of a disclosure.

37. As a general matter, determination of an event window is a case-specific inquiry, and a multi-day event window may be appropriate given the flow of information in the marketplace to ensure that the full effect on the stock price of the new information is measured. As I explained in the Surana Report, to determine the appropriate length of an event window, an economist considers the market's assessment of the disclosed information in terms of contemporaneous

[50] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, pp. 19.2, 19.4 (emphasis added, footnote omitted).

commentary by the financial press and analysts that clarifies or provides financial implications of the disclosure.[51] There can be instances when the price reaction on the first day may not be statistically significant, but as the market continues to process the information, especially as security analysts provide their interpretation of the disclosed information, the cumulative return over the relevant multi-day window may be statistically significant.[52] In the context of securities litigation, Ferrel and Saha (2007) address such a scenario, calling it a "post-disclosure 'trickle' effect":

> POST-DISCLOSURE "TRICKLE" EFFECT
>
> …As a result, while a single day's abnormal return may not be [statistically] significant, the cumulative effect on the firm's stock over the entire corrective disclosure period may be. To examine such a hypothesis, one can test the significance … assuming the disclosure period spans *m* days."[53]

38. Similarly, there can also be instances where there is an initial stock price response, but over the next few days as security analysts evaluate the disclosure and provide their assessments and investors digest the information, the stock price reverses and reaches a new equilibrium price. Ferrell and Saha (2007) address such a scenario and explain that in such cases, it "often makes sense to use multiple-day" event windows:

> The D_1, ... D_k can be single-day dummy variables, or two-day or three-day or even five-day dummy variables [indicating the length of the event window]. It often makes sense to use multiple-day dummy variables because of possible "overreaction" in the market to a corrective disclosure. There is a substantial finance literature

[51] Surana Report, ¶ 62.

[52] As I explain below, economists often test the statistical significance of the cumulative (or combined) return over the relevant event window.

[53] Allen Ferrell and Atanu Saha, "The Loss Causation Requirement for Rule 10b-5 Causes of Action: The Implications of *Dura Pharmaceuticals, Inc. v. Broudo*," *The Business Lawyer* 63, 2007-2008, 163-186, at 168 (emphasis added).

> documenting that, in some circumstances, there appears to be market "overreaction" to certain disclosures and that it might take the market some time to "digest" fully and accurately the implications of a corrective disclosure, such as an accounting restatement. The market may correct for the "overreaction" over the course of several days, which would suggest the need to dummy out not only the day of the corrective disclosure but one or two days post-corrective disclosure as well.[54]

39. All of these articles essentially make the same point, namely, that markets are not perfectly efficient and that it can take more than a day for value-relevant information to be fully impounded in the stock price.

B. The Literature Mr. Patton Cites Demonstrates that Stock Prices Can Take More Than a Single Day to Fully Reflect New Information

40. Citing an article by Mitchell and Netter (1994), the Patton Report states that in an efficient market "if the information is value-relevant, a reaction should be observed immediately after the event, because 'stock prices react quickly.'"[55] Mr. Patton does not provide context for what these words mean. The context is provided by the authors, Mitchell and Netter, who explain that an event window *sometimes* can be "as short as one day," meaning that it can take longer than one day for stock prices to fully reflect new information:

> Because the efficient markets hypothesis, supported by considerable empirical evidence, suggests that stock prices react quickly to the release of new information, in many cases the event window will relatively short, sometimes as short as one trading day.[56]

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[54] Allen Ferrell and Atanu Saha, "The Loss Causation Requirement for Rule 10b-5 Causes of Action: The Implications of *Dura Pharmaceuticals, Inc. v. Broudo*," *The Business Lawyer* 63, 2007, 163-186, at 167-168 (emphasis added, footnote omitted).

[55] Patton Report, ¶ 87.

[56] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, at 558 (emphasis added).

41. Mitchell and Netter also explain that "[f]or a single event that is generally the norm in a securities fraud case, depending upon market factors, the window ***often*** can extend beyond the close of trading the day after the public announcement."[57] The authors conclude the section on defining the event window by noting that their main advice is to "carefully identify the exact dates during which the information in question reached the market, and then restrict the window to a short period if possible, generally two or three days around each release of new information."[58]

42. Mr. Patton cites three other papers to make his point that "the price of an efficiently traded security reacts to value-relevant news within a few hours, and often within minutes."[59] However, this is a misinterpretation of the cited literature. None of the papers cited by Mr. Patton claim that a stock price reaction to an announcement must be ***completed*** within minutes or hours of the first dissemination of information. On the contrary, the authors of each of these papers note that securities often take longer to reflect the ***complete*** market response to an event.

43. Indeed, in a paper he authored, Mr. Patton notes that Busse and Green (2002), in a paper Mr. Patton also cites in the Patton Report, found price reactions occurring up to 10 days after the event:

> Busse and Green (2002) find that stocks react immediately to CNBC Morning and Midday Call reports… <u>However, their Table 4 also</u>

[57] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, footnote 94 (emphasis added).

[58] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, at 559.

[59] Patton Report, ¶ 137.

> shows some statistically significant price reactions occurring up to ten days later.[60]

44. Busse and Green (2002) explain that the initial results might just be the beginning of a longer horizon result:

> For both measures of abnormal return, negative Midday Call reports lead to negative CARs [Cumulative Abnormal Returns]. The CARs become increasingly negative and increasingly significant during the month after the negative Midday Call reports. This evidence indicates that the initial response following these reports could be the beginning of a larger, long-horizon reaction.[61]

45. The other two articles cited by Mr. Patton regarding the speed of stock price adjustment arrive at similar conclusions. Barclay and Litzenberg (1988), the second paper cited by Mr. Patton, studies cumulative excess returns for 20 days to evaluate the "true market price" after the event:

> Fig. 5 displays the intraday common stock returns on the issue day and table 5 presents the daily excess returns for five days prior to the issue day and the excess and cumulative excess returns for 20 days following the issue day…
>
> Extending the analysis to 20 days beyond the issue day assures that the observed price is a true market price.[62]

[60] Dmitry Krivin, Robert Patton, Erica Rose and David Tabak, "Determination of the Appropriate Event Window Length in Individual Stock Event Studies," NERA working paper, 1-24, p. 5 (emphasis added, footnote omitted).

[61] Jeffrey A. Busse and T. Clifton Green, "Market Efficiency in Real Time," *Journal of Financial Economics* 65, 2002, 415-437 at 428 (emphasis added).

[62] Michael J. Barclay and Robert H. Litzenberger "Announcement Effects of New Equity Issues and the Use of Intraday Price Data," *Journal of Financial Economics* 21, 1988, 71-99, at 92-93 (emphasis added).

46. Similarly, Patell and Wolfson (1984), the third paper cited by Mr. Patton, finds significant results on the day following the event, and importantly investigates (and does not ignore) the price response for two days after the event:

> The evening following the announcement provides an opportunity for news to be disseminated to investors who are unable to execute intraday trading strategies, and their actions may affect the overnight price change and the opening trades of the next day. … The positive overnight and following day returns may appear to suggest that longer intraday holding intervals would yield more significant results.[63]

47. None of these articles suggest that, in an efficient market, the stock price response must be completed within minutes, hours, or even a day. More importantly, these studies demonstrate that it is proper to investigate stock price reactions beyond the first day, and none of them advocate for dismissing out of hand an examination of price response beyond the first few minutes or a single day.

C. Mr. Patton's Mechanical Rule for Determining Event Windows Is Inconsistent with Decades of Academic Literature

48. In order to determine the event window following an announcement, Mr. Patton advocates relying solely on the statistical significance of ***daily*** excess returns following the event.[64] This mechanical approach ignores the facts and circumstances relevant to an event and is unsupported by the generally accepted methodology employed in academic research as well as

[63] James M. Patell and Mark A. Wolfson, "The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements," *Journal of Financial Economics* 13, 1984, 223-252, at 235 (emphasis added). Mr. Patton also refers to a quote from Brealey and Myers (2003) that refers to the article by Patell and Wolfson (1984). Patton Report, footnote 127.

[64] Patton Report, ¶ 87.

adopted in securities litigation and also by the sole paper Mr. Patton offers as support for his methodology.

49. The event study methodology followed for decades in academia involves assessing the statistical significance of the ***cumulative*** excess return when multi-day event windows are used. MacKinlay (1997) explains that it is "necessary" to evaluate the cumulative excess return "to accommodate a multiple period event window":

> The abnormal return observations must be aggregated in order to draw overall inferences for the event of interest… The concept of a cumulative abnormal return is necessary to accommodate a multiple period event window.[65]

50. While daily excess returns and their statistical significance are also often reported and considered, when a multi-day event window is used, the general practice is to evaluate the statistical significance of the cumulative excess return. Mitchell and Netter explain it as follows:

> As noted earlier, event windows can extend beyond one trading day. For these cases, the abnormal returns can be cumulated to create the cumulative abnormal return [CAR] formally expressed as …
>
> The CAR measures the total impact of the event on the firm. Generally, event studies report both the [abnormal return] AR and CAR over the event window. For event windows where the information was released over several days, the CAR often is emphasized.[66]

[65] A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35(1), March 1997, 13-39 at 21 (emphasis added).

[66] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, at 570 (emphasis added).

51. In particular, the statistical significance of a multi-day cumulative excess return does not require the daily excess returns that form the cumulative excess return to be individually statistically significant.

52. The Patton Report, on the other hand, argues against the relevance of the statistical significance of a cumulative excess return unless every individual daily excess return that comprises the cumulative excess return is statistically significant.[67]

53. I disagree. A paper authored by Mr. Patton describes the pitfall of such an approach, which is that it will produce an incorrect measure of an event window when the market is still working to incorporate the full effects of the information although not every daily excess return during the event window is statistically significant:

> Another reason a rule based on abnormal returns might produce an incorrect measure of event window length is simple Type II error: an observed abnormal return is within the range in which the null hypothesis is not rejected, though the market is still working to incorporate the effects of the news.[68]

54. Although he recognizes that a stock price will sometimes take more than a day to incorporate the effects of news, Mr. Patton uses the term "*ad hoc*" to describe a methodology that acknowledges this fact. In my view, it is just the opposite. An event window that is rooted in the particular facts and circumstances of the event being studied is a considered and proper approach, not an *ad hoc* approach, and is consistent with the literature described above.

[67] Patton Report, ¶ 87.

[68] Dmitry Krivin, Robert Patton, Erica Rose and David Tabak, "Determination of the Appropriate Event Window Length in Individual Stock Event Studies," NERA working paper, 1-24, at 9 (emphasis added).

55. To support his mechanical approach for the determination of the length of an event window, Mr. Patton refers to a report authored by Mr. Frank Torchio and suggests that Mr. Torchio follows such an approach.[69] Mr. Patton is mistaken.

56. *First*, the passage from Mr. Torchio's report that Mr. Patton cites does not preclude the consideration of a multi-day event window where the excess return on the first day is not statistically significant.

57. *Second*, Mr. Patton's representation of the passage from Mr. Torchio's report, without any context, to suggest that Mr. Torchio adheres to the rule advocated by Mr. Patton, is wrong. In that passage, Mr. Torchio provided an example to illustrate the construction of an event window. It was not an all-encompassing example meant to account for every possible circumstance and scenario that may arise in different cases.

58. Indeed, Mr. Torchio, with whom I have worked closely for 12 years, has always emphasized the need for thoughtful deliberation when constructing an event window as opposed to applying some mechanical rule and, for example, has constructed the following event windows that clearly do not fall within Mr. Patton's mechanical rule: (1) an event window where the excess return on the first day is not statistically significant, but the multi-day cumulative excess return is statistically significant; (2) an event window where each daily excess return is individually not statistically significant, but the multi-day cumulative excess return is significant; and (3) an event window where the excess return is not statistically significant, but where Mr. Torchio determined that the insignificance is due to positive confounding information.[70]

[69] Patton Report, ¶ 159 and footnote 79.

[70] I was involved in various capacities in each of these cases.

59. In a footnote of his report, Mr. Patton provides a citation to a single paper to suggest that his mechanical rule for implementing event windows "has been adopted in academic literature."[71] But the paper he cites does not adopt his rule. To the contrary, the paper states that "if the daily abnormal return ***on a subsequent trading day*** is statistically significant, then we assume that the ***market is continuing to incorporate information*** on Jobs' health,"[72] *i.e.*, the authors consider excess returns not just on the day of the event, but also the subsequent day. More importantly, for each of the events studied, the authors consider the excess return on the subsequent day even when the excess return on the first day is not statistically significant.[73] Furthermore, the authors conclude that one of the events results in a statistically significant return. Notably, for this event, even though the excess return on the first day does not meet their 5% threshold for statistical significance, the authors base their conclusion on a cumulative excess return over two days.[74]

[71] Patton Report, footnote 79, citing James Koch, Robert N. Fenili and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?", *Atlantic Economic Journal* 39, March 2011.

[72] James Koch, Robert N. Fenili and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?", *Atlantic Economic Journal* 39, March 2011.

[73] "One can see in Table 3 that the probabilities associated with the abnormal returns connected to adverse information concerning Jobs' health do not meet the 0.05 criterion in eight of the nine events… In each of these nine events, except one, the daily abnormal return on the subsequent trading day (day 2 of the event window) was statistically insignificant." *See* James Koch, Robert N. Fenili and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?", *Atlantic Economic Journal* 39, March 2011.

[74] "However, in the case of Event 7 (Apple's announcement on December 16, 2008 that Jobs would appear at the MacWorld conference in January 2009), the daily abnormal returns ("DARs") on the first two event or trading days (December 16th and December 17th) were -4.3% (p=0.068) and -6.15 (p=0.010). The market was apparently still digesting Apple's announcement on December 17, 2008. The DAR on the third trading day (December 18th) was positive, and not statistically significant, +0.2% (p=0.386). Thus, for Event 7, we conclude that the market digested information regarding Apple's announcement over two trading days. The two-day cumulative abnormal return for Event 7 was -10.5% (p=0.003)." *See* James Koch, Robert N. Fenili and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?", *Atlantic Economic Journal* 39, March 2011.

60. Thus, the only paper that Mr. Patton cites as support for his mechanical approach: (1) does not base its analysis on the statistical significance of daily excess returns as Mr. Patton's approach requires; (2) in contrast to Mr. Patton's approach, considers the excess return on the subsequent date even when the excess return on the day of the event is not statistically significant; and (3) considers an event to result in a statistically significant price response even when the excess return on the day of the event does not meet the authors' threshold for statistical significance, but the two-day cumulative excess return does.

D. Conclusion

61. The discussion above illustrates that multi-day event windows often allow for the incorporation of the full effects of value-relevant information, are appropriate when circumstances warrant their use, and are consistent with academic literature. Mr. Patton's mechanical rule to determine event windows is also not supported by the sole paper he cites as support.

VI THE AUGUST 15, 2021 DISCLOSURE

62. The Patton Report offers two principal criticisms of my analysis of the August 15, 2021 Disclosure.

63. *First*, Mr. Patton and I agree that the August 15, 2021 Disclosure was "regarding an accounting issue that related to revenue and accounts receivable,"[75] in relation to potential additional credit losses with respect to prior years and that this disclosure corresponds with an alleged misrepresentation in this case.[76] It is also undisputed that the overstatement of the accounts

[75] Patton Report, ¶ 22.

[76] Patton Report, ¶¶ 22, 53.a, 56; Surana Report, ¶¶ 97-98.

receivable resulted in the restatement of prior financials.[77] Yet, Mr. Patton tries to disassociate this disclosure from the restatement of prior financials and faults me for stating that the disclosure put the market on notice regarding "potential adjustments" related to previously reported accounts receivable.[78] Mr. Patton, on the other hand, states the disclosure could have alerted the market that Akumin was "reviewing certain past periods in connection with finalizing the 2Q21 financials,"[79] suggesting that somehow the disclosure of potential credit losses informed the market that the disclosure entailed just a review and no financial consequences. The excess price decline, after accounting for market, industry and exchange rate factors, of -18.5% based on my model and -20.4% based on Mr. Patton's model, which represents the market's consensus view of the disclosure, is consistent with my analysis of the August 15, 2021 Disclosure and does not comport with Mr. Patton's view.

64. Second, Mr. Patton contends that my analysis omitted "concern about the Alliance acquisition and the pending application for MCTO" that "contributed to Akumin's share price decline on August 16, 2021,"[80] and that I ignored "the statistically significant Akumin share price increase on September 1, 2021."[81] I note that beyond mentioning the MCTO in the heading to Section 6.3 of his report, Mr. Patton does not mention the MCTO elsewhere in his entire Section 6.

65. Mr. Patton does not provide any contemporaneous support for his conclusion that there was concern regarding the Alliance deal as of August 16, 2021 due to the August 15, 2021

[77] Patton Report, ¶ 58; Surana Report, ¶ 145.
[78] Patton Report, ¶ 119 citing to Surana Report, ¶¶ 97-98.
[79] Patton Report, ¶ 119.
[80] Patton Report, Section 6.3 heading (formatting adjusted).
[81] Patton Report, Section 6.4 heading (formatting adjusted).

Disclosure. Nor does he support this assertion by any empirical analysis. Furthermore, Akumin's stock price, after accounting for market, industry and exchange rate factors, after the Alliance acquisition was completed on September 1, 2021 (*i.e.*, after the stock price had increased upon the completion of the deal and there was no longer any uncertainty about deal completion) was at almost the same level as it was after the close on August 16, 2021 when my event window for the August 15, 2021 Disclosure is complete.

66. Thus, Mr. Patton has failed to substantiate his implied claim that the stock price increase on September 1, 2021 was a reversal, at least in part, of the decline on August 16, 2021, and by extension that the decline on August 16, 2021, at least in part, was due to the uncertainly about the Alliance acquisition rather than the accounting issues revealed in the August 15, 2021 Disclosure.

67. Mr. Patton's criticisms have no impact on my opinion that the August 15, 2021 Disclosure corresponds with the allegations in this case and was the cause of the large statistically significant excess stock price decline on August 16, 2021, after accounting for market, industry and exchange rate factors. In the following sections, I provide my responses to specific issues raised by Mr. Patton.

A. The August 15, 2021 Disclosure Was Related to the Alleged Misrepresentation Regarding Overstatement of Accounts Receivable and Mr. Patton's Attempt to Disassociate the Disclosure from the Resultant Restatement Is Misguided

68. Mr. Patton does not dispute that there was a large negative statistically significant excess stock price decline, after accounting for market, industry and exchange rate movements, following the August 15, 2021 Disclosure. Mr. Patton's event study demonstrates that there was an excess price decline of -20.4% on August 16, 2021, and that this decline was statistically

significant at the 1% level, meaning that the hypothesis that this price decline was a random fluctuation can be rejected with 99% confidence.[82] Based on my event study, I arrive at a similar conclusion, estimating the excess price decline to be -18.5%, also statistically significant at the 1% level.[83,84]

69. Mr. Patton and I also agree that the August 15, 2021 Disclosure informed the market that the Q2 2021 financials were delayed because "further information and analysis regarding an accounting issue that related to revenue and accounts receivable," in connection with potential additional credit losses, were required.[85] Mr. Patton describes this accounting issue as one of the misrepresentations alleged in this case.[86] Thus, when viewed properly in the context of the allegations in this case, Mr. Patton's own event study shows that Akumin's excess stock price declined by more than 20% (statistically significant at the 1% significance level) in response to the August 15, 2021 Disclosure that was allegedly corrective of one of the allegations in this case.[87]

70. Despite this confirmatory result, Mr. Patton attempts to disassociate the August 15, 2021 Disclosure from the eventual restatement and in the process mischaracterizes the Surana Report, as I discuss below. While the purpose of Mr. Patton's attempt to recast this disclosure in terms of a restatement *per se* is unclear to me, I note that the Plaintiff's allegations concern

[82] Patton Report, Table 3. Although the table only indicates significance at the 5% and the 10% levels, it can be discerned from the back-up materials provided by Mr. Patton that the excess return was statistically significant at the 1% level.

[83] Surana Report, ¶ 91 and Exhibit 5.

[84] I note that although Mr. Patton measures returns based on logarithms (*i.e.*, continuous compounding) and I measure returns based on daily holding periods, we both calculate an excess price decline of $0.69 per share (rounded to the nearest cent).

[85] Patton Report, ¶¶ 22, 56; Surana Report, ¶¶ 97-98.

[86] Patton Report, ¶ 53.a.

[87] Patton Report, ¶ 22 and Table 3.

Akumin's overstated accounts receivable that resulted in the restatement of its financial statements, not simply the act of filing the restated financials. This allegation was partially corrected on August 15, 2021.

71. I next address the Patton Report's attempt at disassociating the August 15, 2021 Disclosure from the restatement.

72. *First*, Mr. Patton claims that, in the Surana Report, I opined that "the August 15 Disclosure ***notified*** the market of a restatement."[88] This is not what the Surana Report says. In the Surana Report, I noted that earlier in the year in 2021, on March 31, 2021, when Akumin filed its financial report for FY 2020, it had reported that there had been "an increase in cumulative implicit price concessions for outstanding receivables of approximately [US]$12 million when compared to fiscal 2019."[89] Because the Company recorded accounts receivable on the basis of net realizable value after accounting for any expected credit losses at each reporting period, analysts noted that the increase in cumulative implicit price concessions was essentially a decrease in Akumin's accounts receivable balance.[90]

73. On August 15, 2021, Akumin informed the market that it would delay the filing of its financial statements and related documents for Q2 2021 because the Company and its external

[88] Patton Report, Section 6.2 heading (formatting adjusted).

[89] Surana Report, ¶ 94, citing "Akumin Inc. Announces Fourth Quarter and Releases 2021 Financial Guidance," *Canada NewsWire*, March 31, 2021, 8:59 pm.

[90] Surana Report, ¶ 94, citing "Quarter Below Forecasts; A/R and Leverage Remain Concerns," National Bank of Canada research report, April 1, 2021; "Noisy End To 2020; 2021 Guidance Falls Short," Cormark Securities research report, April 5, 2021. As discussed in the Surana Report, Akumin noted that "[i]mplicit price concessions are recorded as a reduction in revenue with an offsetting amount reducing the carrying value of the receivable." Surana Report, ¶ 28, citing Akumin Inc. Consolidated Financial Statements for year ended December 31, 2020, filed March 31, 2021, p. 15 (emphasis removed).

auditor had determined that further information and analysis related to ***potential additional*** credit losses with respect to ***prior years*** were necessary to complete the interim financial report.[91] This disclosure, in my view, ***alerted*** or, as I stated in the Surana Report, "***put … the market on notice***" that accounting for the potential additional credit losses related to prior years could lead to ***potential adjustments*** related to previously reported accounts receivable – not that the market was notified of the certainty of a restatement, as Mr. Patton claims.[92]

74. In particular, in the Surana Report, I stated:

> Although the full details concerning the accounting error were not disclosed on August 15, 2021, the information revealed in the August 15, 2021 Disclosure informed the market that the Company and its external auditor were reviewing historical filings for potential additional credit losses, putting the market on notice regarding potential adjustments to previously reported accounts receivable for at least two prior years (*i.e.*, 2019 and 2020) ("*potential additional credit losses with respect to prior years*"). As discussed above in paragraphs 28-30, any potential reduction to the accounts receivable balance would correspond with a decrease in revenue on the income statement and a decrease in the total shareholders' equity on the balance sheet. The August 15, 2021 Disclosure, therefore, corresponds with the alleged misrepresentations concerning Akumin's overstatement of accounts receivable, revenue and relatedly the total shareholders' equity.[93]

75. Therefore, Mr. Patton's claim that, in the Surana Report, I opined that "the August 15 Disclosure ***notified*** the market of a restatement" is wrong.[94]

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[91] Surana Report, ¶ 97; the details of the disclosure are contained in "Akumin Announces Delay in Filing 2021 Q2 Interim Financial Report and Related Management's Discussion and Analysis," *Canada NewsWire*, August 15, 2021, 8:00 am. *See also* Surana Report, Section VIII.A.i.

[92] Surana Report, ¶ 98.

[93] Surana Report, ¶ 98 (emphasis in original).

[94] Patton Report, Section 6.2 heading (formatting adjusted).

76. *Second*, Mr. Patton takes issue with my discussion of the August 15, 2021 Disclosure and instead suggests that the disclosure could have alerted the market that Akumin was "reviewing certain past periods in connection with finalizing the 2Q21 financials."[95] Mr. Patton does not substantiate his view with any market commentary.[96] Moreover, the Patton Report does not elaborate what the phrase "reviewing certain past periods in connection with finalizing the 2Q21 financials"[97] means to Mr. Patton.

77. If Mr. Patton is attempting to minimize the significance of the August 15, 2021 Disclosure by suggesting that somehow the disclosure of potential credit losses informed the market that the disclosure entailed just a review and no financial consequences, then his interpretation does not comport with the consensus view of the market. An excess stock price decline of -18.5% based on my model and -20.4% based on his model, or a loss of nearly one-fifth of the Company's market capitalization following the disclosure, does not indicate that the market viewed the disclosure as suggesting simply a review of certain past periods.

78. If, on the other hand, Mr. Patton is suggesting that the market viewed the disclosure to suggest that the potential credit losses could potentially be addressed in the current period financials as opposed to in prior year financials, then in terms of the impact on accounts receivable and total shareholders' equity as of Q2 2021, the impact would be the same. In other words, regardless of whether Akumin ended up restating its prior year's financial statements to correct for an accounting error (which the Company actually subsequently determined was "required" in its

[95] Patton Report, ¶ 119.
[96] Patton Report, ¶ 119.
[97] Patton Report, ¶ 119.

October 12, 2021 press release),[98] or Akumin determined that the additional credit losses related to prior years could be recorded in the current year, without restating prior year's financial statements, the effect on the company's accounts receivable and shareholders' equity would be the same.

B. After Accounting for Market, Industry and Exchange Rate Factors, Akumin's Stock Price After the Alliance Acquisition Was Completed on September 1, 2021 Was at Almost the Same Level as It Was After the Close on August 16, 2021

79. The excess price decline in Akumin's stock, after accounting for market, industry and exchange rate factors, on August 16, 2021 after the August 15, 2021 Disclosure was $0.69 per share.[99] Mr. Patton suggests that concern about the completion of the Alliance acquisition in the aftermath of the August 15, 2021 Disclosure contributed, at least in part, to Akumin's excess stock price decline on August 16, 2021.[100] Because Akumin's stock price increased when the Alliance deal closed on September 1, 2021, Mr. Patton faults me for stating that "the market's unbiased estimate of the share price consequences from the information in the August 15, 2021 Disclosure was not reversed when further details about the accounting error were revealed on October 12, 2021 (when a second type of accounting error was revealed as well),"[101] suggesting that the stock price increase on September 1, 2021 was a reversal, at least in part, of the decline on August 16, 2021.

80. The Patton Report implies that the share price decline on August 16, 2021 was, at least in part, unrelated to the alleged corrective information released on August 15, 2021, although

[98] October 12, 2021 Press Release.

[99] Surana Report, Exhibit 5. I note that Mr. Patton also calculates an excess price decline of $0.69 on August 16, 2021. Patton Report, Table 3.

[100] Patton Report, Section 6.3.

[101] Patton Report, ¶ 130, citing to Surana Report, ¶ 100.

Mr. Patton does not provide any direct opinion on what he believes the effect of such purportedly confounding information to be.[102] He conducts no independent analysis to assess how much, if any, of the stock price decline on August 16, 2021 is attributable to a perceived risk of the Alliance deal being in jeopardy.

81. In my review of contemporaneous information in the marketplace from the time of the August 15, 2021 Disclosure through the deal completion on September 1, 2021, I did not find any analyst or media commentary expressing concern about the Alliance deal being in jeopardy.

82. Mr. Patton forms his opinion based on a review of two analyst reports. The first is a report by the National Bank of Canada dated August 16, 2021. Mr. Patton claims that this report expressed concern about "uncertainty regarding the pending Alliance acquisition."[103] I do not agree with this interpretation of the National Bank of Canada report.

83. The National Bank of Canada report listed three issues for which the analysts "remain[ed] on the sidelines."[104] None of these three issues included any concern about uncertainty regarding the pending Alliance acquisition, as Mr. Patton claims. Specifically, the National Bank of Canada report stated:

> Given 1) A/R concerns; 2) the elevated leverage (~6x Net Debt to FY+1 EBITDA); and 3) the acquisition of Alliance HealthCare Services (in default in 2020, no growth in last five years, assets

[102] Patton Report, Section 6.3 heading.

[103] Patton Report, ¶ 127.

[104] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank of Canada research report, August 16, 2021.

> overall less desirable than AKU's legacy ones), we remain on the sidelines.[105]

84. The first reason that National Bank of Canada "remain[ed] on the sidelines" was the "**A/R [accounts receivable] concerns**", *i.e.*, concerns related to Akumin's August 15, 2021 Disclosure that "the Company and its external auditor had determined that further information and analysis related to potential additional credit losses with respect to prior years were necessary to complete the interim financial report." This concern related to Akumin's disclosure about the potential additional credit losses related to its accounts receivable balance and was not related to concern about the completion of the Alliance acquisition in the aftermath of the August 15, 2021 Disclosure.

85. The second reason that National Bank of Canada "remain[ed] on the sidelines" was "the elevated leverage (~6x Net Debt to FY+1 EBITDA)." This concern related to Akumin's leverage and was not related to concern about the completion of the Alliance acquisition in the aftermath of the August 15, 2021 Disclosure.

86. The third reason that National Bank of Canada "remain[ed] on the sidelines" related to the Alliance acquisition. The reasons included: "in default in 2020, no growth in last five years, assets overall less desirable than AKU's legacy ones." All these concerns had been previously expressed by National Bank of Canada after the deal was announced in June 2021.[106] More

[105] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank of Canada research report, August 16, 2021.

[106] "Acquisition Accretive But Already High Leverage Up And Some Concerns on the Target," National Bank of Canada research report, June 27, 2021. This report also described the Alliance deal as "transformative" and discussed several "positives" and "concerns" about the deal.

importantly, the report did not express any opinion about the completion of the Alliance deal being in jeopardy due to the August 15, 2021 Disclosure.

87. Not only does the Patton Report offer a misleading interpretation of the National Bank of Canada Report, it also mischaracterizes my summary of this report.[107] In the Surana Report, I stated:

> Expressing their "concerns" related to the accounts receivable disclosure in conjunction with the previously announced acquisition of Alliance and related elevated leverage, the analysts "remain[ed] on the sidelines"[108]

88. Put differently, I simply rephrased what the National Bank of Canada Report stated, which is that the analysts remained on the sides for a number of reasons – which notably did not include the Alliance deal being in jeopardy as a reason: (1) accounts receivable concern; ***together with or "in conjunction" with*** other reasons, namely, (2) elevated leverage; and (3) the acquisition of Alliance for which it provided reasons in parentheses which included "in default in 2020, no growth in last five years, assets overall less desirable than AKU's legacy ones." I did not state that National Bank of Canada viewed the August 15, 2021 Disclosure as introducing uncertainty related to the Alliance acquisition.

89. The second report that Mr. Patton references to support his opinion that concern about completion of the Alliance acquisition contributed to Akumin's excess stock price decline

[107] Patton Report, ¶ 127 citing to Surana Report, ¶ 89.

[108] Surana Report, ¶ 89 citing to "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank of Canada research report, August 16, 2021 (emphasis added).

on August 16, 2021 is a report by Cormark dated September 2, 2021, *i.e.*, ***over two weeks after*** the August 15, 2021 Disclosure and after the Alliance acquisition was completed.[109]

90. The September 2, 2021 Cormark report does not state that the excess price decline on August 16, 2021 was affected by a concern for the completion of the Alliance acquisition, as Mr. Patton suggests.[110] Mr. Patton does not address the possibility that any perceived concern about the Alliance deal completion as a consequence of the August 15, 2021 Disclosure could be reflected in Akumin's stock price after the price decline on August 16, 2021 and prior to the increase on September 1, 2021. In other words, while Mr. Patton implicitly relates Akumin's stock price movement on September 1, 2021 to the stock price movement on August 16, 2021, he ignores the stock price movement in the intervening period, even though there is no evidence to suggest that deal was considered to be in jeopardy as of August 16, 2021.

91. In particular, on August 17, 2021, Mr. Patton and I find a negative excess price change, after accounting for market, industry and exchange rate factors, of $0.19 and $0.20 per share, respectively.[111] Our models both find this price decline to be statistically significant at the 10% level,[112] at which point Akumin's stock price closed at $2.84 per share.

92. Moreover, I note that Akumin's stock price declined by $0.33 between the close on August 16, 2021 and the close on August 31, 2021 (the day prior to the completion of the

[109] Patton Report, ¶ 127 citing to "Alliance Takeout Closed While Waiting For Delayed Q2/21," Cormark research report, September 2, 2021.

[110] "Alliance Takeout Closed While Waiting For Delayed Q2/21," Cormark research report, September 2, 2021.

[111] Surana Report, Exhibit 5, and back-up materials to the Patton Report.

[112] I note that if one were performing a "one-sided" test of whether the price movement was negative, this would be significant at the 5% level.

acquisition) after declining by $0.68 on August 16, 2021.[113] After adjusting for market, industry and exchange rate influences, the decline in Akumin stock price between the close on August 16, 2021 and the close on August 31, 2021 was $0.38 per share, *i.e.*, Akumin's stock price, after adjusting for market, industry and exchange rate factors, had fallen by an additional $0.38 per share after the end of my event window for the August 15, 2021 Disclosure and prior to the completion of the Alliance deal.[114] Mr. Patton's implication of a stock price reversal after completion of the Alliance deal takes no account of this decline, even though Mr. Patton has no evidence to show that there was any perceived risk to deal completion at the time of the August 15, 2021 Disclosure.

93. I conducted an analysis of Akumin's stock price in conjunction with the Alliance acquisition process between the close on August 13, 2021 (last trading day prior to the release of the August 15, 2021 Disclosure) and the close on September 1, 2021 (after the completion of the Alliance acquisition), after stripping out the effect of the deal uncertainty and the MCTO uncertainty as these were resolved as of the close on September 1, 2021. In particular, I note that any potential negative effect on the share price due to a declining deal probability or any MCTO-related uncertainty after the August 15, 2021 Disclosure would no longer affect the share price after the completion of the deal by which time the MCTO had also been granted.[115]

[113] Surana Report, Exhibit 5.

[114] The sum of the daily excess price changes from August 17, 2021 to August 31, 2021 is -$0.38.

[115] Akumin filed a press release on August 23, 2021 informing the market that the MCTO had been granted. *See* "Akumin Announces Acceptance of its Management Cease Trade Order Application," *Canada NewsWire*, August 23, 2021, 7:00 am.

94. When a merger or acquisition is announced, the stock price of a company reflects a blended price of the company's value if the deal does not occur and the value if the deal occurs. The weights on these two values depends on the market's expectation of the probability that the deal will be completed. This can be expressed using the following equation:

$$P_m = Prob(DC) * P_{DC} + [1 - Prob(DC)] * P_{NDC} \quad (1)$$

where, P_m is the market price, $Prob(DC)$ represents the market's expectation of the probability that the deal will be completed, P_{DC} represents the price if the deal is completed and P_{NDC} represents the price if the deal is not completed (*i.e.*, the stand-alone value).[116]

95. Prior to the August 15, 2021 Disclosure, Akumin's stock traded at $3.73 per share. This $3.73 per share stock price was the weighted (by probability of deal completion) average price of the combined and the stand-alone company. As Mr. Patton notes, the proposed acquisition of Alliance was viewed very favorably for Akumin stock.[117,118] Thus, prior to the August 15, 2021 Disclosure, the per share stock price of the combined company was greater than the price of the stock as a stand-alone company, *i.e.*, $P_{DC} > P_{NDC}$ in the equation above.[119] This implies that immediately prior to the August 15, 2021 Disclosure, the per share price of the combined company was greater than or equal to the market price which was $3.73 per share,[120] *i.e.*,

[116] For a general discussion of this formula, *see*, *e.g.*, David F. Larcker and Thomas Lys, "An Empirical Analysis of the Incentives to Engage in Costly Information Acquisition: The Case of Risk Arbitrage," *Journal of Financial Economics* 18, 1987, 111-126 at 113.

[117] Patton Report, ¶¶ 125-126.

[118] When the deal was announced on June 25, 2021, the stock price had increased by a statistically significant 7.5% after accounting for market, industry and exchange rate effects. *See* Surana Report, Exhibit 5.

[119] The combined company here refers to Akumin merged with Alliance.

[120] The market price was equal to the price of the combined company if the market assessed

$$P_{DC} \geq P_m \qquad (2)$$

or, $P_{DC} \geq$ \$3.73.

96. After the deal completed on September 1, 2021, the stock price would reflect only the value of the combined company (*i.e.*, the probability of the deal is 100%). Because the per share price of the combined company was greater than the price of stand-alone Akumin, holding all else constant, the stock price after the completion of the deal should be greater than or equal to the price before deal completion that reflected a probability of deal completion of less than or equal to 100%. *See* equation (2) above.

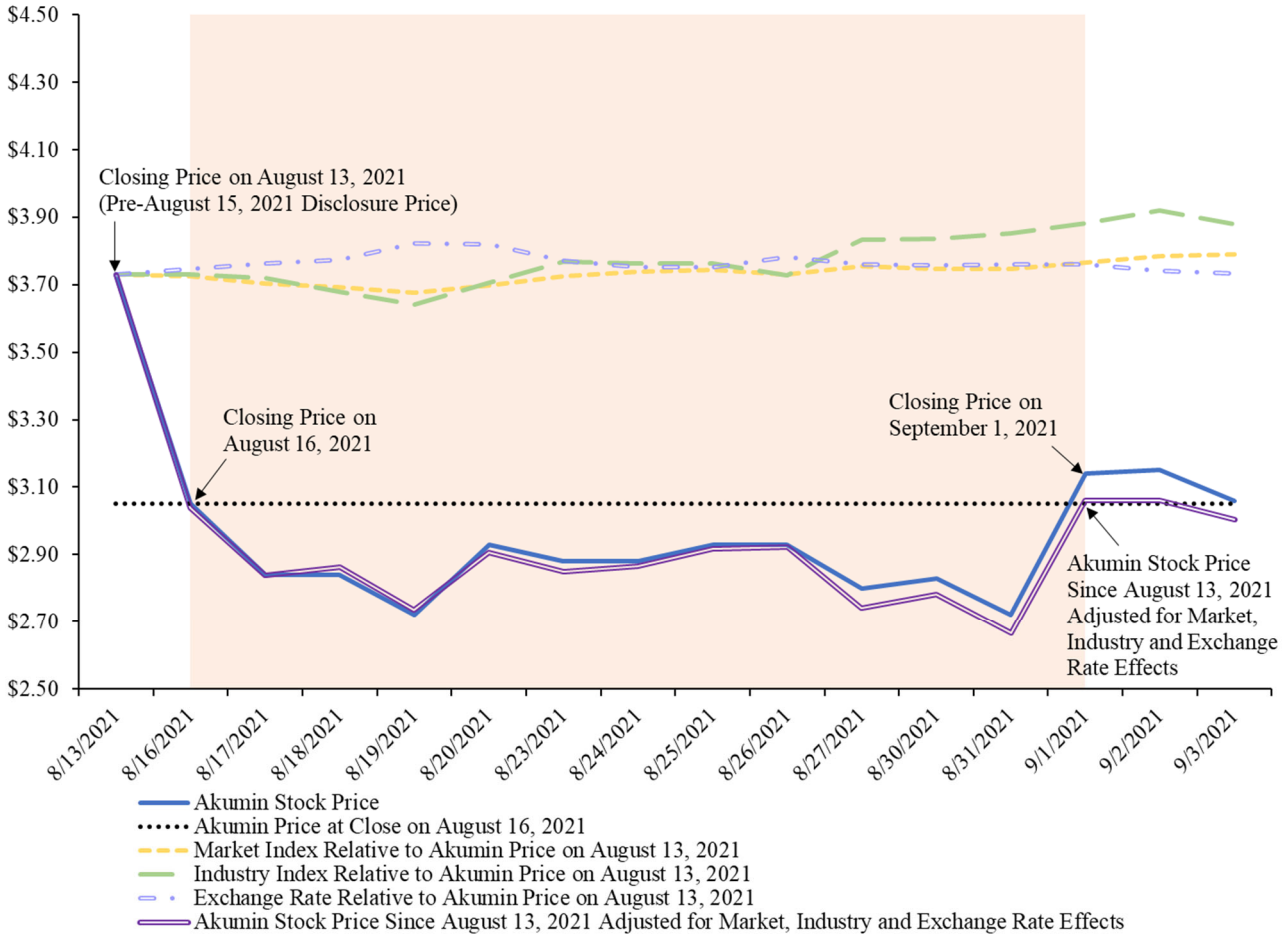
97. However, after the deal was completed on September 1, 2021, Akumin's stock price was \$3.14 per share. Thus, from prior to the August 15, 2021 Disclosure to after the completion of the deal, the per share price declined by \$0.59 per share – from \$3.73 to \$3.14 per share.

98. As shown in the figure below, during this two-week time period, the market, industry, and exchange rate performance improved. This means that the market, industry and exchange rate movements over this period would lead to an expectation of a positive movement in Akumin's stock price, so that none of the decline of \$0.59 per share would then be attributable to general market, industry or exchange rate movements. Instead, the decline in Akumin stock price after accounting for market, industry and exchange rate effects would be greater than \$0.59 per share. If I incorporate market, industry, and exchange rate movements to calculate an excess price decline, the decline from prior to the August 15, 2021 Disclosure to the completion on September

a probability of 100% to deal completion and less otherwise.

1, 2021 is $0.67 per share.[121] Thus, this amount, $0.67 per share, reflects the decline in the per share price of the combined company after stripping out the effect of changes in the deal probability.

FIGURE 2
AKUMIN STOCK PRICE (AUGUST 13, 2021 TO SEPTEMBER 3, 2021)



99. Over this two-week period, I investigated whether there was any other company-specific news, other than the August 15 Disclosure and its effects, that could account for this $0.67

[121] The sum of the daily excess price changes from August 15, 2021 to September 1, 2021 is -$0.67. Surana Report, Exhibit 5.

per share decline. I did not find any other negative company-specific information besides the August 15, 2021 Disclosure.[122]

100. Furthermore, I note that the September 2, 2021 Cormark report estimated the magnitude of the accounts receivable issue to be US$20 million and noted that the closing of the Alliance deal signaled that there likely was no material revenue recognition issue.[123] Cormark's estimate of US$20 million was an underestimation of the true amount.[124] This was later confirmed in the October 13, 2021 Cormark report when Cormark noted that Akumin's disclosure about the magnitude of accounts receivable at issue had an incrementally negative impact on its outlook.[125] Thus, potentially some portion of the price increase on September 1, 2021 was due to Cormark's portrayal of the accounts receivable issue as less severe than it actually was. But for this

[122] Other than the August 15, 2021 Disclosure, the only news events I found are: (1) on Friday, August 20, 2021 (after close), a press release by Moody's announcing completion of a periodic review of ratings of Akumin Inc. (the publication did not announce a credit rating action and was not an indication of whether or not a credit rating action was likely in the near future); (2) on Monday, August 23, 2021, a press release by Akumin stating that the MCTO had been granted; and (3) on Monday, August 30, 2021, a press release by Akumin providing a bi-weekly MCTO status update that did not contain any new significant information. Akumin's excess stock price reaction, after accounting for market, industry and exchange rate factors, on either August 23, 2021 or August 30, 2021 is not statistically significant at the 5% level (the first day of trading after Friday, August 20, 2021 was Monday, August 23, 2021). *See* "Moody's announces completion of a periodic review of ratings of Akumin Inc.," Moody's Investors Service Press Release, August 20, 2021, 6:51 pm; "Akumin Announces Acceptance of its Management Cease Trade Order Application," *Canada NewsWire*, August 23, 2021, 7:00 am; "Akumin Provides Bi-Weekly MCTO Status Update," *Canada NewsWire*, August 30, 2021, 7:00 am.

[123] "Alliance Takeout Closed While Waiting For Delayed Q2/21", Cormark research report, September 2, 2021.

[124] "Reporting Delays Continue", Cormark research report, October 13, 2021.

[125] "Reporting Delays Continue", Cormark research report, October 13, 2021.

discussion, the price increase on September 1, 2021 could have been lower making the above analysis conservative.[126]

101. Based on the discussion above, Mr. Patton's arguments do not make me change my opinion that the August 15, 2021 Disclosure was the cause of the large statistically significant decline in Akumin's stock price, after accounting for market, industry, and exchange rate movements.[127] I found no contemporaneous evidence to suggest that there was any perceived risk to the completion of the Alliance deal or MCTO uncertainty for up to two weeks after the August 15, 2021 Disclosure, and Mr. Patton does not provide any. Mr. Patton also does not support his opinion with any empirical analysis.

102. To the extent there was any uncertainty about deal completion leading up to September 1, 2021 when the Alliance deal was completed, as discussed above, an analysis of Akumin's stock price in conjunction with the acquisition process shows that after accounting for market, industry and exchange rate movements, Akumin's stock price after the deal completed on September 1, 2021, when there was no longer any uncertainty about the completion of the deal, was at nearly the same level as it was after the close on August 16, 2021 when my event window for the August 15, 2021 Disclosure is complete.

[126] My assignment in the Surana Report did not require a quantification of damages and, as such, I have not performed analyses to quantify damages in this case.

[127] I note that any negative effect from the possibility of the deal not being completed was a direct consequence of the alleged corrective information, as is evident by the Cormark commentary cited by Mr. Patton. Similarly, any concern about the pending MCTO was also directly related to the August 15, 2021 Disclosure which prompted Akumin to seek an MCTO in the first place. Mr. Patton provides no support for any perceived MCTO uncertainty. As I noted above in paragraph 64, beyond mentioning the MCTO in the heading to Section 6.3 of his report, Mr. Patton does not mention the MCTO elsewhere in his entire Section 6.

103. Thus, Mr. Patton has failed to substantiate his implied claim that the stock price increase on September 1, 2021 was a reversal, at least in part, of the decline on August 16, 2021, and by extension that the decline on August 16, 2021 was due to the uncertainly about the Alliance acquisition rather than the accounting issues revealed in the August 15, 2021 Disclosure.

104. Finally, Akumin's August 15, 2021 Disclosure contained information that was value relevant and negative to Akumin's share price, independent of any risk that it might have created that the Alliance acquisition would not be completed.

VII THE OCTOBER 12, 2021 DISCLOSURE

105. With regard to my analysis of the October 12, 2021 Disclosure, the Patton Report disagrees with my use of a two-day event window. First, Mr. Patton argues that the use of a two-day event window is inconsistent with an efficient market. I disagree.

106. Second, although Mr. Patton does not explicitly state it, the Patton Report implies that improper capitalization of repair and maintenance expenses is not value-relevant information to Akumin's share price. Again, I disagree.

107. In the sections below, I provide my responses to Mr. Patton's specific arguments and explain why they have no impact on my conclusion that the October 12, 2021 Disclosure corresponds with the allegations in this case and was the cause of the large statistically significant excess stock price decline, after accounting for market, industry and exchange rate factors, over the October 12-13, 2021 event window.

A. Mr. Patton's Claim that A Multi-Day Event Window Is Inconsistent with an Efficient Market Stands in Stark Contrast with Decades of Academic Research; His Proposed Mechanical Approach Is Unsupported by the Sole Paper Mr. Patton Provides as Support

108. The October 12, 2021 Disclosure informed the market that Akumin had determined that a "material change" to historical implicit price concessions recorded as at January 1, 2019, December 31, 2019 and December 31, 2020 was required and the Company accordingly would restate its previously filed financial statements for FY2019, FY2020, and Q1 2021.[128] The October 12, 2021 Disclosure also informed the market about a second accounting error related to improper capitalization of repair and maintenance costs and disclosed that the required filings for Q2 2021 would be further delayed, as it no longer expected to be able to file the required reports by October 15, 2021, instead anticipating filing prior to November 15, 2021.[129]

109. After the October 12, 2021 Disclosure, based on my market model, Akumin's excess stock price, after accounting for market, industry and exchange rate factors, experienced a two-day decline of -11.5%, which is statistically significant at the 5% level, meaning that the hypothesis that this stock price decline was a random fluctuation can be rejected with 95% confidence.[130] Mr. Patton's market model yields a similar two-day excess stock price decline of -12.0%, also statistically significant at the 5% level.[131] However, Mr. Patton argues that this

[128] The details of the disclosure are contained in October 12, 2021 Press Release. *See also* Surana Report, Section VIII.B.i.

[129] October 12, 2021 Press Release.

[130] Surana Report, ¶ 119 and Exhibit 5. I calculate a two-day excess price decline of $0.36 per share.

[131] Patton Report, Table 6. Mr. Patton calculates a two-day excess price decline of $0.35 per share.

statistically significant two-day price response is "inconsistent with Akumin trading in an efficient market"[132] and should be ignored. For the reasons discussed below, I disagree.

110. As discussed in Section V above, multi-day event windows are widely used in academic research and commonly employed in securities litigation to measure the ***full effect*** of new information. It is generally understood that "[i]n practice, the period of interest is often expanded to multiple days."[133] This allows for the incorporation of the "market's ongoing adjustment to news."[134]

111. It is also well recognized that determination of an event window is not a mechanical exercise; rather "there is substantial variation in the complexity of determining the length of an event window."[135]

112. Mr. Patton, however, advocates for a mechanical approach that is based solely on the statistical significance of daily excess returns.[136] Because Akumin's daily excess stock price return on October 12, 2021, after accounting for market, industry and exchange rate factors, is not

[132] Patton Report, ¶ 132.

[133] Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35, March 1997, 13-39, at 15.

[134] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.4.

[135] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, at 559.

[136] Patton Report, ¶ 87.

statistically significant, Mr. Patton suggests that the October 12, 2021 Disclosure was not considered important by market participants and should be ignored.[137]

113. As discussed in detail in Section V above, Mr. Patton's mechanical approach to the determination of event windows in unsupported. Indeed, the sole paper Mr. Patton cites to support his approach confirms the approach I used for the October 12, 2021 Disclosure.[138] The paper Mr. Patton cites states that "if the daily abnormal return on a ***subsequent trading day*** is statistically significant, then we assume that the market ***is continuing to incorporate [the] information***…"[139] The authors thus consider the excess return not just on the day of the event but also the subsequent day, which in the case of the October 12, 2021 Disclosure would be October 13, 2021. The authors recognize that information can continue to be incorporated in the stock price on the day following the event. In particular, the paper finds one event to result in a statistically significant excess return. Notably, for this event, even though the excess return on the first day does not meet the authors' 5% threshold for statistical significance, the authors base their conclusion on a cumulative excess return over two days,[140] just like I base my opinion on the cumulative excess return over the two-day event window of October 12-13, 2021.

114. Furthermore, even for the other events that the paper analyzes that do not result in statistically significant excess returns, the authors examine the excess return on the subsequent day following the event. Thus, Mr. Patton's approach not only stands in contrast with well-established

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[137] Patton Report, Sections 7.1 and 7.2.

[138] Patton Report, footnote 79, citing James Koch, Robert N. Fenili and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?", *Atlantic Economic Journal* 39, March 2011.

[139] James Koch, Robert N. Fenili and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?", *Atlantic Economic Journal* 39, March 2011 (emphasis added).

[140] James Koch, Robert N. Fenili and Richard J. Cebula, "Do Investors Care if Steve Jobs is Healthy?" *Atlantic Economic Journal* 39, March 2011.

techniques used in event studies in academic literature, but is also unsupported by the single paper he offers as support for his mechanical approach.

115. Mr. Patton also presents various charts of intraday price movements to argue against the use of the statistically significant price reaction to the Cormark report. He notes that if the October 13, 2021 Cormark Report was providing new information to the market, then "it would be reasonable to expect the price to react more swiftly."[141] But the charts do not support Mr. Patton's approach. And, as I explain in the next section, the Cormark report did provide new information in its October 13, 2021 report.

116. Mr. Patton's intraday chart for October 13, 2021 shows Akumin's Canadian composite stock price to have declined to $2.78 per share as of 11:05 am, *i.e.*, 7.6% lower than the prior close of $3.01 per share and then fluctuating around before closing at $2.74 per share.[142] So, a minute-level analysis would show that most of the price reaction had occurred within roughly an hour and a half of the stock market open on October 13, 2021.

117. A similar pattern is observed from Mr. Patton's chart for August 16, 2021 (which Mr. Patton uses to demonstrate speed of price reaction), which shows that Akumin's Canadian composite price declined to $3.00 per share by 12:13 pm and then fluctuated around before closing at $3.05 per share.[143]

118. Mr. Patton implies that the market should react "more swiftly," otherwise it would suggest that the Cormark report did not provide new information to the market. He does not define

[141] Patton Report, ¶ 149.

[142] Patton Report, Figure 8 and back-up materials.

[143] Patton Report, Figure 5 and back-up materials.

what "swiftly" means to him. Even though some of the literature Mr. Patton cites shows that the stock market can react to certain types of news within minutes, he does not provide any academic support to dismiss the stock price reaction to new information if the stock price does not move within the first few minutes. These inconsistencies in Mr. Patton's analysis notwithstanding, as I explained in Section V above, even the academic literature that studies minute-level responses considers price reactions over multi-day windows because the "initial response … could be the beginning of a larger, longer-horizon reaction."[144]

119. Finally, while Mr. Patton effectively argues that the price reaction on October 12-13, 2021 should be ignored, he offers no alternate explanation for the large stock price decline over this event window.

120. For all these reasons, I disagree with Mr. Patton's opinion that the large excess stock price decline, after accounting for market, industry and exchange rate factors (-11.5% based on my model and -12.0% based on Mr. Patton's model), should be ignored.

B. After the October 12, 2021 Disclosure, the Cormark Report Issued the Next Day Was the First Analyst Report to Update Its Forecasts, Lower Its Investment Rating, and Lower Its Price Target

121. Cormark issued a report on October 13, 2021.[145] Mr. Patton claims that this report "did not provide *additional* new information regarding the accounting issues, beyond what was already related by and inferable from the October 12 Disclosure."[146] I disagree.

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[144] Jeffrey A. Busse and T. Clifton Green, "Market Efficiency in Real Time," *Journal of Financial Economics* 65, 2002, 415-437 at 428.

[145] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[146] Patton Report, ¶ 150 (emphasis in original).

122. Based on its analysis of the information contained in the October 12, 2021 Disclosure, Cormark lowered its investment rating for Akumin stock from Buy to Speculative Buy, where "Speculative," according to Cormark, denoted that "the investment is speculative and has a higher degree of risk associated with it."[147]

123. Cormark also lowered its price target for Akumin stock by 18.5%, from US$4.60 per share to US$3.75 per share.[148] Cautioning investors that the information contained in the October 12, 2021 Disclosure had "an incrementally negative impact on [its] outlook," Cormark provided its analysis of the details of the "two buckets of accounting issues"[149] revealed in the October 12, 2021 Disclosure and revised its forecasts for Akumin.

124. As I stated in the Surana Report,[150] regarding the overstatement of accounts receivable, Cormark noted that while the issue was "known from the outset of the MCTO," the magnitude of the expected restatement was larger than the US$20 million anticipated by the analysts prior to the guidance provided by Akumin on October 12, 2021.[151] The analysts noted that "[US]$26-$31 MM of the [US]$96 MM accounts receivable balance from Q1/21 will be written-off" and that this would "come alongside restatement of financial results for 2019, 2020, and Q1/21."[152]

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[147] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021; Surana Report, ¶ 113.

[148] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021; Surana Report, ¶ 113.

[149] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021; Surana Report, ¶ 113.

[150] Surana Report, ¶¶ 114-116.

[151] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[152] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

125. Cormark explained that "the revised accounting treatment for expected collections should result in a downward revenue restatement and corresponding flow through the income statement."[153] The analysts cautioned that on a forward-looking basis, the October 12, 2021 Disclosure "trigger[ed] two forecast changes."[154] First, Cormark lowered its estimate of cash collections by an additional [US]$9 million (in addition to the [US]$20 million it had assumed prior to the October 12, 2021 Disclosure) to reflect the adjustment to the accounts receivable disclosed by Akumin in the October 12, 2021 Disclosure. Second, Cormark lowered Akumin's pre-Alliance future revenue forecast by 5% "to reflect the revised collections and price concession practices built into revenue recognition."[155] Given the Company's adjustment to its accounts receivable in Q4 2020, Cormark expected the majority of the restatement related to receivables to impact FY 2019.[156]

126. Regarding Akumin's disclosure of its improper capitalization of repair and maintenance expenses, Cormark noted that it would impact operating cash flow and earnings before interest, taxes, depreciation, and amortization (EBITDA). In light of a lack of guidance from Akumin concerning the magnitude of the improper capitalization, Cormark assumed that

[153] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.
[154] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.
[155] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.
[156] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

"30% of AKU's pre-Alliance Healthcare capex will be reclassified as an operating expense."[157,158] Cormark accordingly lowered its EBITDA forecasts for the Company.[159]

127. The changes in Cormark's (1) investment recommendation; (2) price target; and (3) earnings forecast for Akumin stock were all new pieces of information. They were Cormark's assessment of the October 12, 2021 Disclosure.

128. As I explained in the Surana Report, securities analysts are important information intermediaries in capital markets.[160] They collect company-specific information, analyze and evaluate such information in conjunction with their research and assessment of relevant industry and market conditions and publish research reports that contain their analyses of the company-specific events, their projections for future earnings, price targets, and investment recommendations.[161]

129. I also explained that coverage by research analysts means that important information about the company is analyzed by these professionals who expend considerable resources and that the importance of analyst coverage to investors is evident from the wide use of

[157] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[158] The analysts also noted that "[b]eyond the changes noted above, the only other revision relates to [US]$16 MM of expenses in 2021 (no change) that we now count as one-time (no longer hits Adj. EBITDA). The expenses relate to the Alliance Healthcare acquisition and public debt offerings." This change would increase adjusted EBITDA by US$16 million.

[159] Forecasted 2022 EBITDA decreased from US$195.3 million to US$175.4 million. Forecasted 2021 EBITDA increased from US$92 million to US$94 million, because the decline in adjusted EBITDA due to improper capitalization and revenue reduction were offset by the US$16 million expense now being treated as one-time expense, as discussed in footnote 158 above. *See* "Reporting Delays Continue," Cormark Securities research report, October 13, 2021.

[160] Surana Report, ¶ 40.

[161] Surana Report, ¶ 40.

the collection of forecasted financial estimates put forth by research analysts, commonly referred to as consensus estimates.[162]

130. Thomas and Cotter (2000) comment on the relevance of consensus estimates to the investing community, noting that, "First Call's [acquired by Thomson] earnings estimate dissemination service is a ***very important conduit for information from companies to their investors***. Investors believe that First Call data is so important that they (investors) actually purchase consensus earnings estimates and short analyst write-ups (First Call Notes) that sell-side analysts publish."[163]

131. Despite a revision to Cormark's investment recommendation, price target and earnings forecasts, all in relation to the October 12, 2021 Disclosure, Mr. Patton contends that the October 13, 2021 Cormark report should be ignored because the October 12, 2021 National Bank of Canada report "had already provided similar commentary a day prior."[164] Mr. Patton is mistaken. While the National Bank of Canada report discussed the anticipated write-down of the accounts receivable balance and cautioned that the higher operating expenses related to the disclosed improper capitalization of expenses would "impact profitability,"[165] unlike Cormark,

[162] Surana Report, Appendix A, ¶¶ 10-11.

[163] Randall S. Thomas and James F. Cotter, "Measuring Securities Market Efficiency in the Regulatory Setting," *Law and Contemporary Problems* 63(3), Summer 2000, 105-122, at 114 (emphasis added). *See also* Surana Report, Appendix A, ¶ 11.

[164] Patton Report, ¶ 35.

[165] "Filing of Q2/2021 financials delayed to November with a writedown of up to 32% of A/R," National Bank of Canada research report, October 12, 2021.

National Bank of Canada in its October 12, 2021 report did not revise its forecasts for Akumin; it did not change its investment rating; and it did not change its price target for Akumin stock.[166]

132. As I stated in the Surana Report, it is well-documented in the financial economic literature that investment recommendations, price targets and forecasts contained in analyst reports, in general, provide valuable information to investors and, as such, can significantly influence stock prices.[167] For example, Asquith *et al.* (2005) show that "changes in summary earnings forecasts, stock recommendations, and price targets all provide independent information to the capital markets" and "the strength of the written arguments made to support an analyst's opinion, is also significant."[168] Thus, I disagree with Mr. Patton's suggestion that the October 13, 2021 Cormark report contained no new information.

133. The Patton Report attempts to minimize the significance of the Cormark report by stating that it was "a brief report with a single page of substantive text."[169] I note that the September 2, 2021 Cormark report which Mr. Patton relies on for his opinions, as discussed above, also had a single page of substantive text.[170] Moreover, the October 13, 2021 report had a second page that contained Cormark's revised forecasts. Indeed, it is not uncommon for analysts to write reports with one page of substantive text, and despite its length, the Cormark report detailed its assessment of the impact of Akumin's accounting issues on its view of the company, revised its

[166] "Filing of Q2/2021 financials delayed to November with a writedown of up to 32% of A/R," National Bank of Canada research report, October 12, 2021.

[167] Surana Report, ¶ 41.

[168] Surana Report, ¶ 41, citing Paul Asquith, Michael B. Mikhail and Andrea S. Au, "Information content of equity analyst reports," *Journal of Financial Economics* 75, 2005, 245-282, at 246.

[169] Patton Report, ¶ 148.

[170] "Alliance Takeout Closed While Waiting For Delayed Q2/21," Cormark research report, September 2, 2021. *See also* Section VI.

forecasts and its investment rating, all of which are considered important information by the market, as discussed above.

134. Mr. Patton also claims that the "Cormark Report's focus [was] on the delay in Akumin's 2Q21 financials and the risk of a general cease trade order as opposed to Akumin's pending restatement."[171] However, the October 13, 2021 Cormark report was equally or more focused on Cormark's revised forecasts, investment recommendation and price target. Even so, while Mr. Patton attempts to downplay Cormark's forecast, investment rating and price target revisions, he also fails to appreciate that the delay in filing Akumin's 2Q 2021 financials and any MCTO uncertainty were direct consequences of the alleged corrective disclosure, not other independent factors unrelated to the disclosure.

135. Finally, because Akumin's daily excess stock price decline of -2.6%, after accounting for market, industry and exchange rate factors, was not statistically significant on October 12, 2021, Mr. Patton takes issue with a discussion in the Surana Report that Akumin's stock price had "reacted negatively to the news."[172]

136. Despite his criticism, Mr. Patton makes similar arguments for analyst reports issued on November 16, 2021 and November 17, 2021 – the excess stock price returns on these dates were not statistically significant, yet Mr. Patton discusses the direction of the stock price movements.[173] Mr. Patton's approach to the October 12, 2021 Disclosure is inconsistent with his approach to the November 16 and 17 analyst reports.

[171] Patton Report, ¶ 132.

[172] Patton Report, ¶¶ 33, 144, citing to Surana Report ¶ 100.

[173] Patton Report, ¶ 161. I discuss this further in Section IX.

137. Mr. Patton also takes issue with the statement in the Surana Report that on October 13, 2021, after the publication of the Cormark Report, the market continued to digest the information contained in the October 12 Disclosure.[174] But, in my opinion, that is exactly what the market did – digesting the information contained in the October 13, 2021 Cormark report, which included Cormark's assessment of the effects of the October 12, 2021 Disclosure on its forecasts, price target and investment rating for Akumin stock. This is supported by the statistically significant price reaction on October 13, 2021.[175]

138. As I discussed in the Surana Report, to determine the appropriate length of an event window, an economist considers the market's assessment of the disclosed information in terms of contemporaneous commentary by the financial press and analysts that clarifies or provides financial implications of the disclosure.[176] Thus, in my view, it is appropriate to expand the event window to include October 13, 2021 to allow for the full effects of the October 12, 2021 Disclosure to be impounded in Akumin's stock price.

C. Improper Capitalization of Expenses Simultaneously Increases Net Income (in the Period of Improper Capitalization) and Assets and Distorts the True Financial Strength of a Company

139. Although Mr. Patton does not explicitly state it, his report suggests that improper capitalization of repair and maintenance costs is an innocuous accounting issue. To provide "context in assessing changes to EBITDA,"[177] Mr. Patton refers to certain analyst commentary that noted that correcting for the improper capitalization of repair and maintenance costs would

[174] Patton Report, ¶¶ 145-146.
[175] Surana Report, Exhibit 5.
[176] Surana Report, ¶ 62.
[177] Patton Report, ¶ 109.

involve reclassifying capital expenditure as operating expenditure and that this reclassification would not impact free cash flows.[178] While simply reclassifying the expenses does not affect free cash flows, the proper "context" to understanding this accounting impropriety requires consideration of a number of factors that I discuss below. But before I discuss these factors, I note that the October 12, 2021 Disclosure corresponded to both the accounts receivable misrepresentations as well as the misrepresentations concerning improper capitalization of expenses.

140. *First*, while Mr. Patton understands that it is a "well-established principle in the field of finance that the value of a financial security, such as a common share of Akumin, equals the present ***discounted*** value of the future cash flows expected to accrue to its holder,"[179] he focuses only on the free cash flows and simply ignores the ***discounted*** part of this equation. Even when free cash flows do not change, when investors' perceptions about the riskiness of these cash flows increase, it results in a lower value for the stock. This is because the discount rate (the rate of return used to discount future cash flows back to their present value) applied to the future free cash flows increases, resulting in a lower discounted cash flow value.

141. Contemporaneous evidence suggests that the investor perception of riskiness increased after the October 12, 2021 Disclosure. For example, the October 13, 2021 Cormark report lowered its investment rating of Akumin stock to "Speculative Buy," where, according to

[178] Patton Report, ¶ 110.

[179] Patton Report, ¶ 70 (emphasis added).

Cormark, "Speculative" denoted that "the investment is speculative and has a ***higher degree of risk*** associated with it."[180]

142. Similarly, an October 14, 2021 Moody's report noting that the "continued postponement of Q2 2021 filings to as late as November 15, 2021 and disclosure of an additional accounting review [*i.e.*, improper capitalization of expenses]" were credit negative, stated that these developments signaled "*elevated governance risks* and further *damage[d] the company's financial reporting track record*."[181] Moody's also noted that "Akumin's prolonged focus on reviewing and restating prior reporting periods is also an untimely distraction that *heightens integration risks* surrounding the recent acquisition of Alliance."[182]

143. Thus, investors viewed Akumin's stock to be more risky. Investors in a competitive capital market require higher rates of return to compensate them for higher risk, meaning that a higher discount rate is applied to the free cash flows:

> Everybody knows that common stocks are risky and that some are more risky than others. Therefore, investors will not commit funds

[180] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021 (emphasis added).

[181] "Moody's says Akumin's filing delay and accounting review are credit negative," Moody's Investors Service, October 14, 2021 (emphasis added).

[182] "Moody's says Akumin's filing delay and accounting review are credit negative," Moody's Investors Service, October 14, 2021 (emphasis added). I note that after Akumin filed the restated financials, Moody's published a report that showed that the impact of the restatements on Akumin's debt/EBITDA multiple. Moody's showed that for years 2019 and 2020 while the pre-restatement debt/EBITDA multiples were 7.0x and 7.5x, respectively, post-restatement they were 11.7x and 9.2x for these years, respectively. Moody's also stated: "On 15 November 2021, Akumin Inc. (Akumin, B3 negative) published its Q2 2021 filings and restatements for 2019, 2020 and Q1 2021, revealing credit negative corrections that materially reduce historical EBITDA compared to original statements, unveiling a significant increase in leverage for 2019 and 2020." *See* "Restatements revealing higher leverage combined with ongoing Q3 filing delay cast doubt on projected EBITDA," Moody's Investors Service, November 23, 2021.

> to stocks unless the expected rates of return are commensurate with the risks.[183]

144. *Second*, improper capitalization of expenses inflates the true value of a firm's assets. An asset by definition should provide measurable future benefits.[184] Because Akumin improperly capitalized repair and maintenance costs, this accounting impropriety gave a false impression to the market of the true value of Akumin's assets. Although the accounting practice of capitalizing a cost versus expensing the cost does not change the amount of the cost that affects free cash flow, it changes the market's perception of the benefits that this improperly capitalized asset was expected to generate in the future, which could translate into additional future cash flows as perceived by the market.

145. In my view, the Cormark report's comment that improper capitalization does not change free cash flow was merely explaining that mechanically this cost could impact free cash flow through two channels (either deducted from operating income when the cost is expensed, or deducted as capital expenditure when the cost is capitalized) and the impact on free cash flow was the same. However, this does not mean the market would not account for the lost future benefits (lower future free cash flow) due to the reduced assets. Therefore, this accounting impropriety gives a false impression to the market of the firm's future expected cash flows and thus the true value of the firm.

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[183] R. Brealey, S. Meyers, and F. Allen, Principles of Corporate Finance, Eighth Edition, McGraw-Hill Irwin, 2006, p. 57.

[184] *See*, *e.g.*, Stephen H. Penman, Financial Statement Analysis and Security Valuation, Fourth Edition, McGraw Hill, 2014, p. 34 ("Assets are investments that are expected to generate payoffs.").

146. *Third*, because improper capitalization of expenses inflates earnings in the period of the improper classification, it can also artificially inflate the valuation of a company if market participants value the company based on certain earnings multiples such as the EV (enterprise value, calculated as market capitalization of equity plus outstanding debt, less available cash) to EBITDA (earnings before interest, taxes, depreciation, and amortization) ratio (EV/EBITDA) or the price to earnings ratio (P/E). Valuations based on multiples are widely used and I note that analysts following Akumin reported earnings multiples such as EV/EBITDA in their research reports.[185]

147. In the Surana Report, I provided an illustrative example using the EV/EBITDA multiple to show how lower earnings, whether from lower revenue or higher expenses or both, can impact stock valuations.[186]

148. Mr. Patton, however, states that while valuations based on earnings multiples would be lower, there could be a "discrepancy between the value estimated by the multiple and the value implied by expected cash flows,"[187] where "an accounting change that does not alter the ***present value*** of a company's expected cash flows would not be expected to affect the price of its securities."[188] As Mr. Patton notes, in order for the accounting change to not be expected to affect the security price, the accounting change must satisfy two requirements: (i) it does not alter the expected cash flows; and (ii) it does not alter the ***present value*** of the expected cash flow (*i.e.*,

[185] *See*, *e.g.*, "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank of Canada research report, August 16, 2021 ("We maintain a Sector Perform rating and US$3.50 target, which implies 7.5x 2022e EV/EBITDA.").

[186] Surana Report, ¶¶ 36-37.

[187] Patton Report, ¶ 74.

[188] Patton Report, ¶¶ 73, 103 (emphasis added).

does not change the discount rate). Mr. Patton does not contextualize his discussion within the scope of the allegations in this case. However, to the extent, his discussion is related to improper capitalization of expenditures, as I explained above and as Mr. Patton ignores, such an accounting impropriety also lowers valuations based on a discounted cash flow ("DCF") analysis because such accounting improprieties increase the riskiness of the cash flows. The resulting lower valuation from a DCF analysis is also consistent with lower valuations resulting from earnings multiples. Accordingly, even Mr. Patton's criterion to determine if an accounting change would be expected to affect the price of a security is met by Akumin's improper capitalization of expenditures.

149. Mr. Patton next proceeds to provide "contextualization of multiples" by referring to an analyst report that noted that Akumin's shares were trading at a lower multiple than a competitor, RadNet, because RadNet had a "larger free cash flow profile than Akumin."[189] In his "contextualization," Mr. Patton appears to be discussing what level of multiple is appropriate for Akumin and in so doing, confuses the intent of my illustrative example. The Surana Report is not a valuation report, just as the Patton Report is not. My illustrative example was not meant to shed any light on the level of the multiple to be used. That is determined by the analyst conducting a valuation analysis. Instead, my illustrative example is meant to demonstrate the downward effect on a valuation due to overstated earnings once the multiple has been determined.

150. While the Patton Report appears to be downplaying the relevance of a multiples analysis, in his authored article, Mr. Patton discusses the advantages of both the DCF approach

[189] Patton Report, ¶ 104.

and the multiples approach and notes that "[o]ften, more than one approach is used to cross-check a valuation."[190]

151. *Fourth*, because improper capitalization of expenses inflates earnings in the period of improper classification, it distorts another multiple often used by market participants to gauge the leverage of a company: the net debt to EBITDA or debt to EBITDA multiple. This ratio was important for Akumin investors. For example, Moody's listed "Debt/EBITDA sustained above 8.0 times" as a "factor[] that could lead to a downgrade."[191] Similarly, one of the reasons for the analysts at the National Bank of Canada to "remain on the sidelines" was "the elevated leverage (~6x Net Debt to FY+1 EBITDA)."[192]

152. *Fifth*, improper capitalization of expenses is considered to be one of the most common ways companies artificially inflate earnings.[193] In a paper titled "Improper Capitalization and the Management of Earnings," Ryerson (2009) states:

[190] Erin B McHugh and Robert Patton, "Damages in Financial Services Arbitration," in Global Arbitration Review: The Guide to Damages in International Arbitration, Fourth Edition, ed. by John A Trenor, Law Business Research, 2021, at 412.

[191] "Update following change in outlook to negative," Moody's Investors Service, September 16, 2021. After Akumin filed the restated financials, Moody's published a report that showed that the impact of the restatements on Akumin's debt/EBITDA multiple. Moody's showed that for years 2019 and 2020 while the pre-restatement debt/EBITDA multiples were 7.0x and 7.5x, respectively, post-restatement they were 11.7x and 9.2x for these years, respectively. Moody's also stated: "On 15 November 2021, Akumin Inc. (Akumin, B3 negative) published its Q2 2021 filings and restatements for 2019, 2020 and Q1 2021, revealing credit negative corrections that materially reduce historical EBITDA compared to original statements, unveiling a significant increase in leverage for 2019 and 2020." *See* "Restatements revealing higher leverage combined with ongoing Q3 filing delay cast doubt on projected EBITDA," Moody's Investors Service, November 23, 2021.

[192] "Akumin Delays Filing of Q2/2021 Financial Statements," National Bank of Canada research report, August 16, 2021.

[193] Anthony Campanelli and Kevin Corbett, "Accounting irregularities have moved to the

> The results of a SEC study of its own enforcement actions, covering the period July 31, 1997 to July 30, 2002, found that the most common type of abuse during this period was that of earnings manipulation or inappropriate earnings management. While the study found that improper revenue recognition led to the largest number of enforcement actions, there were also numerous enforcement matters involving improper expense recognition. These included improper capitalization or deferral of expenses, improper use of reserves, and other misstatements.[194]

153. Zack (2012) explains that improper capitalization makes a company "appear financially stronger" than it is:

> One of the most common methods of fraudulently making a company appear financially stronger is through the capitalization or deferral of expenses. This method instantly takes expenses, which reduce net income, and converts them into assets.[195]

154. Based on the discussion above, I disagree with Mr. Patton's suggestion that the statistically significant two-day price reaction following the October 12, 2021 Disclosure should be ignored.

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front burner at the SEC again – can you feel the heat?" Deloitte ("What do regulators frequently look for? … Capitalizing expenses as assets to reduce current-period expenses to artificially inflate earnings."); Jason Zuckerman, Matthew Stock and Katherine Krems, "Top 10 Ways Companies Cook the Books," *The National Law Review* XII 365, December 2022 ("Companies 'cook the books' when they use accounting schemes and tricks to falsify their financial statements (*i.e.*, their books) to make their results appear better than they actually are… Top 10 Accounting Schemes … 6. Improper Capitalization of Expenses: Companies should classify the costs of expenditures as assets or expenses in their financial statements. Improper capitalization of expenses occurs when a company capitalizes current costs that do not benefit future periods. By doing so, a company will understate its expenses in the period and overstate net income. The most well-known example of this scheme involved WorldCom, in which the company overstated its net income by more than $9 billion by, among other accounting tricks, improperly capitalizing operating expenses.").

[194] Frank E. Ryerson, "Improper Capitalization and the Management of Earnings," *Proceedings of ASBBS* 16(1), 2009 (emphasis added).

[195] Gerald M. Zack, Financial Statement Fraud: Strategies for Detection and Investigation, Wiley, 2013, Chapter 6 (emphasis added).

VIII THE NOVEMBER 8, 2021 DISCLOSURE

155. Regarding the November 8, 2021 Disclosure, Mr. Patton opines that a lack of a statistically significant price reaction on November 8, 2021 means that the market did not consider the "cost reclassification issue to be economically material."[196] He also opines that because the amount of the improperly capitalized expenses was first disclosed on November 8, 2021, this means that the "the market could not have reacted to this news following the October 12 Disclosure."[197]

156. Mr. Patton's analysis overlooks that the market reacts to negative information even when the precise scope or impact of that negative information is not fully known, and the resulting stock price reflects the market consensus expectation of the impact of the negative information. If, when full disclosure is made, the negative information is revealed to be largely within the pre-existing market consensus expectation, then it is likely that the full disclosure of the negative information will not have an additional impact on the stock price.

157. Mr. Patton appears to be requiring a "mirror image" of a misrepresentation in a corrective disclosure and also a full correction for the disclosure to count as a public correction of a prior misrepresentation. In my experience, it is not often that a corrective disclosure is a mirror image of a misrepresentation.

158. In the sections below, I provide my responses to Mr. Patton's specific arguments and explain why they have no impact on my opinion that the November 8, 2021 Disclosure corresponds with the allegations in this case and that the statistically insignificant price response

[196] Patton Report, ¶ 40.

[197] Patton Report, ¶ 180.

on November 8, 2021 indicates that the negative impact of this disclosure was already incorporated into Akumin's stock price following the October 12, 2021 Disclosure and the follow-on commentary by National Bank of Canada and Cormark analysts on October 12-13, 2021.

A. Corrective Disclosures Are Often Not Mirror Images and a Full Correction of a Prior Misrepresentation

159. As I explained in the Surana Report, after the October 12, 2021 Disclosure, the market was already aware that Akumin would be restating its financial filings for FY 2019, FY 2020 and Q1 2021 to correct for accounting errors related to overstated accounts receivable and improper capitalization of expenses and that such filings would be delayed until November 15, 2021.[198] Although the market did not know the precise quantification of the improperly capitalized expenses, Akumin's stock price following the October 12, 2021 Disclosure reflected the market consensus expectation of the impact of the accounting impropriety. Investors form expectations about future outcomes to protect themselves against adverse outcomes. The market did not, as Mr. Patton would suggest, ignore this value relevant news or "wait and see" until full disclosure was made.

160. The November 8, 2021 Disclosure augmented the October 12, 2021 Disclosure and informed the market that the changes related to improper capitalization of expenses would result in a net book value of property and equipment as at June 30, 2021 of US$60.4 million as compared to previously reported March 31, 2021 net book value of property and equipment of US$79.2 million.[199]

[198] Surana Report, ¶ 142.

[199] The details of the announcement are contained in "Akumin Provides Bi-weekly MCTO

161. In my opinion, even in the absence of prior guidance from the Company concerning the magnitude of improper capitalization of expenses, the market had already largely formed an expectation of the consequences of the October 12, 2021 Disclosure.[200] The lack of a statistically significant stock price response to the November 8, 2021 Disclosure indicates that the negative impact of this disclosure was already incorporated into Akumin's stock price following the October 12, 2021 Disclosure.[201]

162. Mr. Patton, on the other hand, opines that "given that the November 8 Disclosure was the first time that the Company provided a quantitative assessment of the impact of correcting the accounting issue of capitalizing rather than expensing certain repair and maintenance costs related to its legacy business, the market could not have reacted to this news following the October 12 Disclosure."[202]

163. I disagree. For a stock price to reflect negative news, Mr. Patton appears to be requiring a corrective disclosure to be a mirror image and a full correction of a prior misrepresentation. As I explained in the Surana Report, there often are several partial corrective

Status Update," *Canada NewsWire*, November 8, 2021, 7:00 am (the "November 8, 2021 Press Release"). *See also* Surana Report, Section VIII.C.i. Akumin reiterated its announcement made on October 12, 2021 that it would be restating its annual financial statements and related documents for FY 2019 and FY 2020 and its interim financial statements for Q1 2021 and that it anticipated completing these filings as well as its filings related to Q2 2021 financial results by November 15, 2021. Akumin also announced that the preparation of the restatement filings had delayed its interim financial statements for Q3 2021 which it anticipated not being able to file by the reporting deadline of November 15, 2021 but instead by December 15, 2021.

[200] Surana Report, ¶ 142.

[201] Surana Report, ¶ 142.

[202] Patton Report, ¶ 180.

disclosures because the full revelation of the misrepresentations is often made in more than one disclosure before the misrepresentations are completely corrected.[203]

164. Furthermore, in my experience, it is rare to encounter language in a corrective disclosure that is identical to or a "mirror-image" of the language describing the alleged misrepresentations or omissions.[204] In such circumstances, the financial economist conducts an evaluation of the economic content and substance of the disclosure and how investors, analysts and the financial press evaluate the language of the disclosure and the financial consequences thereof for the company to determine whether the information in the alleged corrective disclosure corresponds to the alleged misrepresentations.[205] That is, an evaluation of a disclosure requires consideration as to how the market processes the information contained in the disclosure.[206]

165. As I stated in the Surana Report, in my view, on October 12-13, 2021, the market responded to both pieces of information disclosed, *i.e.*, both accounting errors: (1) the quantification of the overstatement of the accounts receivable; and (2) that Akumin had engaged in improperly capitalizing expenses.[207]

166. Therefore, I disagree with Mr. Patton's suggestion that the market could not have reacted to the disclosure of Akumin's improper capitalization of expenses following the October 12, 2021 Disclosure. Indeed, just as the market formed an expectation of the consequences of the August 15, 2021 Disclosure even though the amount of the overstatement of Akumin's accounts

[203] Surana Report, ¶ 59.
[204] Surana Report, ¶ 57.
[205] Surana Report, ¶ 57.
[206] Surana Report, ¶ 57.
[207] Surana Report, Section VIII.B.iii.

receivable was not disclosed in that disclosure, so too the market formed an expectation of the consequences of the October 12, 2021 Disclosure even though the amount of the improperly capitalized expenses was not disclosed on that day. The statistically insignificant reaction to the November 8, 2021 Disclosure indicates that any negative impact of the improper capitalization of expenses was already incorporated into Akumin's stock price following the October 12, 2021 Disclosure.

167. I also note that Mr. Patton's contention that the market could not have reacted in the absence of a disclosure that quantified the amount is contradicted by the October 13, 2021 Cormark report that lowered its investment rating for Akumin stock to Speculative Buy to denote that the investment had a higher degree of risk associated with it and stated that:

> As a starter estimate pending the details [about the improper classification of expenses] we will eventually get in the restated financials, we assume 30% of AKU's pre-Alliance Healthcare capex will be reclassified as an operating expense. This assumption is now also reflected in our forecast.[208]

B. Improper Capitalization of Repair and Maintenance Costs Is Not an Innocuous Accounting Error

168. Mr. Patton opines that the "lack of a statistically significant movement in Akumin's share price in response to the November 8 Disclosure provides an objective indication that the market did not consider the restatement in respect of the cost reclassification issue to be economically material."[209]

[208] "Reporting Delays Continue," Cormark Securities research report, October 13, 2021 (emphasis added).

[209] Patton Report, ¶ 40.

169. I disagree. As I stated above, in my view, the market's reaction to the October 12, 2021 Disclosure on October 12-13, 2021 was to the quantification of the overstatement of accounts receivable as well as the information concerning improper capitalization of costs. Further, to the extent it is Mr. Patton's view that improper capitalization of costs is not value-relevant information for investors, for all the reasons mentioned in Section VII above, I disagree with this view.

IX THE NOVEMBER 15, 2021 DISCLOSURE

170. The difference between the Surana Report and the Patton Report regarding the November 15, 2021 Disclosure boils down to the appropriate length of the event window. I considered an event window that includes analyst commentary following the November 15, 2021 Disclosure that shows Akumin's excess stock price reaction, after accounting for market, industry and exchange rate factors, to be statistically insignificant, which is consistent with the restated financials being in line with the prior August 15, 2021, October 12, 2021 and November 8, 2021 Disclosures and mixed results for 2Q 2021. Akumin's stock price, after allowing for the "market's ongoing adjustment to the news,"[210] reflects the incorporation of the ***full effect*** of the November 15, 2021 Disclosure.

171. This multi-day event window is consistent with decades of well-accepted academic literature as discussed in Section V above. It is also consistent with the explanation that "the initial response … could be the beginning of a larger, long-horizon reaction."[211]

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[210] David Tabak and Fredrick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in Litigation Services Handbook: The Role of the Financial Expert, Third Edition, ed. by Roman L. Weil, Michael J. Wagner and Peter B. Frank, Wiley, USA, 2001, Chapter 19, p. 19.4.

[211] Jeffrey A. Busse and T. Clifton Green, "Market Efficiency in Real Time," *Journal of Financial Economics* 65, 2002, 415-437 at 428.

172. Mr. Patton, on the other hand, based on an application of his mechanical rule to the determination of an event window, advocates for ignoring the reversal of the price reaction after November 15, 2021 because the daily excess returns on these days are not individually statistically significant. For all the reasons described in Section V above, Mr. Patton's approach is inconsistent with decades of well-accepted academic research.

173. In the sections below, I provide my responses to Mr. Patton's specific arguments and explain why they have no impact on my conclusion that the November 15, 2021 Disclosure corresponds with the allegations in this case and that while the stock price initially increased by a statistically significant amount on November 15, 2021, over the next three days as analyst commentary continued to be published through November 18, 2021 and the market fully digested the news, the stock price declined, resulting in a cumulative excess stock-price return over the November 15-18, 2021 event window that is not statistically significant at the 5% level.[212]

174. The lack of a statistically significant stock price response to the November 15, 2021 Disclosure (including the follow-on analyst commentary) indicates that the negative impact of this disclosure was already incorporated into Akumin's stock price following the prior disclosures and is consistent with the release of no new important information about the previously disclosed accounting improprieties that resulted in the restatement and mixed results for 2Q 2021.[213] Based on my review, I found that there was no other confounding information during this time period and Mr. Patton does not provide any alternate explanation for the complete price reversal over the multi-day event window.

[212] Surana Report, ¶ 163.

[213] Surana Report, ¶ 163.

A. Multi-Day Event Windows Are Commonly Accepted and Used, Supported by Decades of Academic Scholarship, Whereas Mr. Patton's Mechanical Approach to Event Windows Is Unsupported

175. On November 15, 2021, Akumin refiled its financial statements for FY 2019, FY 2020 and Q1 2021 to correct for accounting errors related to overstated historical accounts receivable and improper capitalization of certain expenses.[214] As the Company's press release emphasized, the revisions in the restated financial statements were in line with the prior August 15, 2021, October 12, 2021 and November 8, 2021 Disclosures, indicating that at the time of the November 15, 2021 Disclosure, the market was already apprised of the nature and magnitude of the accounting misrepresentations. The confounding news related to the Q2 2021 financial results was overall mixed and was not the cause of downward revisions in analyst forecasts.[215]

176. Based on my market model, while the stock price increased initially on November 15, 2021 by a statistically significant amount, as the market fully digested the information with follow-on analyst commentary, the stock price reversed and the cumulative excess stock price return, after accounting for market, industry and exchange rate movements is not statistically significant at the 5% level.[216] Mr. Patton's market model yields a similar result.[217]

177. However, Mr. Patton argues that this statistically insignificant price response which reversed the initial price increase should not be considered because the daily stock price reactions on November 16-18, 2021 are not individually significant, which is what his mechanical rule for

[214] Surana Report, ¶ 161.
[215] Surana Report, ¶ 162.
[216] Surana Report, ¶ 155 and Exhibit 5.
[217] Patton Report, Table 7.

determining event windows dictates.[218] Presumably, if the price reversed the next day and the daily excess return was statistically significant, resulting in a two-day insignificant excess return, Mr. Patton would allow for a statistically insignificant price reaction (as I found in my event study). In my view, such a mechanical methodology is myopic in design. For all the reasons discussed in Section V above, it is also inconsistent with generally accepted practices in academic research as well as securities litigation.

178. Because of Mr. Patton's improper focus on statistical significance of *daily* excess returns, he also argues that I did not state in my conclusion that there was a one-day statistically significant price increase on November 15, 2021.[219] But my conclusion is not based on the single day excess return. I note that I discussed this result for November 15, 2021 in the Surana Report in both the section in which I discussed the stock-price reaction to the November 15, 2021 Disclosure as well as the section that contains my summary and opinion related to this disclosure.[220] The discussion in the conclusion of the Surana Report is based on the event window I considered appropriate for this event, which was longer than one day.

179. Mr. Patton also argues that the direction of Akumin's stock price movement on November 17, 2021 (and possibly also November 16, 2021) was not consistent with the tenor of the analyst report issued that day.[221] While the excess stock price returns, after accounting for market, industry and exchange rate, were negative on these dates based on both my market model and his, according to Mr. Patton, given the tenor of the Clarus report on November 16, 2021 and

[218] Patton Report, ¶ 175.
[219] Patton Report, ¶ 175.
[220] Surana Report, ¶¶ 155, 163.
[221] Patton Report, ¶ 161.

the Cormark report on November 17, 2021, the price should have increased. However, given the large initial increase in Akumin's stock price on November 15, 2021 and subsequent reversal to reflect the "true market price,"[222] such a result is not unexpected. Similarly, despite Mr. Patton's claims to the contrary,[223] typical average daily volume over the event window is not inconsistent with an overall cumulative statistically insignificant return.[224] I note that the trading volume was 353,484 shares on November 15, 2021 when the price increased and a combined 274,943 shares when the priced decreased during November 16-18, 2021.[225]

180. Finally, Mr. Patton states that although I did not have the Clarus report, my event window included the day on which the report was published.[226] My event window was based on the incorporation of the ***full effect*** of the November 15, 2021 Disclosure which includes Clarus' assessment of the November 15, 2021 Disclosure (despite my not having the report). Since the Surana Report, the November 16, 2021 Clarus report has been produced by the Defendants and I have reviewed it.[227] It does not change my conclusion in the Surana Report.

181. As I explained in Section V above, as a general matter, determination of an event window is a case-specific enquiry, and a multi-day event window may be appropriate given the flow of information in the marketplace to ensure that the full effect on the stock price of the new

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[222] Michael J. Barclay and Robert H. Litzenberger "Announcement Effects of New Equity Issues and the Use of Intraday Price Data," *Journal of Financial Economics* 21, 1988, 71-99, at 92-93 (emphasis added) ("Extending the analysis to 20 days beyond the issue day assures that the observed price is a true market price").

[223] Patton Report, Section 7.7.2.

[224] Surana Report, ¶ 155.

[225] Surana Report, Exhibit 5.

[226] Patton Report, ¶ 162.

[227] "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2," Clarus research report, November 16, 2021. *See also* my discussion in paragraphs 210-211.

information is measured. As I also explained in Section V above, there can be instances where there is an initial stock price response, but over the next few days as security analysts evaluate the disclosure and provide their assessments and investors digest the information, the stock price reverses and reaches a new equilibrium price. Ferrell and Saha (2007) address such a scenario and explain that in such cases, it "often makes sense to use multiple-day" event windows.[228]

182. Based on the discussion above, I disagree with Mr. Patton's suggestion that the statistically insignificant price reaction over the November 15-18, 2021 event window, in which the price reaction on November 16-18, 2021 reversed the initial price reaction on November 15, 2021, should be ignored because each day during November 16-18, 2021 did not result in a statistically significant price movement. Such a conclusion ignores that "there is substantial variation in the complexity of determining the length of an event window."[229]

B. Mr. Patton's Explanation for the Price Increase on November 15, 2021 Ignores the Complete Price Reversal as the Market Fully Digested the Information

183. Mr. Patton hypothesizes that "the resolution of the uncertainty and delay relating to the Company's financials, as a consequence of the publication of the 2Q21 financials and restatement contributed to the statistically significant Akumin share price increase on November 15, 2021."[230] He does not, however, explain why such a resolution of uncertainty was completely reversed in the next three days (with continued information flow in the form of analyst

[228] Allen Ferrell and Atanu Saha, "The Loss Causation Requirement for Rule 10b-5 Causes of Action: The Implications of *Dura Pharmaceuticals, Inc. v. Broudo*," *The Business Lawyer* 63, 2007, 163-186, at 167-168.

[229] Mark L. Mitchell and Jeffry M. Netter, "The Role of Financial Economics in Securities Fraud Cases: Applications at the Securities and Exchange Commission," *The Business Lawyer* 49, February 1994, 545-590, at 559.

[230] Patton Report, ¶ 192.

commentary) as his own market model indicates.[231] Put differently, Mr. Patton provides no alternate explanation for the complete price reversal and the cumulative statistically insignificant return.

184. As I stated in the Surana Report, I note the revisions in the restated financial statements were in line with the prior August 15, 2021, October 12, 2021 and November 8, 2021 Disclosures, and the results for Q2 2021 were mixed.[232] The date of the restatement was known, as were the nature of the accounting errors and the related amounts.[233] Based on my review, there was also no other confounding information during my event window of November 15-18, 2021.[234] A statistically insignificant price response is consistent with this. Mr. Patton's analysis does not account for the full digestion by the market of the information released.

X MR. PATTON'S CRITICISMS RELATED TO MY DISCUSSION OF ACADEMIC LITERATURE AND ANALYST FOCUS ON KEY FINANCIAL METRICS ARE MISGUIDED

185. In the Surana Report, I opined that analyst commentary and academic research indicate that ***Akumin's Class Period misrepresentations*** concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim, ***would be expected*** to have an effect on the market price of Akumin's common stock.[235]

186. Mr. Patton disagrees, stating that "the Surana Report's review of academic literature and analyst commentary ***does not support*** the conclusion that the alleged

[231] Patton Report, Table 7.
[232] Surana Report, ¶ 162.
[233] Surana Report, ¶ 162.
[234] Surana Report, ¶ 160.
[235] Surana Report, ¶ 3(a).

misrepresentations ***would be expected*** to affect Akumin's share price."[236] However, Mr. Patton does not dispute the findings of the well-accepted academic literature showing the association between unexpected earnings disclosures and stock price reactions or the association between restatements of financials and stock price reactions as well as analyst focus on key financial metrics.

187. Rather, Mr. Patton questions the relevance of the literature because the findings of the literature do not apply for every single security.[237] In other words, because the findings of the academic literature do not apply for every single security, Mr. Patton concludes that the academic literature does not support my opinion that the alleged misrepresentations would be ***expected*** to affect Akumin's share price.

188. Mr. Patton then selectively quotes from analyst reports in an attempt to minimize the significance of the allegations in this case.

189. In the sections below, I provide my responses to Mr. Patton's criticisms.

A. Academic Literature and Analyst Commentary During the Class Period Are Consistent with the Results of My Event Studies

190. As an initial matter, my discussion of the academic literature and review of analyst reports are not the sole basis for my opinion that the alleged misrepresentations would be expected to affect Akumin's share price.

[236] Patton Report, Section 2.1 heading (formatting adjusted, emphasis added).

[237] Patton Report, ¶ 14.

191. As I explained in the Surana Report, and as Mr. Patton agrees,[238] the effect on stock prices from disclosure failures (*i.e.*, misrepresentations) is measured as this conduct is actually revealed through corrective disclosures that eventually cause the disclosure failures and their economic effects to come to light.[239] The stock price reaction following the corrective disclosure thereby provides a measure of the value of the previously undisclosed information.[240] This analysis is performed by conducting event studies of the corrective disclosures.

192. In the Surana Report, I conducted event studies of the four alleged corrective disclosures, which showed that the August 15, 2021 and October 12, 2021 Disclosures caused large statistically significant declines in the price of Akumin's common stock amid higher-than-normal trading volume.[241] I noted that commentary by security analysts and financial press reporting contemporaneously with the disclosures underscore the significance of these alleged public corrections to Akumin's common stock.[242] I explained that the academic literature on the importance of unanticipated earnings disclosures and restatements of historic financials ***further supports*** the importance of the alleged misrepresentations to investors.[243] I also showed that the alleged public corrections in the form of the November 8, 2021 and November 15, 2021 Disclosures (including follow-on analyst commentary) did not result in statistically significant declines in the price of Akumin's common stock, consistent with the market having generally

[238] Patton Report, ¶ 78.
[239] Surana Report, ¶ 53.
[240] Surana Report, ¶ 53.
[241] Surana Report, ¶ 165.
[242] Surana Report, ¶ 165.
[243] Surana Report, ¶ 165.

anticipated the information from these disclosures given the earlier August 15, 2021 and October 12, 2021 Disclosures.[244]

193. Mr. Patton's criticism of my review of the literature and analyst focus on key financial metrics appears to disregard the results of my event studies that show the significance of the alleged misrepresentations to investors. Findings of academic literature and analyst commentary during the Class Period lend further support to my opinion that had Akumin told the truth in respect to its misrepresentations concerning revenue, accounts receivable, property and equipment, and total shareholders' equity, Akumin's common stock price would have declined. Mr. Patton's criticisms related to the additional support I found with the academic literature and analyst focus evidently ignores the results of the event studies I conducted that comprise the bulk of the Surana Report.

B. Academic Literature Is Relevant to Understanding Expected Price Reactions

194. Mr. Patton's view that a "review of academic literature and analyst commentary ***does not support*** the conclusion that the alleged misrepresentations would be expected to affect Akumin's share price"[245] because the prices of securities do not respond in every case to financial disclosures appears to disregard the basic premise that in empirical research it virtually is never the case that a result holds for all securities studied. Yet, empirical research is conducted because it informs us what the ***expected*** outcome of an event is. As I stated in the Surana Report, in large sample event studies, the effect on stock prices is generally measured ***on average***:

[244] Surana Report, ¶ 166.

[245] Patton Report, Section 2.1 heading (formatting adjusted, emphasis added).

> Academic research has demonstrated that stock prices, ***on average***, are not only highly correlated with actual accounting earnings but also with security analysts' forecasts of future earnings.[246]
>
> The significance of a company's financial disclosures is also evident from studies demonstrating that "restatements of financial statements result in a substantial loss of market value." This literature shows that stock prices for companies that announce downward restatements of previously reported financial figures result in statistically significant negative excess returns ***on average***.[247]

195. This is the essence of the large sample event study methodology. MacKinlay (1997), a reference that Mr. Patton cites to "[f]or a discussion of the event study technique and its uses,"[248] explains the relevance of event studies as follows:

> Economists are frequently asked to measure the effects of an economic event on the value of firms. On the surface this seems like a difficult task, but a measure can be constructed easily using an event study.[249]

196. Despite the fact that a result will not hold for all stocks, MacKinlay states that a measure of the effects of an economic event can be constructed easily using an event study and then explains the large sample event study methodology in the article. This is because large sample event studies educate us about the effects, on average, of events such as unexpected earnings announcements on security prices. Indeed, in his own published article, Mr. Patton recognizes the importance of event studies conducted in the academic literature to measure the price movement of securities in response to new information:

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[246] Surana Report, ¶ 33 (emphasis added and footnote omitted).

[247] Surana Report, ¶ 35 (emphasis added and footnote omitted).

[248] Patton Report, footnote 70.

[249] A. Craig MacKinlay, "Event Studies in Economics and Finance," *Journal of Economic Literature* 35(1), March 1997, 13-39, at 13 (emphasis added).

> Event studies have been developed in the academic literature over several decades, and have been applied in a wide variety of contexts to measure the price movement of securities in response to new information. For example, academic economists have used event studies to assess the impact on firm value of policy measures such as new regulations or changes in interest-rate policy; to gauge the market's expectation about the benefit or harm to companies from a merger or acquisition; and to measure the impact on share prices of corporate events such as stock splits, the issuance of new shares, or earnings announcements.[250]

197. These event studies conducted in the academic literature that Mr. Patton alludes to in his article do not find all securities to have the same response to a given event. Yet, as Mr. Patton states in his article, "academic economists have used event studies to assess the impact on firm value of policy measures such as new regulations or changes in interest-rate policy …"[251]

198. Similarly, in the hundreds of large sample event studies I have reviewed over my career, I have never encountered one where the same result holds for every single security. But this does not mean that the findings of all these articles are unimportant or that they do not shed light on the ***expected*** stock price impact of an event. In general, the standard of proof in empirical research is not 100%; almost none of the empirical research would be of any use if one were to disregard the findings because the same result was not obtained in every case. Yet, Mr. Patton's arguments suggest that these studies are not informative in this matter because the result did not hold for every security. I disagree with this conclusion.

199. Further, as stated above, my review of literature and analyst commentary during the Class Period was not done in a vacuum where the actual stock price response was not measured

[250] Robert Patton, "The Use of Event Studies in Disputes and Enforcement," *Commercial Dispute Resolution*, December 2010.

[251] Robert Patton, "The Use of Event Studies in Disputes and Enforcement," *Commercial Dispute Resolution*, December 2010.

when the corrective disclosures corrected the prior misrepresentations. I conducted detailed event studies of all four corrective disclosures, the results of which were consistent with the findings in academic research.

200. Finally, I note that while Mr. Patton attempts to discount my review of relevant literature because the results do not hold for every single security, the Patton Report relies on the results of large-sample studies in drawing conclusions about the speed of stock price reactions as discussed in Section V above.[252] These studies would also not necessarily have the same result for each security in the sample.[253] I do not have any objection to Mr. Patton's reference to these articles. However, Mr. Patton's opinion about the relevance of the findings of academic large-sample event studies I discussed in the Surana Report is inconsistent with his opinion of the relevance of the findings of academic large-sample event studies he discusses in the Patton Report.

201. Mr. Patton next states that "***not all*** unexpected accounting and financial disclosures will affect a company's share price."[254] He notes "[w]hether and to what extent a particular financial disclosure by Akumin would be expected to affect the price of its shares depends on factors including the nature, magnitude and context of that disclosure."[255] I agree. My opinions are specifically with regard to the alleged misrepresentations concerning revenue, accounts

[252] Patton Report, ¶ 138 (footnotes omitted).

[253] *See*, *e.g.*, Busse and Green (2002) states: Jeffrey A. Busse and T. Clifton Green, "Market Efficiency in Real Time," *Journal of Financial Economics* 65, 2002, 415-437 at 424 (emphasis added) ("The table reports ***average*** percentage price changes following on-air stock reports during the Morning Call and Midday Call segments on CNBC."); Michael J. Barclay and Robert H. Litzenberger "Announcement Effects of New Equity Issues and the Use of Intraday Price Data," *Journal of Financial Economics* 21, 1988, 71-99, at 71 (emphasis added) ("For fifteen minutes following the announcement, there is abnormally high volume and a -1.3% ***average*** return").

[254] Patton Report, ¶ 15 (emphasis added).

[255] Patton Report, ¶ 15.

receivable, property and equipment, and total shareholders' equity, as alleged in the Statement of Claim in this case, not any arbitrary financial disclosures.

202. As Mr. Patton recognizes,[256] the best evidence to gauge the importance of a misrepresentation is to examine its effects on the stock price when the truth is actually revealed. That is the purpose of the event studies I conducted for the four corrective disclosures analyzed in the Surana Report. The significant price reactions to the August 15, 2021 and October 12, 2021 Corrective Disclosures; contemporaneous commentary by research analysts as well as the ratings agency, Moody's, concerning these disclosures; findings of academic studies on issues relevant here; and commentary by security analysts during the Class Period illustrating their reliance on Akumin's historical results and management guidance as well as their focus on the Company's key financial metrics, including accounts receivable, revenue and operating expenses – all combined form the basis of my view that had Akumin told the truth in respect of these misrepresentations, Akumin's common stock price would have declined.

C. Mr. Patton's Selective Reference to Analyst Commentary Belies the Importance of the Misrepresentations to Investors

203. Based on my review of his report, Mr. Patton does not explicitly opine that the alleged misrepresentations were unimportant to investors. Rather, Mr. Patton selectively references analyst commentary that purportedly indicate that the alleged misrepresentations were not important to investors.[257] However, as I discuss below, in my opinion Mr. Patton's analysis is misguided.

[256] Patton Report, ¶ 78.

[257] Patton Report, ¶ 19.

204. *First*, Mr. Patton refers to commentary in a Canaccord report that discussed the Q2 2021 results that were released along with the restatements of the 2019, 2020 and Q1 2021 financials. Mr. Patton notes that Canaccord said that the miss in Akumin's Q2 2021 revenue per relative value unit was "not significant."[258]

205. However, what Mr. Patton leaves out from his discussion of the Canaccord report is that the report noted that because the miss in revenue per relative value unit in Q2 2021 was not significant, it indicated that "the majority of receivables write-downs related to pre-2020 periods," not that the magnitudes of the revision to revenue or accounts receivable were insignificant:

> We back-calculate the conversion factor [or revenue per relative value unit] to be $41.14. This missed our $43.25 estimate, which was based on 2020 pricing that did not include sufficient price concessions. This miss was not significant, indicating the majority of receivables write-downs related to pre-2020 periods.[259]

206. Palmrose *et al.* (2004) show that the market is more concerned with the dollar amount of the restatement than the period over which the restatement occurs:

> We conjecture that more material restatements have negative implications for companies' future prospects, and so will be associated with more negative returns. We use three variables to examine this relation. We find the effect on income (net income change/assets) consistently associated with more negative returns, but not the number of years restated. Thus, the market appears more concerned about the dollar impact than the length of time misstatements persist. Our third materiality measure, pervasiveness (number of accounts affected), is associated with more negative returns in the full sample.[260]

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[258] Patton Report, ¶ 19.a.

[259] "Q2/21: Restatements impact pricing and margin", Canaccord research report, November 18, 2021 (emphasis added).

[260] Zoe-Vonna Palmrose, Vernon J. Richardson, and Susan Scholz, "Determinants of

207. *Second*, as another "contextual factor"[261] in respect of the restatements, Mr. Patton notes that after the restatement, Akumin's Days Sales Outstanding ("**DSO**") declined.[262] The decline in DSO was a result of the write-down of the outstanding receivables, not a factor that somehow makes any less important the overstatement of the receivables in the first place. Mr. Patton's argument can be illustrated with an example.

208. Consider a company that has a subsidiary that the market knows is not performing well but the full extent of the problem is unknown to the market. Eventually, the company writes off its investment in this subsidiary and when the write-down occurs, it is much larger than the problems anticipated by the market. As a result of the disclosure of the size of the write-down, the stock price of this company declines substantially. Market participants comment about the surprise amount of the write-down but also that the company is now better off not having this subsidiary. Not having the problematic subsidiary does not make any less significant the amount of the write-down as evident by the substantial stock price decline. Similarly, here, the decline in Akumin's DSO was a result of the write-down of the accounts receivable; it does not make any less significant the amount of the write-down of the accounts receivable balance.

209. *Third*, Mr. Patton refers to certain analyst commentary that noted that correcting for the improper capitalization of repair and maintenance costs would involve reclassifying capital expenditure as operating expenditure and that this reclassification, would not impact free cash flows.[263] While simply reclassifying the expenses does not affect free cash flows, understanding

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Market Reactions to Restatement Announcements," *Journal of Accounting and Economics* 37, 2004, 59–89 at 80 (emphasis added).

[261] Patton Report, ¶ 19.a.

[262] Patton Report, ¶ 19.a.

[263] Patton Report, ¶ 19.b.

this accounting impropriety requires consideration of a number of factors as discussed in Section VII: (1) it masks the true riskiness of the cash flows; (2) it artificially inflates the true value of a firm's assets and gives a false impression to the market of the firm's true value; (3) it artificially inflates earnings in the period of improper capitalization and results in inflated valuations based on earnings multiples (consistent with a lower value based on a discounted cash flow analysis); (4) it distorts the net debt to EBITDA multiple often used by market participants to gauge the leverage of a company; and (5) it is considered to be one of the most common ways companies artificially inflate earnings.

210. *Fourth*, there was consistent negative commentary by analysts and the rating agency, Moody's, regarding the disclosed improprieties. However, Mr. Patton selectively quotes from a Clarus report that stated that the net impact of the restatement "on the combined business going forward is likely to be extremely modest," while ignoring that the same report also stated "Akumin also completed ***two notable revisions*** to their accounting methods – for estimating A/R collection rates and how to categorize certain equipment maintenance expenses – that caused ***sizable historical restatements*** …"[264] A modest impact going forward does not make any less significant the inability to collect the accounts receivable for previously rendered services. Consider a company that announces that $50 million of the accounts receivable on its books is not collectible. Investors, in addition to revising their expectations for the future collectability for the company's business, will also likely lower the market value of the company for the $50 million accounts receivable that is uncollectible.

[264] Patton Report, ¶ 19.c; "Competitor Sells for over 12x EBITDA; Record RVU Volume in Q2," Clarus research report, November 16, 2021 (emphasis added).

211. Furthermore, the analyst's comment about the implications for the business going forward was in relation to the "combined business," considering the addition of Alliance's relatively larger business (which was not affected by the alleged accounting improprieties) to Akumin's business. During the Class Period, prior to the combination with Alliance, the impact of the accounting improprieties would be solely on Akumin's business without the benefit of the merger with Alliance and would thus likely be perceived as having a greater proportionate negative valuation effect. As discussed in the Surana Report, analyst commentary throughout the Class Period shows that research analysts considered Akumin's disclosures about its accounts receivable and related revenue offsets, as well as the Company's management of operating expenses, to convey important information.[265] Negative analyst commentary after the disclosures of the alleged accounting improprieties is consistent with the analysts' prior focus on Akumin's quarterly revenue, accounts receivable and operating expenses (financial metrics that have been alleged to be misrepresented).[266] Similarly, negative commentary after the corrective disclosures of the accounting improprieties by the rating agency, Moody's, is also consistent with the importance of key financial metrics to the market.[267]

212. Therefore, the selective quotes presented by Mr. Patton do not alter my opinion that the alleged misstatements related to revenue, accounts receivable, property and equipment, and total shareholders' equity were important to investors.

213. The best gauge of the significance of the alleged misrepresentations is the market's collective response in terms of the stock price reaction when the truth about the misrepresentations

[265] Surana Report, ¶¶ 43-45.

[266] *See*, *e.g.*, Surana Report, ¶¶ 89, 112-116, 137.

[267] *See*, *e.g.*, Surana Report, ¶ 117.

was revealed, which in this case resulted in Akumin's stock experiencing large statistically significant declines, after accounting for market, industry and exchange rate factors, of -18.5% after the August 15, 2021 Disclosure and -11.5% after the October 12, 2021 Disclosure.

Exhibit 3
Comparison of Excess Returns and Cumulative Excess Returns in the Surana Report and the Patton Report

[1]	[2]	[3]		[4]		[5]		[6]	
		Excess Return				Cumulative Excess Return			
Date	Akumin Stock Price	Surana Report		Patton Report		Surana Report		Patton Report	
06/25/2021	$4.10	7.46%	**	7.24%	**	7.46%	**	7.24%	**
06/28/2021	$3.91	-4.03%		-4.08%		3.13%		3.16%	
06/29/2021	$4.00	2.55%		2.61%		5.76%		5.77%	
06/30/2021	$3.95	-0.89%		-0.83%		4.83%		4.93%	
07/02/2021	$4.14	5.46%		5.43%		10.55%		10.36%	
08/16/2021	$3.05	-18.52%	***	-20.36%	***	-18.52%	***	-20.36%	***
08/17/2021	$2.84	-6.58%	*	-6.79%	*	-23.88%	***	-27.16%	***
08/18/2021	$2.84	0.84%		0.91%		-23.24%	***	-26.25%	***
08/19/2021	$2.72	-4.49%		-4.51%		-26.68%	***	-30.76%	***
08/20/2021	$2.93	6.27%	*	6.06%	*	-22.09%	***	-24.70%	***
09/01/2021	$3.14	14.61%	***	13.61%	***	14.61%	***	13.61%	***
09/02/2021	$3.15	-0.02%		0.05%		14.59%	***	13.66%	***
09/03/2021	$3.06	-1.80%		-1.76%		12.52%	**	11.90%	*
09/07/2021	$2.90	-5.15%		-5.21%		6.73%		6.69%	
09/08/2021	$2.87	-0.77%		-0.72%		5.91%		5.97%	
10/12/2021	$3.01	-2.55%		-2.53%		-2.55%		-2.53%	
10/13/2021	$2.74	-9.17%	**	-9.50%	***	-11.50%	**	-12.03%	**
10/14/2021	$2.62	-4.47%		-4.46%		-15.45%	**	-16.50%	***
10/15/2021	$2.55	-2.45%		-2.39%		-17.52%	**	-18.89%	**
10/18/2021	$2.53	-0.74%		-0.67%		-18.13%	**	-19.55%	**
11/08/2021	$2.19	1.12%		1.18%		1.12%		1.18%	
11/09/2021	$2.14	-1.81%		-1.76%		-0.71%		-0.58%	
11/10/2021	$2.17	2.18%		2.22%		1.45%		1.64%	
11/11/2021	$2.32	5.69%		5.55%		7.23%		7.19%	
11/12/2021	$2.32	-0.24%		-0.14%		6.97%		7.05%	
11/15/2021	$2.64	15.01%	***	14.20%	***	15.01%	***	14.20%	***
11/16/2021	$2.55	-3.98%		-3.98%		10.44%	**	10.22%	**
11/17/2021	$2.41	-5.33%		-5.43%		4.56%		4.79%	
11/18/2021	$2.33	-2.21%		-2.19%		2.25%		2.60%	
11/19/2021	$2.18	-6.07%	*	-6.24%	*	-3.96%		-3.64%	

Notes:

[1] Dates presented in Exhibits 2 through 7 of the Patton Report.

[2] Source: Surana Report, Exhibit 5.

[3] Source: Surana Report, Exhibit 5.

[4] Source: Patton Report, Exhibits 2 through 7. The asterisks to denote statistical significance for the Patton Report excess returns are updated to correspond with the Surana Report that used *, **, and *** to denote statistical significance at the 10%, 5%, and 1% levels, respectively.

[5] Cumulative excess returns are computed as compounded excess returns. The statistical significance is based on a t-statistic that is the sum of daily t-statistics divided by the squared root of the number of days, with the degrees of freedom from the market model in the Surana Report. Source for excess returns and t-statistics: Surana Report, Exhibit 5.

[6] Source: Patton Report, Exhibits 2 through 7. The asterisks to denote statistical significance for the Patton Report cumulative excess returns are updated to correspond with the Surana Report that used *, **, and *** to denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Tab 20

Start Date 2019-05-01
End Date 2021-12-31

	01021FAA7 @TRAC CUSIP	01021FAB5 @TRAC CUSIP
Dates	PX_LAST	PX_LAST
2020-10-15	n/a	n/a
2020-10-16	n/a	n/a
2020-10-19	n/a	n/a
2020-10-20	n/a	n/a
2020-10-21	n/a	n/a
2020-10-22	n/a	n/a
2020-10-23	100.125	n/a
2020-10-26	100.5	n/a
2020-10-27	100	n/a
2020-10-28	99	n/a
2020-10-29	n/a	n/a
2020-10-30	99	n/a
2020-11-02	99.5	n/a
2020-11-03	99.375	n/a
2020-11-04	100.155	n/a
2020-11-05	100.625	n/a
2020-11-06	100.388	n/a
2020-11-09	102.375	n/a
2020-11-10	102.25	n/a
2020-11-11	n/a	n/a
2020-11-12	102.455	n/a
2020-11-13	102.187	n/a
2020-11-16	103	n/a
2020-11-17	103.749	n/a
2020-11-18	103	n/a
2020-11-19	102.468	n/a
2020-11-20	102.355	n/a
2020-11-23	102.451	n/a
2020-11-24	103.25	n/a
2020-11-25	n/a	n/a
2020-11-26	n/a	n/a
2020-11-27	n/a	n/a
2020-11-30	103.144	n/a
2020-12-01	103.18	n/a
2020-12-02	103.778	n/a
2020-12-03	104	n/a
2020-12-04	n/a	n/a
2020-12-07	104.9	n/a
2020-12-08	n/a	n/a
2020-12-09	104.919	n/a

2020-12-10	104.75	n/a
2020-12-11	n/a	n/a
2020-12-14	105	n/a
2020-12-15	105	n/a
2020-12-16	105.358	n/a
2020-12-17	105	n/a
2020-12-18	n/a	n/a
2020-12-21	104.915	n/a
2020-12-22	105.448	n/a
2020-12-23	n/a	n/a
2020-12-24	n/a	n/a
2020-12-25	n/a	n/a
2020-12-28	n/a	n/a
2020-12-29	105.98	n/a
2020-12-30	n/a	n/a
2020-12-31	105.544	n/a
2021-01-01	n/a	n/a
2021-01-04	105.49	n/a
2021-01-05	n/a	n/a
2021-01-06	104.85	n/a
2021-01-07	n/a	n/a
2021-01-08	105.5	n/a
2021-01-11	105.746	n/a
2021-01-12	105.097	n/a
2021-01-13	105.344	n/a
2021-01-14	105.75	n/a
2021-01-15	105.75	n/a
2021-01-18	n/a	n/a
2021-01-19	106	n/a
2021-01-20	n/a	n/a
2021-01-21	n/a	n/a
2021-01-22	105.863	n/a
2021-01-25	105.75	n/a
2021-01-26	105.75	n/a
2021-01-27	105.9	n/a
2021-01-28	106	n/a
2021-01-29	n/a	n/a
2021-02-01	n/a	n/a
2021-02-02	106.478	n/a
2021-02-03	106.25	n/a
2021-02-04	105.913	n/a
2021-02-05	106.25	n/a
2021-02-08	105.75	n/a
2021-02-09	105.5	n/a
2021-02-10	105	n/a
2021-02-11	n/a	n/a
2021-02-12	105.057	n/a

2021-02-15	n/a	n/a
2021-02-16	105.125	n/a
2021-02-17	105.5	n/a
2021-02-18	105.689	n/a
2021-02-19	106.094	n/a
2021-02-22	n/a	n/a
2021-02-23	105.47	n/a
2021-02-24	105.57	n/a
2021-02-25	105.296	n/a
2021-02-26	104.572	n/a
2021-03-01	n/a	n/a
2021-03-02	105.37	n/a
2021-03-03	105.213	n/a
2021-03-04	104.97	n/a
2021-03-05	105.48	n/a
2021-03-08	105.25	n/a
2021-03-09	n/a	n/a
2021-03-10	n/a	n/a
2021-03-11	n/a	n/a
2021-03-12	105.625	n/a
2021-03-15	n/a	n/a
2021-03-16	105.521	n/a
2021-03-17	n/a	n/a
2021-03-18	n/a	n/a
2021-03-19	105.85	n/a
2021-03-22	106.83	n/a
2021-03-23	106.188	n/a
2021-03-24	106.27	n/a
2021-03-25	106.252	n/a
2021-03-26	106.75	n/a
2021-03-29	106.87	n/a
2021-03-30	106.375	n/a
2021-03-31	106.785	n/a
2021-04-01	106.5	n/a
2021-04-02	n/a	n/a
2021-04-05	106.25	n/a
2021-04-06	105.82	n/a
2021-04-07	105.5	n/a
2021-04-08	n/a	n/a
2021-04-09	105.446	n/a
2021-04-12	105.375	n/a
2021-04-13	105.28	n/a
2021-04-14	105.28	n/a
2021-04-15	104.9	n/a
2021-04-16	104.85	n/a
2021-04-19	104.75	n/a
2021-04-20	n/a	n/a

2021-04-21	104.332	n/a
2021-04-22	n/a	n/a
2021-04-23	104.612	n/a
2021-04-26	104.75	n/a
2021-04-27	104.769	n/a
2021-04-28	104.375	n/a
2021-04-29	104.675	n/a
2021-04-30	104.345	n/a
2021-05-03	104.543	n/a
2021-05-04	n/a	n/a
2021-05-05	n/a	n/a
2021-05-06	104.124	n/a
2021-05-07	104	n/a
2021-05-10	104.25	n/a
2021-05-11	104.134	n/a
2021-05-12	103.79	n/a
2021-05-13	104.5	n/a
2021-05-14	n/a	n/a
2021-05-17	n/a	n/a
2021-05-18	104.02	n/a
2021-05-19	103.89	n/a
2021-05-20	103.75	n/a
2021-05-21	104.219	n/a
2021-05-24	n/a	n/a
2021-05-25	n/a	n/a
2021-05-26	103.825	n/a
2021-05-27	n/a	n/a
2021-05-28	103.613	n/a
2021-05-31	n/a	n/a
2021-06-01	103.831	n/a
2021-06-02	103.82	n/a
2021-06-03	103.75	n/a
2021-06-04	103.8	n/a
2021-06-07	104.27	n/a
2021-06-08	104.45	n/a
2021-06-09	104.14	n/a
2021-06-10	104.15	n/a
2021-06-11	103.96	n/a
2021-06-14	104.125	n/a
2021-06-15	104	n/a
2021-06-16	103.899	n/a
2021-06-17	104	n/a
2021-06-18	103.866	n/a
2021-06-21	103.969	n/a
2021-06-22	104.015	n/a
2021-06-23	104.13	n/a
2021-06-24	103.762	n/a

2021-06-25	103.881	n/a
2021-06-28	n/a	n/a
2021-06-29	104.026	n/a
2021-06-30	103.819	n/a
2021-07-01	n/a	n/a
2021-07-02	n/a	n/a
2021-07-05	n/a	n/a
2021-07-06	103.914	n/a
2021-07-07	103.8	n/a
2021-07-08	103.85	n/a
2021-07-09	103.89	n/a
2021-07-12	103.712	n/a
2021-07-13	n/a	n/a
2021-07-14	n/a	n/a
2021-07-15	104.143	n/a
2021-07-16	n/a	n/a
2021-07-19	103.89	n/a
2021-07-20	103.46	n/a
2021-07-21	103.675	n/a
2021-07-22	103.625	n/a
2021-07-23	n/a	n/a
2021-07-26	103.625	n/a
2021-07-27	103.62	n/a
2021-07-28	103.375	n/a
2021-07-29	102.875	n/a
2021-07-30	102.654	100
2021-08-02	102.57	n/a
2021-08-03	102.428	99.875
2021-08-04	n/a	99.5
2021-08-05	102.04	99.5
2021-08-06	101	n/a
2021-08-09	n/a	98.75
2021-08-10	n/a	98.5
2021-08-11	n/a	n/a
2021-08-12	100.5	98.25
2021-08-13	99.48	n/a
2021-08-16	n/a	93.5
2021-08-17	99.48	93.25
2021-08-18	95	94
2021-08-19	95.04	94.5
2021-08-20	95.02	94.375
2021-08-23	n/a	n/a
2021-08-24	n/a	95.5
2021-08-25	94.96	95.125
2021-08-26	94.53	95.5
2021-08-27	94.812	n/a
2021-08-30	94.5	95.75

2021-08-31	94.25	96
2021-09-01	94.875	n/a
2021-09-02	96.503	96.75
2021-09-03	96.238	n/a
2021-09-06	n/a	n/a
2021-09-07	97.75	97.75
2021-09-08	98.125	97.53
2021-09-09	98.125	97.875
2021-09-10	n/a	n/a
2021-09-13	98.375	97
2021-09-14	98.236	n/a
2021-09-15	97.944	n/a
2021-09-16	n/a	97.25
2021-09-17	97.844	97
2021-09-20	96.653	96.02
2021-09-21	97.25	96.169
2021-09-22	97.26	96.346
2021-09-23	96.971	96.31
2021-09-24	96.722	n/a
2021-09-27	97.25	96.5
2021-09-28	96.768	96.68
2021-09-29	97	96.742
2021-09-30	97	96.563
2021-10-01	97	97.43
2021-10-04	97.48	n/a
2021-10-05	97.479	n/a
2021-10-06	97.36	95.803
2021-10-07	97.73	n/a
2021-10-08	n/a	95.39
2021-10-11	n/a	n/a
2021-10-12	96.06	94.77
2021-10-13	96.25	95.5
2021-10-14	97	96.625
2021-10-15	n/a	96.822
2021-10-18	97.125	96.5
2021-10-19	97.55	97.095
2021-10-20	97.75	n/a
2021-10-21	97.63	96.75
2021-10-22	97	96.5
2021-10-25	96.735	96.5
2021-10-26	96.261	96.115
2021-10-27	95.938	95.5
2021-10-28	96.25	95.12
2021-10-29	95.663	94.75
2021-11-01	95.731	n/a
2021-11-02	95.625	94.75
2021-11-03	95.097	n/a

2021-11-04	95.5	95.05
2021-11-05	95.27	95.125
2021-11-08	95.5	94.84
2021-11-09	95.025	94.375
2021-11-10	94.52	94
2021-11-11	n/a	n/a
2021-11-12	94	93.625
2021-11-15	96.5	95
2021-11-16	96.45	94.9
2021-11-17	95.45	94.75
2021-11-18	96.438	95.007
2021-11-19	95	94.625
2021-11-22	95	94.375
2021-11-23	95.018	94.22
2021-11-24	n/a	n/a
2021-11-25	n/a	n/a
2021-11-26	n/a	n/a
2021-11-29	94.125	93.25
2021-11-30	94.25	93.486
2021-12-01	95	n/a
2021-12-02	95	94
2021-12-03	94.85	93.636
2021-12-06	95.107	93.75
2021-12-07	95.973	94.25
2021-12-08	96	93.937
2021-12-09	95.459	93.625
2021-12-10	n/a	93.75
2021-12-13	n/a	n/a
2021-12-14	93.5	91.75
2021-12-15	94.5	93
2021-12-16	94.125	93.375
2021-12-17	n/a	n/a
2021-12-20	94.181	92.75
2021-12-21	94.25	92.75
2021-12-22	94.5	n/a
2021-12-23	n/a	n/a
2021-12-24	n/a	n/a
2021-12-27	94.75	93
2021-12-28	n/a	n/a
2021-12-29	95.158	n/a
2021-12-30	95.2	93.625
2021-12-31	95.17	93.75

Tab 21

MOODY'S
INVESTORS SERVICE

Announcement of Periodic Review: Moody's announces completion of a periodic review of ratings of Akumin Inc.

20 Aug 2021

Toronto, August 20, 2021 -- Moody's Investors Service ("Moody's") has completed a periodic review of the ratings of Akumin Inc. and other ratings that are associated with the same analytical unit. The review was conducted through a portfolio review discussion held on 18 August 2021 in which Moody's reassessed the appropriateness of the ratings in the context of the relevant principal methodology(ies), recent developments, and a comparison of the financial and operating profile to similarly rated peers. The review did not involve a rating committee. Since 1 January 2019, Moody's practice has been to issue a press release following each periodic review to announce its completion.

This publication does not announce a credit rating action and is not an indication of whether or not a credit rating action is likely in the near future. Credit ratings and outlook/review status cannot be changed in a portfolio review and hence are not impacted by this announcement. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Key rating considerations are summarized below.

Akumin's B3 CFR is constrained by execution risks of an aggressive acquisition growth strategy in the US medical diagnostic imaging sector, high leverage, downward pressure on reimbursement rates and integration risks. The rating benefits from longstanding partnerships with most major US healthcare networks, nationwide presence and strong market position, well-diversified payor base, and favorable industry trends.

This document summarizes Moody's view as of the publication date and will not be updated until the next periodic review announcement, which will incorporate material changes in credit circumstances (if any) during the intervening period.

The principal methodology used for this review was Business and Consumer Service Industry published in October 2016. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

This announcement applies only to EU rated, UK rated, EU endorsed and UK endorsed ratings. Non EU rated, non UK rated, non EU endorsed and non UK endorsed ratings may be referenced above to the extent necessary, if they are part of the same analytical unit.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Whitney Leavens
Analyst
Corporate Finance Group
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Donald S. Carter, CFA
MD - Corporate Finance
Corporate Finance Group
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Releasing Office:
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653



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MOODY'S
INVESTORS SERVICE

Rating Action: Moody's affirms Akumin's B3 CFR; changes outlook to negative

15 Sep 2021

Toronto, September 15, 2021 -- Moody's Investors Service ("Moody's") affirmed Akumin Inc.'s ("Akumin") B3 corporate family rating (CFR), B3-PD probability of default rating (PDR) and B2 senior secured ratings. The speculative grade liquidity rating remains unchanged at SGL-3. At the same time, Moody's changed the outlook to negative from stable.

The change in outlook to negative reflects the continued delay in Akumin's Q2 2021 filings, which increases risks in Moody's assessment of liquidity and governance. The action follows a reduction in the amount available to draw under the company's revolving credit facility to $10 million from $55 million, announced on September 13th.

Management expects to file results for the second quarter ending June 30 before October 15, 2021. Although Moody's does not expect the company to rely on the revolver in the near term, financial flexibility will be more limited until publication of the missing reports, which would restore revolver capacity if completed by the extended 60-day deadline. Any further delay would substantially increase the risk of a default event and weaken Moody's assessment of liquidity and corporate governance. The trustee of the secured notes has filed a notice by which further postponement of the Q2 filings beyond December 15, 2021 would constitute an event of default under the indentures.

Outlook Actions:

..Issuer: Akumin Inc.

....Outlook, Changed To Negative From Stable

Affirmations:

..Issuer: Akumin Inc.

.... Probability of Default Rating, Affirmed B3-PD

.... Corporate Family Rating, Affirmed B3

....Senior Secured Bank Credit Facility, Affirmed B2 (LGD3)

....Senior Secured Regular Bond/Debenture, Affirmed B2 (LGD3)

RATINGS RATIONALE

Akumin's B3 CFR is constrained by: (1) governance risks associated with its inability to file Q2 2021 financial statements on time; (2) high leverage (around 7x through 2022); (3) execution risks of an aggressive acquisition growth strategy; (4) exposure to downward pressure on reimbursement rates; and (5) integration risks associated with the Alliance acquisition, including execution of the strategy shift away from mobile units to fixed. The company benefits from: (1) a nationwide presence and large scale within the fragmented diagnostic imaging and oncology markets after the Alliance acquisition; (2) longstanding partnerships with most major US healthcare networks; (3) a well-diversified payor base, including about half of revenues linked to long-term contracts with healthcare providers; and (4) favorable industry trends, including the transition toward lower cost outpatient settings and an aging population.

Akumin currently has adequate liquidity (SGL-3). Pro-forma for the acquisition of Alliance, which closed in early September, Moody's estimates sources total about $45 million, consisting of cash on hand of about $35 million (post closing, and according to management), and $10 million available under the committed revolving facility due 2025. Moody's expects flat free cash flow generation over the next twelve months through September 2022. The company has no mandatory debt amortizations.

Assuming the company completes its Q2 2021 filings before October 15, 2021, revolver capacity will increase

back to $55 million. Once in compliance with filing requirements, the revolver will be again be subject to a springing covenant when more than 30% drawn. Moody's does not expect the company to rely on the revolver, but Akumin would have a comfortable cushion of around 30% if triggered. Alternate sources of liquidity are limited as substantially all assets are encumbered by the secured credit facilities.

Akumin's senior secured debt (including the $55 million revolving credit facility due 2025, and $475 million and $375 million first lien notes due 2025 and 2028, respectively) is rated B2, one notch above the B3 CFR, reflecting higher recovery in the capital structure ahead of the $325 million unsecured notes due 2032/33 (unrated), funded by Stonepeak Partners.

Akumin is exposed to social risks arising from efforts to address the accessibility and affordability of healthcare services, which may lead to additional pressure on payor reimbursement rates. However, future price reductions are likely to be less material than those mandated in prior years. Additional social risks include the ongoing coronavirus pandemic and concerns around patient health and safety which could drive volatility in results until the risk of outbreaks subsides.

Governance risks are high, given both the current delay in financial reporting and the company's aggressive financial policy, characterized by elevated leverage and an acquisition growth strategy that will consume free cash flow in lieu of debt reduction. Akumin is a publicly traded company with a long-term target leverage of 4x total net debt to EBITDA; however, Moody's believes the company will prioritize inorganic growth over the medium term, keeping leverage above target at closer to 5.5x (around 6.5x on a Moody's adjusted basis). Although Akumin faces heightened execution risk with the Alliance acquisition, the company has a good track record of integrating smaller scale transactions, which will continue to be core to its growth strategy.

FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

The ratings could be upgraded if Akumin successfully integrates Alliance while demonstrating a strong execution of its growth strategy and sustaining debt to EBITDA below 5.5x while generating positive free cash flow and maintaining good liquidity.

The ratings could be downgraded if the company appears unlikely to file its Q2 2021 results by the extended deadline of October 15, 2021, or if Moody's believes liquidity will weaken. Downward pressure would also arise if integration challenges pressure profitability, operating performance deteriorates, or debt to EBITDA is sustained above 8x. The rating on the secured notes could be downgraded if the company raises significant additional secured debt.

The principal methodology used in these ratings was Business and Consumer Service Industry published in October 2016 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1037985. Alternatively, please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

Akumin Inc., a publicly-traded company headquartered in Toronto, Canada and Plantation, Florida, is a provider of diagnostic imaging services in the United States. Pro-forma revenue was $730 million for the twelve months ended March 2021, including the acquisition of Alliance Healthcare. Stonepeak Partners LP owns 13% of Akumin, on a fully diluted basis.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

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At least one ESG consideration was material to the credit rating action(s) announced and described above.

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Whitney Leavens
Asst Vice President - Analyst
Corporate Finance Group
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Donald S. Carter, CFA
MD - Corporate Finance
Corporate Finance Group
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Releasing Office:
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada

JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

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CREDIT OPINION
16 September 2021

Update

Rate this Research

RATINGS

Akumin Inc.

Domicile	Jacksonville, Florida, United States
Long Term Rating	B3
Type	LT Corporate Family Ratings
Outlook	Negative

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Donald S. Carter, CFA +1.416.214.3851
MD-Corporate Finance
donald.carter@moodys.com

Whitney Leavens +1.416.214.3849
Analyst
whitney.leavens@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
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Akumin Inc.

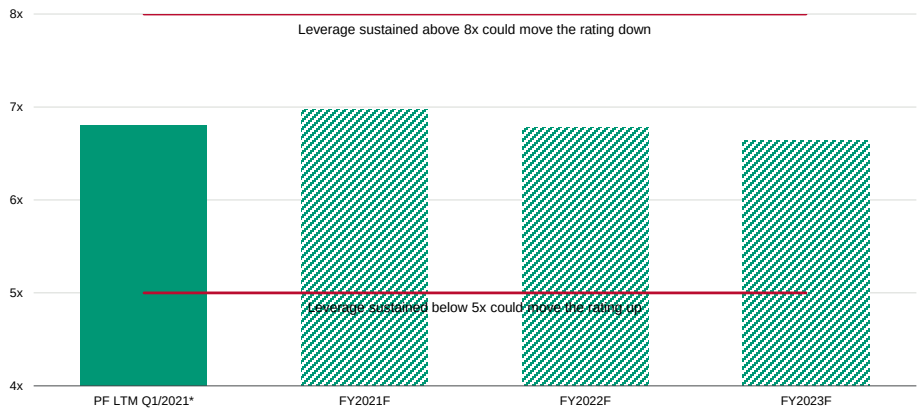
Update following change in outlook to negative

Summary

Akumin's B3 CFR is constrained by: (1) governance risks associated with its inability to file Q2 2021 financial statements on time; (2) high leverage (around 7x through 2022); (3) execution risks of an aggressive acquisition growth strategy; (4) exposure to downward pressure on reimbursement rates; and (5) integration risks associated with the Alliance acquisition, including execution of the strategy to focus on fixed sites. The company benefits from: (1) a nationwide presence and large scale within the fragmented diagnostic imaging and oncology markets after the Alliance acquisition; (2) longstanding partnerships with most major US healthcare networks; (3) a well-diversified payor base, including about half of revenues linked to long-term contracts with healthcare providers; and (4) favorable industry trends, including the transition toward lower cost outpatient settings and an aging population

Exhibit 1

We expect Akumin's leverage to remain around 7x



*LTM Q1 2021 is proforma for the acquisition of Alliance as well as additional tuck-in acquisitions completed in H1 2021
Source: Moody's Financial Metrics™, Moody's Projections

Credit challenges

» Delayed financial reporting, increasing risks around liquidity and governance

» High leverage

» Execution risks associated with aggressive inorganic growth strategy

» Exposure to downward pressure on reimbursement rates

Credit strengths

» Favorable market position and strong partnerships with healthcare providers

» Good payor and geographic diversification

» Industry trends supportive of long term growth

Rating outlook

The negative outlook reflects the continued delay in Akumin's Q2 2021 filings and more limited financial flexibility as well as increased risks in our assessment of liquidity and governance.

Factors that could lead to a downgrade

» If the company appears unlikely to file its Q2 2021 results by the extended deadline of October 15, 2021

» If we believe liquidity will weaken

» Integration challenges pressuring profitability

» Debt/EBITDA sustained above 8.0 times

The rating on the secured notes could be downgraded if the company raises significant additional secured debt.

Factors that could lead to an upgrade

» Successful integration of Alliance

» Strong execution of acquisition growth strategy

» Debt/EBITDA sustained below 5.5 times

» Track record of generating positive free cash flow

» Maintenance of good liquidity

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Akumin Inc

USD $ Millions	Dec-18	Dec-19	Dec-20	PF LTM Q1 2021	2021 P	2022 P	2023 P
Revenue	155	247	251	730	764	810	842
EBITA Margin %	16%	18%	17%	16%	16%	16%	16%
Debt / EBITDA	5.2x	6.7x	7.5x	6.8x	7.0x	6.8x	6.6x
EBITA / Interest Expense	1.8x	1.5x	1.0x	1.1x	1.1x	1.2x	1.3x
RCF / Net Debt	17%	10%	7%	6%	5%	8%	8%

All figures and ratios are calculated using Moody's estimates and standard adjustments. Moody's projections (P) are Moody's opinion and do not represent the views of the issuer. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months. PF LTM represents Moody's estimates of the combined operations of Alliance and Akumin.
Source: Moody's Financial Metrics™, Moody's Projections

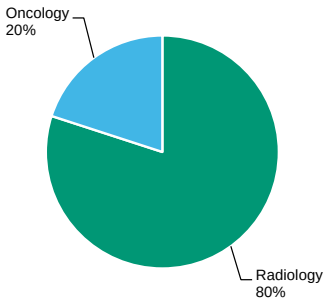
Profile

Akumin, headquartered in Toronto, ON, and Plantation, FL, is a provider of diagnostic imaging services at freestanding centers providing magnetic resonance imaging, computed tomography, positron emission tomography, nuclear medicine, mammography, ultrasound, digital radiography (Xray), fluoroscopy and other related procedures. Following the acquisition of Alliance, Akumin will incorporate outsourced and joint venture healthcare services that include outpatient radiology, oncology and interventional services, including both mobile and fixed sites, and ambulatory surgical centers across 46 US states, in partnership with over 1,000 hospitals, health systems and physician practices. Pro-forma revenues for the combined businesses were $730 million for the twelve months ended March 2021. Stonepeak Magnet Holdings LP owns 13% of Akumin, on a fully diluted basis.

Exhibit 3

Revenue by Services

Pro forma combined revenues $730 million LTM 03/21

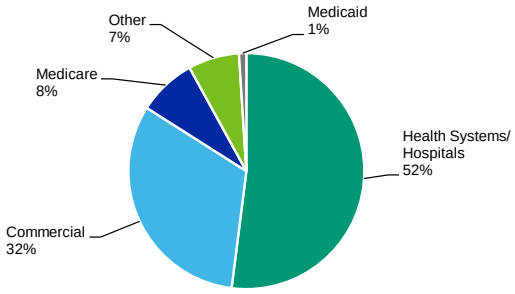


Source: Company Reports

Exhibit 4

Revenue by Payor Mix

Pro forma combined revenues $730 million LTM 03/21



Source: Company Reports

Recent developments

On 13 September 2021, Akumin announced that lenders under its revolving credit agreement would waive any default due to the ongoing delay in Q2 2021 filings until October 15th, but simultaneously reduced the amount available to draw under the facility to just $10 million, from $55 million. The loss of additional liquidity combined with the ongoing delay in Akumin's Q2 2021 filings increases risks in Moody's assessment of liquidity and governance.

Management expects to file results for the second quarter ending June 30 before October 15, 2021. Although Moody's does not expect the company to rely on the revolver in the near term, financial flexibility will be more limited until publication of the missing reports, which would restore revolver capacity if completed by the extended 60-day deadline. Any further delay would substantially increase the risk of a default event and weaken Moody's assessment of liquidity and corporate governance. The trustee of the secured notes has filed a notice by which further postponement of the Q2 filings beyond December 15, 2021 would constitute an event of default under the indentures.

Detailed credit considerations

Transformative Alliance acquisition enhances business profile and long-term growth opportunities

The Alliance acquisition provides Akumin with significantly enhanced scale, revenue diversification and competitive positioning. On a combined basis, the company will be present in all but four US states (from eight currently). Incremental and competitive benefits associated with Akumin's larger presence within the highly fragmented sector will include access to a wider pool of radiologists (including sub-specialty expertise), a strong referral network linked to Alliance's existing hospital partnerships, and the ability to extract operational efficiencies through centralized business functions as well as invest in technology on a scale that small, independent players cannot. Alliance's nationwide presence will also act as a platform for Akumin to increase density in new metropolitan areas and provide a solid runway for growth in both radiology and oncology through tuck in acquisitions, and hospitals seeking outsourcing solutions.

Post-acquisition, Akumin will be uniquely positioned to capitalize on opportunities through partnerships with healthcare providers as the industry continues transitioning away from more costly hospital-based settings. There is some execution risk around the extent to which the company will be able to preserve the value of hospital partnerships as the industry continues shifting toward off campus, outpatient care and payors continue reducing rates. However, we believe pricing pressures will be gradual, and the transfer of operational efficiencies from the company's existing fixed business combined with increased scale will benefit partnering hospitals. Compared to peers, the merged company will have a more favorable payor mix, with direct hospital contracts across a large and well-diversified group of over 1,000 healthcare providers (including the vast majority of all major US healthcare networks) representing about 50% of pro-forma revenues, and the remainder concentrated among higher rate commercial insurers (about 30%), and to a lesser extent government payors (10%).

Alliance acquisition involves execution and integration risks

Akumin faces execution risks given the magnitude of the acquisition (Alliance is twice as big as Akumin) and complexity of integrating two distinct operating models while the company's strategy is focusing growth on fixed sites, with less capital investment to be made on mobile sites, which make up a significant portion of Alliance's existing business. Also, management's intention to fully intertwine managerial, administrative and operational business functions and service offerings, heightens integration risks. Although this is the first time the company is carrying out a business combination of such significant size and scope, Akumin has a good acquisition track record, having integrated over 100 centers into its platform.

The free cash flow generating capacity of the combined entities will be initially limited by integration costs; however longer-term, we also expect the company to focus on fixed sites, which may increase capital intensity. Longer-term, free cash flow may also be weakened to the extent Akumin draws on the additional high-coupon (11%), committed financing provided by Stonepeak in the form of unsecured notes. We expect the company will seek to fund inorganic growth initiatives with the Stonepeak financing, however the amount the company can draw is currently severely limited since the availability of additional funds (up to $490 million) is dependent on the market value of its common equity being at least equal to the outstanding amount of unsecured notes.

Industry transition toward outpatient services and value-based care partially counteracts pressure on reimbursement rates

Long term, Akumin will continue to benefit from the industry's transition to outpatient services as major US insurers have increasingly reduced reimbursements for more costly hospital-based diagnostic services; however, the company is exposed to industry-wide pressure on rates, both directly through its fee-for-service business (payments collected from insurance companies, government-sponsored healthcare programs and patients), and indirectly through hospital contracts. Modest but steady increases in volumes will partially mitigate ongoing pressure on reimbursement rates. Demand will also increase as the US population ages and as the healthcare sector places increasing emphasis on value-based care, leading to more preventive screenings as payors seek cost savings through early diagnosis. We believe Akumin will continue to demonstrate flexibility to adjust operating costs as the pricing environment evolves. The company has a good track record of implementing operational efficiencies at acquired clinics as demonstrated by the maintenance of strong margins for the industry (EBITA margins above 15%) and flexible cost management, as demonstrated during the coronavirus pandemic.

Rapid growth strategy will limit pace of deleveraging

We forecast that Akumin's adjusted debt/EBITDA will remain elevated around 7x through 2022. We expect normalized organic revenue growth to be about 3-5%, with EBITDA expansion supported by a recovery in procedure volumes back toward 2019 levels as well as the achievement of some synergies once the businesses are fully integrated. However, we expect some increase in debt related to higher

capital leases as the business expands, which will limit the pace of deleveraging. We also believe Akumin will continue its rapid pace of acquisitions which may be partially or fully financed with debt, potentially slowing the deleveraging process longer-term.

ESG considerations

Akumin is exposed to social risks arising from efforts to address the accessibility and affordability of healthcare services, which may lead to additional pressure on payor reimbursement rates. However, future price reductions are likely to be less material than those mandated in prior years. Additional social risks include the ongoing coronavirus pandemic and concerns around patient health and safety which could drive volatility in results until the risk of outbreaks subsides.

Governance risks are high, given both the current delay in financial reporting and the company's aggressive financial policy, characterized by elevated leverage and an acquisition growth strategy that will consume free cash flow in lieu of debt reduction. Akumin is a publicly traded company with a long-term target leverage of 4x total net debt to EBITDA; however, Moody's believes the company will prioritize inorganic growth over the medium term, keeping leverage above target at closer to 5.5x (around 6.5x on a Moody's adjusted basis). Although Akumin faces heightened execution risk with the Alliance acquisition, the company has a good track record of integrating smaller scale transactions, which will continue to be core to its growth strategy. Following the Alliance acquisition, Akumin will have a seven-member board of directors, of which four will be independent.

Liquidity analysis

Akumin currently has adequate liquidity (SGL-3). Pro-forma for the acquisition of Alliance, which closed in early September, Moody's estimates sources total about $45 million, consisting of cash on hand of about $35 million (post closing, and according to management), and $10 million available under the committed revolving facility due 2025. Moody's expects flat free cash flow generation over the next twelve months through September 2022. The company has no mandatory debt amortizations.

Assuming the company completes its Q2 2021 filings before October 15, 2021, revolver capacity will increase back to $55 million. Once in compliance with filing requirements, the revolver will be again be subject to a springing covenant when more than 30% drawn. Moody's does not expect the company to rely on the revolver, but Akumin would have a comfortable cushion of around 30% if triggered. Alternate sources of liquidity are limited as substantially all assets are encumbered by the secured credit facilities.

Structural considerations

Akumin's senior secured debt (including the $55 million revolving credit facility due 2025, and $475 million and $375 million first lien notes due 2025 and 2028, respectively) is rated B2, one notch above the B3 CFR, reflecting higher recovery in the capital structure ahead of the $325 million unsecured notes due 2032/33 (unrated), funded by Stonepeak Partners.

Rating methodology and scorecard factors

Akumin's scorecard-indicated outcome from Moody's 12-18 month forward view under the Business and Consumer Service Industry scorecard is B2, one notch above the company's assigned B3 CFR. The assigned rating takes into account the company's high leverage and an aggressive growth strategy.

Exhibit 5

Akumin Inc.

Business and Consumer Service Industry Scorecard [1][2]	Current PF LTM 3/31/2021		Moody's 12-18 Month Forward View As of July 2021 [3]	
Factor 1 : Scale (20%)	**Measure**	**Score**	**Measure**	**Score**
a) Revenue (USD Billion)	$0.7	B	$0.8	B
Factor 2 : Business Profile (20%)				
a) Demand Characteristics	B	B	B	B
b) Competitive Profile	B	B	B	B
Factor 3 : Profitability (10%)				
a) EBITA Margin	16%	Ba	16%	Ba
Factor 4 : Leverage and Coverage (40%)				
a) Debt / EBITDA	6.8x	Caa	6.8x	Caa
b) EBITA / Interest	1.1x	B	1.2x	B
c) RCF / Net Debt	6%	Caa	8%	B
Factor 5 : Financial Policy (10%)				
a) Financial Policy	B	B	B	B
Rating:				
a) Scorecard-Indicated Outcome		B2		B2
b) Actual Rating Assigned				B3

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporation
[2] Pro forma as of 3/31/2021(L) for the acquisition of Alliance as well as additional tuck-in acquisitions completed in H1 2021
[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures
Source: Moody's Financial Metrics™

Ratings

Exhibit 6

Category	Moody's Rating
AKUMIN INC.	
Outlook	Negative
Corporate Family Rating	B3
Sr Sec Bank Credit Facility	B2/LGD3
Senior Secured	B2/LGD3
Speculative Grade Liquidity	SGL-3

Source: Moody's Investors Service

Appendix

Exhibit 7

Peer Comparison Table

	Akumin Inc. B3 Stable			Alliance Healthcare Services Caa2 Stable			RadNet Management, Inc. B2 Stable		
(in US millions)	FYE Dec-19	FYE Dec-20	LTM Mar-21	FYE Dec-19	FYE Dec-20	LTM Mar-21	FYE Dec-19	FYE Dec-20	LTM Mar-21
Revenue	$247	$251	$247	$569	$496	$483	$1,154	$1,072	$1,106
EBITDA	$71	$72	$81	$131	$130	$131	$251	$218	$250
Total Debt	$478	$538	$615	$729	$682	$693	$1,195	$1,185	$1,220
Cash & Cash Equiv.	$23	$44	$123	$15	$26	$24	$40	$102	$31
EBIT Margin	18%	17%	16%	10%	7%	13%	9%	6%	9%
EBIT / Int. Exp.	1.5x	1.0x	0.9x	0.9x	0.6x	1.0x	1.4x	0.9x	1.2x
Debt / EBITDA	6.7x	7.5x	7.6x	5.6x	5.3x	5.3x	4.8x	5.4x	4.9x
RCF / Net Debt	10%	7%	6%	5%	9%	9%	15%	16%	17%
FCF / Debt	0%	2%	3%	1%	4%	1%	2%	11%	12%

All figures are calculated using Moody's estimates and standard adjustments
LTM 2021 for Akumin Inc. is pro forma for additional tuck-in acquisitions completed in H1 2021
Source: Moody's Financial Metrics

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MOODY'S
INVESTORS SERVICE

Announcement: Moody's says Akumin's filing delay and accounting review are credit negative

14 Oct 2021

Toronto, October 14, 2021 -- Moody's Investors Service ("Moody's") said that Akumin Inc.'s ("Akumin", B3 negative) announcement of the continued postponement of Q2 2021 filings to as late as November 15, 2021 and disclosure of an additional accounting review is credit negative. The developments signal elevated governance risks and further damage the company's financial reporting track record. Akumin's prolonged focus on reviewing and restating prior reporting periods is also an untimely distraction that heightens integration risks surrounding the recent acquisition of Alliance Healthcare Services, Inc.

For more information, please refer to the Issuer Comment posted on Moodys.com.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Whitney Leavens
Asst Vice President - Analyst
Corporate Finance Group
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Donald S. Carter, CFA
MD - Corporate Finance
Corporate Finance Group
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Releasing Office:
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

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INVESTORS SERVICE

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ISSUER COMMENT
23 November 2021

Contacts

Whitney Leavens +1.416.214.3849
Analyst
whitney.leavens@moodys.com

Donald S. Carter, CFA +1.416.214.3851
MD-Corporate Finance
donald.carter@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
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Akumin Inc.

Restatements revealing higher leverage combined with ongoing Q3 filing delay cast doubt on projected EBITDA

On 15 November 2021, Akumin Inc. (Akumin, B3 negative) published its Q2 2021 filings and restatements for 2019, 2020 and Q1 2021, revealing credit negative corrections that materially reduce historical EBITDA compared to original statements, unveiling a significant increase in leverage for 2019 and 2020. The ongoing delay of Akumin's Q3 2021 filings, which it expects to publish by December 15, 2021, further limits visibility on performance year-to-date. As such and combined with a weak governance track record amplifying execution risks surrounding the integration of Alliance, there is a high degree of uncertainty around our forward view leverage estimates. As such, in our revised forecast, we have assumed no growth in EBITDA above our current pro-forma estimate for LTM Q2 2021, as presented below.

Exhibit 1

Pro-forma for the Alliance acquisition, we estimate Akumin's leverage settles around 7.5x

Comparison of gross leverage before and after restatements

EBITDA and gross leverage *as adjusted by Moody's*	2019	2020	LTM Q2/20 PF Akumin + Alliance	2021F	2022F
EBITDA - pre restatement	$ 71	$ 72	$ 211	$ 211	$ 220
EBITDA - post restatement	$ 42	$ 59	$ 196	$ 196	$ 196
Debt/EBITDA - pre restatement	7.0x	7.5x	6.9x	7.0x	6.8x
Debt/EBITDA - post restatement	11.7x	9.2x	7.5x	7.5x	7.6x

The restatements reduced EBITDA by about $13 million in 2020 and $29 million in 2019.
Source: Moody's Financial Metrics; Moody's Investors Service

The deleveraging nature of the Alliance acquisition (closed on September 1, 2021), should provide some offset to the otherwise weaker underlying EBITDA assumptions for Akumin's standalone operation given that pro-forma for the acquisition, Akumin will represent around just one-third of the consolidated annual revenues (Alliance is almost double the size of Akumin).

Akumin has adequate liquidity. Pro-forma for the acquisition of Alliance, which closed September 1st, we estimate sources total about $45 million, consisting of cash on hand of about $35 million (post closing, and according to management), and $10 million available under the committed revolving facility due 2025. We expect flat free cash flow generation over the next twelve months through September 2022 and the company has no mandatory debt amortizations. The lack of near-term maturities, some discretionary capex and a PIK option under the company's unsecured notes provide Akumin with additional flexibility to manage a sufficient cash position in the near term. Akumin's access to external liquidity is

currently more restricted following reporting delays after lenders reduced commitments to just $10 million (from $55 million) under its revolving credit facility. There is no amount outstanding under the revolver currently and we do not expect Akumin to require access in the near term.

The ongoing reporting delay and prior accounting errors call into question internal controls and the ability of Akumin to implement stronger financial controls as it adjusts to the demands of a larger and more complex business following the Alliance Healthcare acquisition. Our weak assessment of corporate governance is likely to persist until the company reestablishes a track record of consistent and reliable reporting with evidence of more robust financial controls and oversight.

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REPORT NUMBER 1311802

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Tab 22

Court File No. CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

TERRY LONGAIR PROFESSIONAL CORPORATION

Plaintiff

and

AKUMIN INC., RIADH ZINE-EL-ABIDINE, MOHAMMAD SALEEM, THOMAS DAVIES, STAN DUNFORD, MURRAY LEE, JAMES WEBB and ERNST & YOUNG LLP

Defendants

Proceedings under the *Class Proceedings Act*, 1992

AKUMIN DEFENDANTS' RESPONDING FACTUM (MOTIONS FOR LEAVE AND CERTIFICATION)

May 15, 2024

STIKEMAN ELLIOTT LLP
Barristers & Solicitors
5300 Commerce Court West, 199 Bay Street
Toronto, ON M5L 1B9

Eliot N. Kolers LSO #38304R
ekolers@stikeman.com
Tel: (416) 869-5637

Daniel S. Murdoch LSO #53123L
dmurdoch@stikeman.com
Tel: (416) 869-5529

Lawyers for the Defendants,
Akumin Inc., Riadh Zine-El-Abidine,
Mohammad Saleem, Thomas Davies,
Stan Dunford, Murray Lee and James Webb

Court File No. CV-21-00674081-00CP

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

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Plaintiff

and

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Defendants

TABLE OF CONTENTS

	Page No
PART 1 - OVERVIEW	**1**
PART 2 – BACKGROUND	**4**
A. The Akumin Business	**4**
B. Events Relevant to this Action	**7**
a. The Alliance Transaction	**7**
b. The August 15 Disclosure	**8**
c. Closing of the Alliance Transaction	**11**
d. The October 12 Disclosure	**13**
e. The November 8 Disclosure	**17**
f. The November 15 Disclosure	**18**
C. The Accounting Issues	**20**
a. The Accounts Receivable Restatement	**21**
b. The PPE Restatement	**23**
PART 3 – THE LEGAL ISSUES	**23**
ISSUE 1: LEAVE UNDER PART 23.1 OF THE OSA	**24**
A. The Plaintiff's Burden Under Part 23.1	**24**
B. The August 15 Disclosure Did Not Correct Any Misrepresentations	**25**

C. Investors Did Not React to The October 12 Disclosure **31**

D. Akumin's Share Price Increased following the November 15 Disclosure **36**

E. The Plaintiff Has Not Established Materiality **39**

ISSUE 2: ANY CERTIFIED CLASS SHOULD BE SIGNIFICANTLY CIRCUMSCRIBED **44**

A. Nothing Should be Certified if Leave is Dismissed. **45**

B. The Primary Market Claims Should Not be Certified or Limited to Canadian Purchasers **46**

C. Any Class Should be Limited to Canadian Purchasers of Securities **49**

D. Any Class Period should be Narrowed **51**

Disclosure, the plaintiff's allegation is false. The plaintiff's economics expert, Dr. Surana, does not provide any analysis of the movement of the Note prices to support a contention that they are statistically significant or relate to the correction of the alleged misrepresentations, nor did the plaintiff address the noteholder claim in any meaningful way in his factum on the leave motion.

108. While there was some decline in the price of the Notes following the August 15 Disclosure, they rebound almost entirely following the September 1 Disclosure, demonstrating that it was the closing risk of the Alliance acquisition and not the accounting issues themselves that led to a price decline. When the accounts receivable issue was actually quantified in the October 12 Disclosure, the Notes at minimum held their value, and the 7.5 Percent Notes actually rose in price over the following week.

109. As a result, the plaintiff has failed to establish that he has a reasonable possibility of obtaining judgment at trial that the alleged misrepresentations were material to Akumin investors. The Akumin defendants respectfully submit that this is fatal to his leave motion and ask that it be dismissed.

ISSUE 2: ANY CERTIFIED CLASS SHOULD BE SIGNIFICANTLY CIRCUMSCRIBED

110. If leave is denied, none of the plaintiff's causes of action should be certified. If leave is granted, in whole or in part, any certified class should be severely circumscribed. As set out below, the Akumin defendants make the following submissions with respect to certification :

(a) If the leave motion is dismissed, the certification motions should be dismissed in its entirety;

(b) The primary market claim should not be certified, or in the alternative, should be limited to Canadian primary market purchasers of Notes;

(c) The secondary market claim should be limited to Canadian purchasers; and

(d) The proposed class period should be narrowed.

A. Nothing Should be Certified if Leave is Dismissed.

111. If the leave motion is dismissed, the plaintiff's common law and primary market claims – even though they do not require leave – should also not be certified. It is not "preferable" to certify an action that is likely bound to fail.

112. The Ontario Court of Appeal has stated, in denying certification of common law claims following the dismissal of a leave motion:

> [I]t is inappropriate to simply ignore the denial of leave for the statutory claim. The motion judge's leave decision is a relevant consideration in determining whether the class representative has demonstrated some basis in fact that a class proceeding is the preferable procedure to resolve the class members' claims. It, too, favours the conclusion that a class action is not the preferred method of advancing the common law claims in this case.[156]

113. The same applies to the primary market claims, which also rely on the identical alleged misrepresentations and corrections.

114. If the plaintiff does not obtain leave, the primary market claim should also not be certified for lack of a representative plaintiff who purchased Notes pursuant to the offering memoranda. The *Ragoonanan* principle holds that for a cause of action to be certified against a defendant, there must be a representative plaintiff who personally has a cause of action against that defendant. The plaintiff only purchased Akumin shares on the secondary market.

115. In *Poirier*, the Court refused to certify a primary market claim where the proposed representative plaintiff only purchased on the secondary market and leave and certification were both denied. The plaintiff attempted to have the primary market claim certified on the basis that the representative plaintiff would have claims in common law. The Court rejected this view:

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[156] *Bayens v. Kinross Gold Corporation*, 2014 ONCA 901 at para 132.

Tab 23

$400,000,000

AKUMIN INC.

7.000% Senior Secured Notes due 2025

Akumin Inc. (the "issuer"), a corporation existing under the Ontario *Business Corporations Act*, is offering $400,000,000 in aggregate principal amount of 7.000% senior secured notes due 2025 (the "notes"). The notes will bear interest at a rate of 7.000% per annum. The issuer will pay interest on the notes semi-annually in cash in arrears on May 1 and November 1 of each year, beginning on May 1, 2021. The notes will mature on November 1, 2025.

We intend to use the net proceeds from this offering to repay in full all outstanding borrowings and terminate all commitments under our Existing Revolving Credit Facility and our Existing Term Loans (each as defined herein) and to pay related financing fees and expenses. See "Use of Proceeds."

The notes may be redeemed, in whole or in part, on or after November 1, 2022 at the redemption prices specified under "Description of Notes—Optional Redemption," together with accrued and unpaid interest, if any, thereon to, but not including, the redemption date. At any time prior to November 1, 2022, the issuer may redeem the notes, in whole or in part, at a redemption price equal to 100% of their principal amount plus a make-whole premium, together with accrued and unpaid interest, if any, thereon to, but not including, the redemption date. The issuer may redeem up to 40% of the aggregate principal amount of the notes at any time prior to November 1, 2022 with an amount not to exceed the net cash proceeds from certain equity offerings at the redemption prices set forth in this offering memorandum plus accrued and unpaid interest, if any, thereon to, but not including, the redemption date. See "Description of Notes—Optional Redemption." If we sell certain of our assets or experience specific kinds of changes of control, the issuer must offer to purchase the notes at the prices set forth in this offering memorandum plus accrued and unpaid interest, if any, thereon to, but not including, the date of purchase.

On the issue date, the obligations under the notes will be guaranteed (the "guarantees"), jointly and severally, by each of the issuer's wholly-owned restricted subsidiaries, including our professional service affiliates, in each case organized under the laws of the United States or any political subdivision thereof. After the issue date, the notes will be guaranteed by each of our restricted subsidiaries, including professional services affiliates that become a guarantor under our New Revolving Credit Facility (as defined below) or that guarantee certain other indebtedness of the issuer or any guarantor (subject to certain exceptions).

The notes and the guarantees (as defined below) will be secured on a first-priority basis by liens on substantially all of the issuer's and the guarantors' tangible and intangible assets (the "Collateral"), subject to certain exceptions and permitted liens. The liens on the Collateral will be equal and ratable, pursuant to the terms of a first lien intercreditor agreement, with the indebtedness under our New Revolving Credit Facility. See "Description of Notes—Security".

The notes and the related guarantees will be the issuer's and the guarantors' senior secured obligations and will rank equally in right of payment with any existing and future senior indebtedness, senior in right of payment to any future subordinated indebtedness, and will rank equally to any existing and future secured indebtedness of the issuer and the guarantors secured by the Collateral on a first lien basis, including our New Revolving Credit Facility, to the extent of the value of the assets securing such indebtedness. The notes and the related guarantees will be effectively subordinated to any existing and future indebtedness that is secured by liens on assets that do not constitute a part of the Collateral to the extent of the value of such assets. In addition, the notes and the guarantees will be structurally subordinated to any existing and future indebtedness, claims of holders of preferred stock and other liabilities of any subsidiary of the issuer that is not a guarantor of the notes.

Investing in the notes involves a high degree of risk. See "Risk Factors" beginning on page 18.

Offering Price of Notes: 100.000% plus accrued interest, if any, from November 2, 2020.

The notes and the guarantees have not been and will not be registered under the Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any other jurisdiction. The notes are being offered and sold only to persons reasonably believed to be qualified institutional buyers in reliance on Rule 144A under the Securities Act ("Rule 144A") and to certain non-U.S. persons in transactions outside the United States in reliance on Regulation S under the Securities Act

IMPORTANT INFORMATION FOR INVESTORS

Investors are advised to consult legal counsel prior to making any offer for or resale, pledge or transfer of the notes offered hereby.

This offering memorandum may not be copied or reproduced in whole or in part, nor may it be distributed or any of its contents be disclosed to anyone other than the prospective investors to whom it is being provided.

We have prepared this offering memorandum and we are solely responsible for its contents. You are responsible for making your own examination of us and your own assessment of the merits and risks of investing in the notes. You may contact us if you would like any additional information. By purchasing any notes, you will be deemed to have acknowledged that:

- you have reviewed this offering memorandum;
- you have had an opportunity to request and to review, and you have received, any additional information that you need from us;
- you have not relied upon the initial purchasers or any person affiliated with the initial purchasers in connection with your investigation of the accuracy of such information or your investment decision;
- this offering memorandum relates to an offering that is exempt from registration and prospectus qualification under the Securities Act and applicable Canadian securities laws and does not comply in important respects with the rules of the Securities and Exchange Commission (the "SEC") and applicable Canadian securities laws that would apply to an offering document relating to a public offering of securities; and
- no person has been authorized to give information or to make any representation concerning us, this offering or the notes, other than as contained in this offering memorandum in connection with your examination of us and the terms of this offering.

The notes and the note guarantees have not been and will not be registered with, recommended by, or approved or disapproved by any securities commission or regulatory authority, nor has any securities commission or regulatory authority passed upon or endorsed the merits of the offering or the accuracy or adequacy of this offering memorandum. Any representation to the contrary is a criminal offense.

The distribution of this offering memorandum and the offering and sale of the notes in certain jurisdictions may be restricted by law. The Issuer, the guarantors and the initial purchasers require persons into whose possession this offering memorandum comes to inform themselves about and to observe any such restrictions. This offering memorandum does not constitute an offer of, or an invitation to purchase, any of the notes in any jurisdiction in which such offer or invitation would be unlawful. For a description of the restrictions on offers, sales and resales of the notes and distribution of this offering memorandum, see "Plan of Distribution" and "Transfer Restrictions". None of the Issuer, the other note guarantors, the initial purchasers or the trustee are making any representation to any offeree or purchaser under any applicable law.

The notes are subject to restrictions on transferability and resale and may not be transferred or resold except as permitted under the Securities Act of 1933, as amended (the "Securities Act"), and applicable Canadian securities laws and any other applicable securities laws pursuant to registration, prospectus qualification or exemptions therefrom. As a prospective purchaser, you should be aware that you may be required to bear the financial risks of this investment for an indefinite period of time.

Please refer to the sections in the offering memorandum entitled "Plan of Distribution" and "Transfer Restrictions".

In making an investment decision, prospective investors must rely on their own examination of the Company and the terms of the offering, including the merits and risks involved. Prospective investors should not construe anything in the offering memorandum as legal, business or tax advice. Each prospective investor should consult its own advisors in making its investment decision and to confirm there are no legal, regulatory or contractual restrictions

prohibiting its investment and whether it is legally permitted to purchase the securities under applicable investment or similar laws or regulations.

This offering memorandum is being provided on a confidential basis for informational use solely in connection with consideration of a purchase of the notes (i) to persons reasonably believed to be "qualified institutional buyers" as defined in Rule 144A under the Securities Act, (ii) to other investors in offshore transactions complying with Rule 903 or Rule 904 of Regulation S under the Securities Act, and (iii) in the case of sales into Canada, to purchasers acquiring the notes pursuant to a prospectus exemption. Its use for any other purpose is not authorized.

This offering is being made in the United States in reliance upon an exemption from registration under the Securities Act and in Canada pursuant to exemptions from the prospectus requirements of applicable Canadian securities laws for an offer and sale of the notes that do not involve a public offering. Prospective purchasers are hereby notified that sellers of the notes may be relying upon the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A thereunder. In making your purchase, you will be deemed to have made certain acknowledgments, representations and agreements as set forth under "Transfer Restrictions".

In connection with the offering of the notes, the initial purchasers are not acting for anyone other than the Issuer and will not be responsible to anyone other than the Issuer for providing the protections afforded to its clients nor for providing advice in relation to the issue.

Akumin reserves the right to withdraw this offering of the notes at any time. Akumin and the initial purchasers also reserve the right to reject any offer to purchase the notes in whole or in part for any reason or no reason and to allot to any prospective purchaser less than the full amount of the notes subscribed for by it. The initial purchasers and certain of their related entities may acquire, for their own accounts, a portion of the notes.

The initial purchasers make no representation or warranty, express or implied, as to the accuracy or completeness of the information contained in this offering memorandum. Nothing contained in this offering memorandum is, or shall be relied upon as, a promise or representation by the initial purchasers as to the past or future. The initial purchasers assume no responsibility for the accuracy or completeness of any such information.

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

The following summary describes the material Canadian federal income tax considerations pursuant to the Income Tax Act (Canada) and the Income Tax Regulations (collectively, the "Tax Act") generally applicable to a holder that acquires as beneficial owner the notes pursuant to this offering, and beneficially owns all payments thereunder, and that, for purposes of the Tax Act and all relevant times, holds the notes as capital property, deals at arm's length with the Company and Guarantors and each of the initial purchasers, and is not affiliated with the Company or Guarantors or any of the initial purchasers (a "Holder"). Generally, the notes will be considered to be capital property to a Holder provided the Holder does not hold the notes in the course of carrying on a business of trading or dealing in securities and has not acquired them in one or more transactions considered to be an adventure or concern in the nature of trade.

This summary is based upon the provisions of the Tax Act in force as of the date hereof, all specific proposals to amend the Tax Act that have been publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "Proposed Amendments") and our understanding of the current administrative policies and assessing practices of the Canada Revenue Agency ("CRA") made publicly available prior to the date hereof. This summary assumes the Proposed Amendments will be enacted in the form proposed. However, no assurance can be given that the Proposed Amendments will be enacted in the form proposed, if at all. This summary is not exhaustive of all possible Canadian federal income tax considerations and, except for the Proposed Amendments, does not take into account any changes in the law, or administrative policy or assessing practice, whether by legislative, administrative, governmental or judicial action or decision, nor does it take into account provincial, territorial or foreign income tax considerations, which may differ significantly from those discussed herein.

This summary is of a general nature only and is not intended to be, nor should it be construed to be, legal or tax advice to any particular Holder or prospective Holder, and no representations with respect to the income tax consequences to any Holder or prospective Holder are made. Consequently, Holders and prospective Holders should consult their own tax advisors for advice with respect to the tax consequences to them of acquiring notes pursuant to this offering, having regard to their particular circumstances.

Currency Conversion

Generally, all amounts relating to the acquisition, holding or disposition of the notes, including adjusted cost base, proceeds of disposition, and payments of interest must be converted into Canadian dollars for the purposes of the Tax Act based on the daily noon rate as quoted by the Bank of Canada for the applicable day or such other rate of exchange that is acceptable to the Minister of National Revenue (Canada). The amount of interest or capital gain or capital loss of a Holder may therefore be affected by fluctuations in the Canadian/U.S. dollar exchange rate.

Residents of Canada

The following portion of the summary is applicable to a Holder that, at all relevant times and for the purposes of the Tax Act and any applicable income tax treaty or convention is or is deemed to be resident in Canada (a "Resident Holder"). Certain Resident Holders that might not otherwise be considered to hold their notes as capital property may, in certain circumstances, be entitled to have their notes and all other "Canadian securities" (as defined in the Tax Act) owned in the taxation year of the election and all subsequent taxation years deemed to be capital property by making the irrevocable election permitted by subsection 39(4) of the Tax Act. Such Holders should consult their own tax advisors for advice with respect to whether an election under subsection 39(4) of the Tax Act is available or advisable having regard to their particular circumstances. The following portion of this summary is not applicable to (i) a Holder that is a "financial institution", as defined in the Tax Act for the purposes of the mark-to-market rules, (ii) a Holder an interest in which would be a "tax shelter investment" as defined in the Tax Act, (iii) a Holder that is a "specified financial institution" as defined in the Tax Act, (iv) a Holder that makes or has made a functional currency reporting election pursuant to section 261 of the Tax Act to report its "Canadian tax results" as defined in the Tax Act in a currency other than Canadian currency or (v) a holder that has entered or will enter into a "derivative forward agreement" as defined in the Tax Act in respect of the notes. Any such Holder should consult its own tax advisor with respect to an investment in the notes.

Settlement

It is expected that delivery of the notes will be made against payment therefor on or about the date specified on the cover of this offering memorandum, which is the sixth business day following the date of pricing of the notes (such settlement cycle being referred to as "T+6"). Under Rule 15c-1 under the Exchange Act, trades in the secondary market generally are required to settle in two business days unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the notes prior to the date that is two business days preceding the settlement date will be required, by virtue of the fact that the notes initially will settle in T+6, to specify an alternative settlement cycle at the time of any such trade to prevent failed settlement. Purchasers of the notes who wish to trade the notes during such period should consult their own advisor.

Notice to Prospective Investors in the European Economic Area

The notes are not intended to be offered, sold or otherwise made available to and should not be offered sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "Insurance Mediation Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive"). Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPS Regulation. This offering memorandum has been prepared on the basis that any offer of notes in any Member State of the EEA will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of notes. This offering memorandum is not a prospectus for the purposes of the Prospectus Directive.

The above selling restriction is in addition to any other selling restrictions set out below.

Notice to Prospective Investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

Notice to Prospective Investors in Switzerland

No initial purchaser has publicly offered, sold or advertised and will not publicly offer, sell or advertise any notes, directly or indirectly, in, into or from Switzerland. Any offering or marketing material relating to the Notes does not constitute a prospectus as such term is understood pursuant to article 652a or article 1156 of the Swiss Code of Obligations or a listing prospectus within the meaning of the listing rules of the SIX Swiss Exchange or any other regulated trading facility in Switzerland. Any offering or marketing material relating to the notes may not be publicly distributed or otherwise made publicly available in Switzerland.

Notice to Prospective Investors in Canada

Prospective Canadian investors should refer to the offering memorandum prepared for Canadian investors (the "Canadian Offering Memorandum"), which incorporates this offering memorandum and includes additional content. The Canadian Offering Memorandum pertains to the offering of the notes in Canada only to those persons to whom they may be lawfully offered for sale, and only by persons permitted to sell the notes in the jurisdictions of those

TERRY LONGAIR PROFESSIONAL CORPORATION Plaintiff (Respondent)	and	**AKUMIN INC. et al.** Defendants (Appellant)	Court of Appeal File No. COA-24-CV-0846

COURT OF APPEAL FOR ONTARIO

Proceeding commenced at Toronto

Proceeding under the *Class Proceedings Act, 1992*

RESPONDENT'S COMPENDIUM

KALLOGHLIAN MYERS LLP
35 Prince Arthur Avenue
Toronto, Ontario M5R 1B2

Paul Guy (LSO# 49794K)
paul@kalloghlianmyers.com

Garth Myers (LSO# 62307G)
garth@kalloghlianmyers.com

Lawyers for the Plaintiff (Respondent), Terry Longair Professional Corporation