UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

MOHAMMAD ALI IKRAM, individually and on behalf of all others similarly situated, Plaintiff, v. APPLIED THERAPEUTICS, INC., and SHOSHANA SHENDELMAN, Defendants.	Civil Action No. 24-9973 JURY TRIAL DEMANDED

CLASS ACTION COMPLAINT

Plaintiff Mohammad Ali Ikram ("Plaintiff"), individually and on behalf of all others similarly situated, by and through Plaintiff's counsel, alleges the following upon information and belief, except as to those allegations concerning Plaintiff, which are alleged upon personal knowledge. The investigation of counsel included, among other things, a review of Applied Therapeutics, Inc. ("Applied" or "Company") public filings with the United States Securities and Exchange Commission ("SEC"), press releases issued by the Company, media, news, and analyst reports about the Company, conference calls with Company executives and investors, and other publicly available data, including, but not limited to, publicly available trading data relating to the price and trading volume of Applied common stock.

I. SUMMARY OF THE ACTION

1. This is a securities class action on behalf of all purchasers of Applied common stock during the period January 3, 2024 through December 2, 2024, inclusive (the "Class Period"), who were damaged thereby (the "Class"). The claims asserted herein are alleged against Applied and Shoshana Shendelman ("Shendelman"), the Company's founder, and former President and Chief Executive Officer ("CEO"), and arise under Sections 10(b) and 20(a) of the Securities Exchange

Act of 1934 (the "Exchange Act"), 15 U.S.C. §§ 78j(b) and 78t(a), and SEC Rule 10b-5, 17 C.F.R. § 240.10b-5, promulgated thereunder.

2. Applied purports to be a clinical-stage biopharmaceutical company whose lead drug candidate, govorestat (also referred to as AT-007), is intended to treat rare metabolic diseases, including Galactosemia, a pediatric metabolic disease that affects how the body processes a simple sugar called galactose, and for which there is no known cure or approved treatment available.

3. According to the Company's annual report for the year ended December 31, 2023 filed with the SEC on Form 10-K on March 6, 2024, the Company does "not have any product candidates approved for sale and ha[s] not generated any revenue." If approved, govorestat would be the first medication indicated for the treatment of Galactosemia and would be Applied's first commercial product.

4. During the Class Period, Defendants made positive representations about the Company's New Drug Application ("NDA") for govorestat and Defendants' interactions with the U.S. Food and Drug Administration ("FDA") concerning the NDA for govorestat, such as "things are going very well with the FDA" and that there were no "major sticking points" with the FDA concerning the NDA for govorestat.

5. In response to Defendants' positive representations about the govorestat NDA, Applied's stock price significantly increased and Defendants took advantage of Applied's inflated stock price. The Company sold approximately $100 million in Applied securities through a private placement that valued the Company's shares at $7 per share. Defendant Shendelman sold Applied shares on the open market for over $4.7 million in net proceeds.

6. However, unknown to investors, during the Class Period, the FDA had serious concerns about the NDA for govorestat and the study data results supporting the NDA, including

undisclosed Dosing Errors and Study Data Deletion (defined below) issues. These data integrity issues were sticking points for the NDA for govorestat and were objectionable conditions observed by the FDA during its inspections of the Company and its clinical sites. Defendants knew of, or recklessly disregarded, these material negative facts that cut against their positive representations to investors through Defendants' meetings and correspondence with the FDA.

7. On November 27, 2024, the truth began to partially be disclosed, when the Company disclosed receipt of a complete response letter ("CRL") from the FDA stating it was unable to approve the NDA for govorestat in its current form, citing deficiencies in the govorestat NDA, a disclosure that caused the Company's stock to crash over 80%. On December 2, 2024, the Class Period ends when, after the close of trading, the Company disclosed that it received a Warning Letter (defined below) from the FDA relating to the NDA for govorestat, a disclosure that caused Applied's shares to further decline. Shortly after the end of the Class Period, Defendant Shendelman "stepped down" as Chair and CEO of the Company.

II. DEFENDANTS' WRONGFUL CONDUCT

8. On January 3, 2024, the start of the Class Period, the Company issued a press release in which it announced that it submitted an NDA to the FDA for govorestat (AT-007) for the treatment of Classic Galactosemia. According to Defendant Shendelman, the NDA was "supported by rapid and sustained reduction in galactitol, which resulted in a meaningful benefit on clinical outcomes across pediatric patients, alongside a favorable safety profile." She further stated that "We look forward to working closely" with the FDA "throughout the review process and hope to bring the first treatment to patients with Galactosemia soon." The NDA submission included, among others, clinical outcomes data from a Phase 3 registrational study, called ACTION-Galactosemia Kids study, in children aged 2-17 with Galactosemia, among other clinical and preclinical data, including Phase 1 dosing study data results.

9. Unknown to investors, the Company's NDA for govorestat did not adhere to FDA requirements. In order to permit the FDA to make a knowledgeable judgment about the NDA, FDA regulations require NDAs to provide the FDA with a description and analysis of any data or information relevant to an evaluation of the safety and effectiveness of the drug product obtained or otherwise received by the applicant from any source, including information derived from clinical investigations.

10. Between March and June 2021, the Company's clinical sites administered 80% of the protocol-required dose to subjects in a Phase 1 dosing study for govorestat and at least 19 subjects of the 47 subjects at a clinical site received a lower dosage of than the protocol required (the "Dosing Errors"). On June 17, 2021, Applied notified clinical sites of this error, and on June 29, 2021, clinical sites were provided with a new formulation of the drug at the correct concentration. However, in the NDA, Applied failed to provide the FDA with any description or analysis of the information describing the nature and extent of the dosing errors related to the mislabeled doses. Applied reported dose levels for subjects as stated in the protocol, rather than the actual dose levels administered.

11. Defendants' failure to provide a description or analysis of the Dosing Errors was a material, negative concern for the FDA because information on the nature and extent of the Dosing Errors is relevant to an evaluation of the safety and effectiveness of govorestat. Therefore, Defendants failed to provide sufficient information at the time of submission of the NDA to enable FDA to make an informed decision regarding the impact of the Dosing Errors on study data. Furthermore, Defendants' failure to provide a description or analysis of the Dosing Errors raised significant concerns about the validity, reliability, and integrity of the data and the Company's failure to disclose this critical information in the NDA for govorestat raised significant

concerns about the Company's oversight and conduct of clinical investigations, including its compliance with the reporting requirements for human drug products. The Dosing Error was not disclosed to investors until after the Class Period.

12. On February 28, 2024, the Company issued a press release that disclosed that the FDA accepted the filing of the NDA for govorestat (AT-007) for the treatment of Classic Galactosemia: "[t]he NDA was granted Priority Review status, and the FDA assigned a Prescription Drug User Fee Act ("PDUFA") target action date of August 28, 2024. The FDA also noted that it is planning to hold an advisory committee meeting to discuss the application."

13. Also on February 28, 2024, the Company issued a press release titled "Applied Therapeutics Announced $100 Million Private Placement" that stated the following:

> The Company entered into a definitive securities purchase agreement, dated as of February 27, 2024, for the sale of 12,285,714 shares of the Company's common stock, par value $0.0001 per share at a purchase price of $7.00 per share (the "Shares") and 2,000,000 pre-funded warrants to purchase common stock at a purchase price of $6.999, which is equal to the purchase price per share of common stock less the $0.001 per share exercise price of each pre-funded warrant (the "Pre-Funded Warrants" and together with the Shares, the "Securities"), in a private placement (the "Private Placement"). The Private Placement is expected to result in gross proceeds to the Company of approximately $100 million, before deducting placement agent commissions and other offering expenses.

14. Unknown to investors, on March 27, 2024, two days after the FDA preannounced its inspection of one of the Company's clinical sites, a third-party vendor contracted by the Company deleted certain electronic study data results, including associated audit trails for all 47 subjects enrolled in the Phase 3 ACTION-Galactosemia Kids study (the "Study Data Deletion").

15. On March 28, 2024, the Company disclosed that the FDA extended the PDUFA date:

> extended the review period for the New Drug Application ("NDA") for govorestat (AT-007) for the treatment of Classic Galactosemia by three months. The FDA has set a new Prescription Drug User Fee Act (PDUFA) target action date of November 28, 2024. The FDA notified the Company that it required additional

> time to review supplemental analyses of previously submitted data that had been provided by the Company in response to the FDA's routine information requests and determined that the additional information constitutes a Major Amendment to the NDA.

16. Defendants reassured analysts and investors that the FDA's request for additional time to review the NDA was part of the FDA's "routine information requests." On March 28, 2024, UBS published a research report based on its discussion with Defendant Shendelman:

> **PDUFA now 11/28/2024 - FDA needs additional time to review suppl. analyses** FDA has extended the review period for the govorestat (AT-007) NDA in galactosemia by 3 months - new PDUFA 11/28/2024. APLT provided supplemental analyses (of existing data) in response to "FDA's routine information requests" (specific details not provided), which were considered a "Major Amendment to the NDA" and thus additional time (3mos) is required to review the information. The knee jerk reaction is that this could be an incremental negative but, following our conversation with mgmt (not related to carcinogenicity or QT data - see below), we continue to see approval as likely. Regarding the AdComm (likely 3Q24, in our view), we expect safety, surrogacy of galactitol levels, and clinical meaningfulness of govorestat's efficacy to be the focal points.
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> **Takeaways from mgmt f/u call - more analyses need more time to review** We caught up with mgmt (CEO Shoshana Shendelman) - key takeaways include:
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> 1) **FDA did not request new data** - the timeline extension is purely based on additional analyses of existing data. FDA has been requesting information since the NDA submission (specific requests not disclosed). This PDUFA extension has nothing to do with carcinogenicity or QT studies - the carcinogenicity study is ongoing (data not ready yet), while the QT study has completed with no QT prolongation observed (APLT will discuss the potential QT data submission with FDA at the mid-cycle meeting).
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> 2) **AdComm still expected** - the schedule is currently unknown - APLT expects to get more information during the mid-cycle meeting with FDA (likely in May), and will then communicate to the Street.
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> 3) **No changes in FDA division composition** - there have been no changes of note to the review team/division.
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> 4) **Aiming for full approval across ages** - post-market study in adults is likely required.

17. During the period April 29 through May 3, 2024, unknown to investors at the time, the FDA conducted an inspection of the Company and learned of the Study Data Deletion, which

had occurred on March 27, 2024. The inspection was conducted as part of the FDA's Bioresearch Monitoring Program, which includes inspections designed to evaluate the conduct of research and to help ensure that the rights, safety, and welfare of human subjects have been protected.

18. During the FDA inspection and an earlier inspection of a clinical site, the FDA requested access to verify electronic data collected and maintained in a data capturing system. Specifically, the Company used Pearson's Q-global, a web-based administration system for capturing data for certain electronic clinical outcomes assessments (eCOAs) performed for measuring primary and secondary efficacy endpoints in the ACTION-Galactosemia Kids study.

19. However, as alleged above, on March 27, 2024, a third-party vendor contracted by the Company deleted electronic data in the Q-global system. As a result, during the inspection of the Company, the FDA was unable to access and copy and verify records and reports relating to the study, specifically certain electronic data collected and maintained in Q-global for critical eCOAs for all 47 subjects at multiple study timepoints for the ACTION-Galactosemia Kids study. At the conclusion of the FDA's inspection, FDA investigators discussed with Defendant Shendelman significant findings and presented a Form FDA 483 for Inspectional Observations. The finding was limited to the deletion of source data for 11 subjects at one clinical study site.

20. Then, on May 9, 2024, the Company responded to the FDA Form 483 and explained that the deleted source data for 11 subjects, which was captured directly into Q-global, could not be recovered in electronic format. The Company indicated to the FDA that steps had been taken to ensure the integrity of the remaining data and performed an assessment of systems to ensure that the third-party vendor did not have the capability to delete data from any other systems and that preventive actions will be taken.

21. According to the Warning Letter (defined below), which was disclosed after the

Class Period, based on a report of the FDA's inspection and the Company's May 9, 2024 response, the Company failed to adhere to federal law. In particular, the requirements of Code of Federal Regulations, part 312.58(a) (FDA inspection), which provides that a drug sponsor like the Company "shall upon request from any properly authorized officer or employee of the Food and Drug Administration, at reasonable times, permit such officer or employee to have access to and copy and verify any records and reports relating to a clinical investigation conducted under this part. Upon written request by FDA, the sponsor shall submit the records or reports (or copies of them) to FDA."

22. The Study Data Deletion was a serious negative development for the Company's prospects for NDA approval and a major sticking point because electronic data collected for critical eCOAs was deleted and could not be verified, which raised concerns about the validity and integrity of the data collected during the clinical investigation. Without access to the pertinent electronic data in Q-global, including associated audit trails, FDA could not verify the accuracy, consistency, and completeness of study data collected for critical eCOAs used to measure primary and secondary efficacy endpoints, and could not evaluate the extent and impact of any reported data errors and discrepancies. FDA also could not confirm whether the clinical investigation was conducted in compliance with the regulatory responsibilities set forth in 21 CFR 312. None of these facts were disclosed to investors until after the Class Period.

23. On May 14, 2024, during a conference with investors and analysts, Defendant Shendelman was asked about the status of the NDA for govorestat and the reasons for the PDUFA delay. Despite knowing or recklessly disregarding the Dosing Error and the Study Data Deletion and the material negative findings of the FDA during its inspection of the Company, Defendant Shendelman repeatedly assured investors that the govorestat NDA was "going very well with the

FDA," and that there were no "major sticking points" with the FDA.

24. On August 7, 2024, the Company issued a press release in which it disclosed its financial results for the quarter ended June 30, 2024. The Company disclosed a positive update to a calculation of cognition data in the Phase 3 ACTION-Galactosemia Kids Study that showed improved cognition, however, Defendants did not disclose the negative Dosing Errors or Study Data Deletion issues:

> In the process of preparing for the United States Food and Drug Administration (FDA) inspection, it was discovered that the vendor hired to compile NIH Toolbox data for the Company used an adult formula for calculation of about one third of composite cognition and motor skills scores. Adjusting the formula to the pediatric formula resulted in significantly improved data for cognition as compared to the prior data, demonstrating improvement in the govorestat (AT-007) treated group of approximately 8 points on a standard scale, which was statistically significant compared to placebo (p=0.032). This also resulted in a statistically significant effect on the primary endpoint sensitivity analysis which included cognition (p=0.034). The motor skills data did not change substantially. These updates were disclosed and discussed with the FDA and European Medicines Agency (EMA) and will be used in the ongoing evaluation of the New Drug Application (NDA) and Marketing Authorization Application (MAA). . . .
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> The FDA notified the Company of their tentative plans to convene the Genetic Metabolic Diseases Advisory Committee (GeMDAC) on October 9, 2024, to discuss the Company's NDA for govorestat for the treatment of Classic Galactosemia. . . .

25. Defendants reassured analysts and investors that the data reanalysis disclosed on August 7, 2024 was a positive development and an isolated incident. For example, RBC Capital Market issued a report that stated:

> we had a chance to catch up with the mgmt. team. With a favorable data reanalysis . . . we see favorable tailwinds for govorestat in galactosemia into the Oct 9 panel and Nov 28 PDUFA . . . .
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> The company announced corrections to the formula used for their cognition and motor skill scores (initially had used adult, vs pediatric formula) from the ph.III galactosemia trial, resulting in improvement on a sensitivity analysis of the primary endpoint including cognition (cognition turned stat. sig.) We believe this may incrementally strengthen APLT's data package in anticipation of their AdComm [Advisory Committee] – especially given GeMDAC's recent emphasis of the

> importance of cognition for a recently reviewed drug. While this delayed error identification may lead to questions about whether there may be additional mistakes in the rest of the data package (recall data integrity and presentation had been a concern for some), the company emphasized that this is isolated to a single toolbox of tests done by a third party and that their careful audit of the rest of the package did not reveal any other discrepancies.

26. During the period August 12 through August 14, 2024, Defendant Shendelman sold 777,014 shares of Applied shares for net proceeds of over $4.7 million.

27. On August 20, 2024, the FDA sent an Information Request to the Company concerning the Study Data Deletion. On August 27, 2024, the Company responded and explained that an export of the study data results from the backup Q-global system is maintained with a third-party statistical consulting vendor; however, the data is no longer available in Q-global.

28. On September 5, 2024, the FDA sent Defendants correspondence regarding a Late Cycle Meeting and that concerned the Study Data Deletion issues. On September 11, 2024, the Company responded and stated that the third-party vendor deleted the data study from the Q-global system without consulting Applied and that it was able to recover this data from the Q-global system's backup, except for 11 tests. Applied noted that, before the electronic data's deletion, item-level responses were captured in PDF and in paper copies of the score reports. However, the Company's response was inadequate because it did not include sufficient details about its corrective action plan. For example, it did not provide sufficient details regarding the procedures being implemented to prevent similar violations in the future. Additionally, the FDA remained concerned that electronic data collected for critical eCOAs was deleted and could not be verified, which raised concerns about the validity and integrity of the data collected during the clinical investigation of govorestat. Without access to the pertinent electronic data in Q-global, including associated audit trails, FDA could not verify the accuracy, consistency, and completeness of study data collected for critical eCOAs used to measure primary and secondary efficacy endpoints, and

could not evaluate the extent and impact of any reported data errors and discrepancies. Accordingly, the FDA could not confirm whether the clinical investigation of govorestat was conducted in compliance with federal law. The FDA communications and the Company's responses were not disclosed to investors during the Class Period.

29. As late as September 10, 2024, while knowing or at least recklessly disregarding the Dosing Errors and Study Data Deletion issues, Defendant Shendelman represented that Defendants' meetings with the FDA were "very positive" and that "things are going well," and that Defendants were "encouraged by the dialogue with [the] FDA."

30. On September 18, 2024, the Company disclosed that the FDA informed the Company that an Adcomm meeting would not be necessary and during an investor conference Defendant Shendelman presented this as positive news, stating: "We had some positive news this morning . . . We recently completed our late cycle review meeting with [the] FDA, which was very positive. They had previously communicated maybe there would be an advisory committee meeting. They let us know at the late cycle meeting that they no longer felt that was needed. Our next interaction with them will be in about a month when we discuss post-marketing requirements." Defendant Shendelman further stated: "And overall, our message [with FDA approval for govorestat] is that things are going well. We're very encouraged by the dialogue with [the] FDA and we're excited about moving forward into this late stage of regulatory review."

31. On September 18, 2024, Applied's stock price opened at $6.15 per share, increased to $8.41 per share during the trading day, an increase of over 36%, and closed at $7.85 per share on heavier than usual volume.

32. Then, on November 27, 2024, after the close of trading, the Company disclosed that the FDA issued a CRL rejecting the NDA of govorestat for the treatment of Classic

Galactosemia. In a report on Form 8-K filed with the SEC on November 27, 2024, the Company disclosed that the FDA "has issued a [CRL] for the NDA for govorestat and that "[t]he CRL indicates that the FDA completed its review of the application and determined that it is unable to approve the NDA in its current form, citing deficiencies in the clinical application."

33. As a result of this news, shares of Applied's common stock declined from a closing price of $8.57 per share on November 27, 2024, to a close at $2.03 per share on November 29, 2024, a decline of $6.53 per share, or over 76% on heavier than usual volume.[1]

34. However, unknown to investors, also on November 27, 2024, Defendants received a warning letter from the FDA (the "Warning Letter"). The Warning Letter noted two "objectionable conditions" relating to the govorestat NDA, the Dosing Error and the Study Data Deletion. According to the Warning Letter, these issues, which were not an all-inclusive list of deficiencies, "raise[d] significant concerns about the validity and reliability of data collected for this clinical investigation."

35. Then on December 2, 2024, after the close of trading, the Company filed a report on Form 8-K with the SEC in which it disclosed:

> In the normal course of Applied['s NDA] … review for govorestat, the U.S. Food and Drug Administration ("FDA") performed an inspection relating to the AT-007-1002 study. The Company responded to the FDA's inspectional observations and believed it addressed any outstanding questions or issues. Following issuance of a Complete Response Letter ("CRL"), the Company received a warning letter limited to the AT-007-1002 [Phase 3 ACTION-Galactosemia Kids] study. The letter identified issues related to electronic data capture, which the Company believes were addressed in prior communications with the agency, including by providing detailed paper and video records. The letter also refers to a dosing error in the dose-escalation phase of the study resulting in slightly lower levels than targeted in a limited number of patients, which was remedied prior to achieving maintenance dosing. Detailed records were maintained by the Company under FDA regulatory requirements, and this information was provided to FDA. The Company intends to

[1] On November 28, 2024, the market was closed for the Thanksgiving Day holiday.

respond within the permitted 15 business days to address these issues.

36. On December 3, 2024, the FDA posted the Warning Letter on its website.

37. On December 4, 2024, multiple news outlets published articles concerning the Warning Letter. For example, Fierce Biotech published an article titled "Applied Therapeutics' trial conduct scrutinized in FDA warning letter" that stated:

> While Applied Therapeutics has vowed to reapply or appeal the FDA's recent rejection of its rare disease candidate govorestat, deeper issues with the New York biotech's clinical trial conduct could put a damper on those plans. In a warning letter published Tuesday, the FDA scolded Applied on two counts related to its 47-patient study of govorestat in kids with classic galactosemia.
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> Specifically, agency investigators took issue with electronic data deletion by a third-party vendor and the mishandling of a dosing error that led to some patients initially receiving lower levels of govorestat than intended.
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> The reprimand was issued around the same time the FDA rejected govorestat's approval bid in classic galactosemia, which causes developmental delays, speech problems and motor function abnormalities.
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> A phase 3 trial of Applied's drug missed its primary endpoint in 2023—which isn't always a dealbreaker for rare disease approvals—but the company's clinical data package still fell short of the FDA's standards last week. The FDA's recent rejection sent Applied's share price tumbling some 80% in post-Thanksgiving trading.
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> Applied previously received a Form 483—a less severe FDA reprimand—around its trial conduct and responded to that write-up in May. That earlier wrist-slap did not include details on the dosing issue, the FDA explained in its warning letter.
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> Applied acknowledged the letter in a securities filing this week, noting that the regulator's complaints come down to "issues related to electronic data capture," which the biotech believes it addressed in prior communications, as well as a "dosing error in the dose escalation phase of the study" that the company said was "remedied prior to achieving maintenance dosing."
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> Applied said that it plans to respond to the FDA's warning letter within 15 business days.
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> Digging deeper into the FDA's concerns, the agency stated that two days after preannouncing an inspection of one of Applied's clinical trial sites in late April, a third-party vendor contracted by Applied deleted electronic data in a web-based data capturing platform.

> In previous written correspondence with the FDA, Applied argued that the vendor deleted the data without consulting the company.
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> As for the dosing mishap, the FDA said that due to a labeling error, "clinical sites administered 80% of the protocol-required dose to subjects" between March and June of 2021. Applied alerted clinical sites about the error and provided a new formulation at the correct concentration in June of that same year, according to the warning letter.
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> Still, the FDA alleges that the company failed to provide the regulator with "any description or analysis of the information describing the nature and extent of the dosing errors."
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> In turn, the FDA says it lacked sufficient information at the time of Applied's approval submission to make an informed decision on the impact of the error on study data.
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> Govorestat, which is an aldose reductase inhibitor, has had something of a troubled history. Following the phase 3 miss last year, the FDA in March of this year delayed its decision deadline on the drug by three months, citing the need to further examine supplemental analyses of previously submitted data.
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> Regarding govorestat's fate in classic galactosemia, Applied has said it's reviewing feedback after the FDA's snub and plans to immediately request to meet with the regulator to "discuss requirements for a potential resubmission . . . or appeal of the decision."
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> The company has also maintained plans to file for approval of the drug in sorbitol dehydrogenase (SORD) deficiency in the first quarter of 2025.

38. As a result of this news, shares of Applied's common stock further declined from a closing price of $1.75 per share on December 2, 2024, to a close at $1.38 per share on December 4, 2024, a decline of $0.37 per share, or over 21% on heavier than usual volume.

39. On December 5, 2024, an article in Stat News titled "Why Applied Therapeutics has a credibility problem" stated the following:

> Applied Therapeutics' CEO Shoshana Shendelman has a debilitating credibility problem: She repeatedly misled investors prior to the Food and Drug Administration's rejection of the company's rare-disease drug.
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> Throughout 2024, Shendelman assured investors that Applied's drug, called govorestat, was sailing through the FDA review process without major hitches. We now know she was lying by omission. The company was aware of significant problems with the govorestat application identified by the FDA, but Shendelman

said nothing publicly.

If members of the company's board have any sense of responsibility to shareholders, they'll take immediate steps to replace Shendelman. Allow her to resign or fire her, but either way, Applied Therapeutics needs a change in leadership if it's going to recover from this crisis.

On Nov. 27, Applied said the FDA rejected its application seeking approval of govorestat to treat children with galactosemia, a rare metabolic disease. The agency cited "deficiencies in the clinical application" as the reason for govorestat's rejection, according to Applied.

Applied's stock price plunged 80%.

The FDA denial was obviously bad, but it was exacerbated by the disclosure on Tuesday of a warning letter sent by the FDA to Applied on Nov. 27.

The warning letter cites Applied for drug-dosing errors in its clinical trial, and for deleting certain patient data from an electronic database that the agency sought to audit. The failures and deficiencies raised "significant concerns about the validity and reliability of data collected for this clinical investigation," the FDA concluded.

Applied was made aware of the FDA's concerns in March, after an inspection conducted by the agency's review team in late April and early May, and in correspondence between the FDA and the company in September.

The timeline is particularly damning for Shendelman's shattered credibility. "Things are going very well with the FDA," Shendelman said in May during an on-stage presentation at a health care investor conference.

In March, the FDA had extended the govorestat review by three months, but Shendelman brushed aside questions that this might signal a potential problem.

"We actually don't think that there are any major sticking points with the agency," she said, emphasizing that the FDA simply needed more time to review the application.

In August, Shendelman sold $4.7 million of Applied Therapeutics stock.

On Sept. 18, Applied announced that the FDA decided against convening an outside advisory committee to review the govorestat data.

Speaking at another health care investors conference on the same day, Shendelman said the FDA's decision, which came after a meeting with the company, was "very positive."

"Overall, our message there is that things are going well. We're very encouraged by the dialogue with the FDA, and we're excited about moving forward into this

> last stage of regulatory review," she added.
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> Applied's stock price soared, as investors interpreted the cancellation of the advisory committee meeting and Shendelman's comments as meaning the FDA was likely to approve the drug.
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> The opposite was actually true.
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> The FDA warning letter makes it clear that Shendelman was aware throughout 2024 that all was not well with the FDA's review. She decided to keep the critically important information to herself, while spinning a positive but misleading story to investors.
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> "The September 18 statement reflected Applied's optimism about the ongoing collaborative dialogue with the FDA during the NDA review process," Shendelman told me, in a statement sent through a company spokesperson. She declined an interview request.
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> "Applied remains committed to addressing the concerns outlined in the FDA warning letter swiftly and transparently," she added.

40. On December 20, 2024, the Company issued a press release that disclosed Defendant Shendelman "has stepped down as Chair and CEO" of the Company.

41. As alleged herein, during the Class Period, Defendants violated the federal securities laws by making materially false or misleading representations or by failing to disclose material facts they had a duty to disclose.

III. JURISDICTION AND VENUE

42. The claims asserted herein arise under Sections 10(b) and 20(a) of the Exchange Act, 15 U.S.C. §§ 78j(b) and 78t(a), and Rule 10b-5 promulgated thereunder by SEC, 17 C.F.R. § 240.10b-5. Jurisdiction for this Court is conferred over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1337, and Section 27 of the Exchange Act, 15 U.S.C. § 78aa.

43. Venue is proper in this District pursuant to Section 27 of the Exchange Act, 15 U.S.C. § 78aa, and 28 U.S.C. § 1391(b). The acts and transactions giving rise to the violations of law complained of occurred in part in this District, including the dissemination of false and

misleading statements from this District. In addition, Applied's common stock trades on the NASDAQ in this District under the symbol APLT and the Company's principal executive office is located in New York City in this District.

44. In connection with the acts and conduct alleged in this complaint, Defendants, directly or indirectly, used the means and instrumentalities of interstate commerce, including, but not limited to, the mails and interstate wire and telephone communications.

IV. PARTIES

45. Plaintiff purchased Applied common stock during the Class Period as described in the Certification attached hereto, and suffered damages as a result of the violations of the federal securities laws alleged herein.

46. Defendant Applied purports to be a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular targets in indications of high unmet medical need. The Company has principal executive offices at 545 5th Avenue, Suite 1400, New York, New York 10017.

47. Defendant Shendelman is the founder, and former CEO and Chair of the Board of the Company. During the Class Period, Defendant Shendelman made materially false and misleading statements and omitted material facts in Applied's SEC filings, press releases and on public conference calls with analysts and investors.

48. Because of Defendant Shendelman's positions with the Company, she possessed the power and authority to control the contents of the Company's reports to the SEC, press releases, and presentations to securities analysts, money and portfolio managers, and institutional and individual investors, *i.e.* the market. She was provided with copies of the Company's reports and press releases alleged herein to be misleading prior to, or shortly after, their issuance and had the ability and opportunity to prevent their issuance or cause them to be corrected.

V. FACTUAL BACKGROUND

A. Galactosemia

49. Galactosemia is a rare, slowly progressive, and metabolic disease caused by a genetic inability to metabolize galactose, a simple sugar.

50. In healthy individuals, galactose is usually processed by enzymes. However, in people with galactosemia, one of these enzymes does not work properly or is missing in the body.

51. Therefore, people with galactosemia are unable to metabolize galactose properly, which results in galactose accumulating in blood and tissues, which can cause central nervous system complications, including deficiencies in speech, cognition, behavior, and motor skills.

B. Govorestat (AT-007)

52. Govorestat, also called AT-007, if approved, would be the first medication indicated for the treatment of classic galactosemia. It is a small molecule that is taken orally.

C. Adult Study

53. Applied's first clinical trial for govorestat to treat classic galactosemia was an adult study where the Company looked at levels of galactitol in the blood through plasma samples and levels of galactitol in the brain through MRI quantitation. This Phase 1/2 Study of AT-007 in galactosemia was initiated in June 2019. The Company announced full results of the ACTION-Galactosemia study in adults on April 21, 2020.

D. The ACTION-Galactosemia Kids Study

54. On June 15, 2020, Applied "announced the initiation of the ACTION-Galactosemia Kids pediatric study of AT-007 for treatment of Galactosemia (ACTION-Kids Study) to evaluate safety, pharmacokinetics, and reduction in the toxic biomarker, galactitol." The Company also announced that "[t]he study is comprised of two parts: a placebo-controlled dose range finding segment evaluating up to seven days of consecutive dosing to determine the optimal dose in

children, followed by a placebo-controlled 90 day study evaluating safety and biomarker efficiency."

VI. DEFENDANTS' FALSE AND MISLEADING STATEMENTS DURING THE CLASS PERIOD

55. During the Class Period, Defendants' representations to investors were materially false and misleading at the time they were made, and Defendants failed to disclose material facts that they had a duty to disclose in order to make the statements made by Defendants, in light of the circumstances under which they were made, not misleading.

56. On January 3, 2024, Applied issued a press release titled "Applied Therapeutics Announces MAA Validation and NDA Submission of Govorestat (AT-007) for Treatment of Classic Galactosemia" that stated the following:

> NEW YORK, Jan. 03, 2024 (GLOBE NEWSWIRE) -- Applied Therapeutics, Inc. (Nasdaq: APLT), a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular targets in indications of high unmet medical need, today announced it has submitted a New Drug Application (NDA) to the U.S. Food and Drug Administration (FDA) for govorestat (AT-007) for the treatment of Classic Galactosemia. The NDA was submitted in December 2023. In addition, the Company submitted a Marketing Authorization Application (MAA) to the European Medicines Agency (EMA) in the fourth quarter of 2023, which was subsequently validated and accepted for review in December 2023.
>
> "The submissions of both the NDA and MAA for govorestat are supported by rapid and sustained reduction in galactitol, which resulted in a meaningful benefit on clinical outcomes across pediatric patients, alongside a favorable safety profile," said Shoshana Shendelman, PhD, Founder and CEO of Applied Therapeutics. "We look forward to working closely with both regulatory agencies throughout the review process and hope to bring the first treatment to patients with Galactosemia soon . . .
>
> The NDA and MAA submission packages include clinical outcomes data from the Phase 3 registrational ACTION-Galactosemia Kids study in children age 2-17 with Galactosemia, the Phase 1/2 ACTION-Galactosemia study in adult patients with Galactosemia, and preclinical data. The FDA has a 60-day filing review period to determine whether the NDA is complete and accepted for review. The MAA has been validated and will move to review by the EMA's Committee for Medicinal Products for Human Use (CHMP).

57. On February 28, 2024, Applied issued a press release titled "Applied Therapeutics Announces FDA Acceptance and Priority Review of New Drug Application for Govorestat for the Treatment of Classic Galactosemia" that stated the following:

> NEW YORK, Feb. 28, 2024 (GLOBE NEWSWIRE) -- Applied Therapeutics, Inc. (Nasdaq: APLT), a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular targets in indications of high unmet medical need, today announced that the U.S. Food and Drug Administration (FDA) has accepted the filing of the New Drug Application (NDA) for govorestat (AT-007) for the treatment of Classic Galactosemia. The NDA was granted Priority Review status, and the FDA assigned a Prescription Drug User Free Act (PDUFA) target action date of August 28, 2024. The FDA also noted that it is planning to hold an advisory committee meeting to discuss the application. Govorestat was previously granted Pediatric Rare Disease designation, and will qualify for a Priority Review Voucher (PRV) upon approval.
>
> "The FDA's acceptance of the NDA for govorestat for the treatment of Galactosemia represents a critical milestone for Applied Therapeutics and more importantly, for patients with Galactosemia and their families. The Agency's decision to grant Priority Review for this NDA underscores the urgent unmet medical need as there are currently no treatment options for this devastating disease," said Shoshana Shendelman, PhD, Founder and CEO of Applied Therapeutics. "We want to thank the patients, families, collaborators and physicians involved in reaching this achievement. We look forward to continuing to work with the FDA throughout the review process, as we hope to bring govorestat to patients as quickly as possible."

58. On March 6, 2024, Applied issue a press release titled "Applied Therapeutics Reports Fourth Quarter and Year-end 2024 Financial Results" that stated the following:

> NEW YORK, March 06, 2024 (GLOBE NEWSWIRE) -- Applied Therapeutics, Inc. (Nasdaq: APLT) (the "Company"), a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular targets in indications of high unmet medical need, today reported financial results for the fourth quarter and full year ended December 31, 2023.
>
> "We've made significant clinical and regulatory progress, particularly with the NDA acceptance and MAA validation for govorestat for the treatment of Galactosemia, achieving key milestones for our rare disease pipeline . . . said Shoshana Shendelman, PhD, Founder, Chief Executive Officer, and Chair of the Board. "As Applied enters into this next stage of growth, we are poised for continued value generation across our rare disease pipeline, supported by our recent financing and bolstered cash position."

Recent Highlights

- **Govorestat NDA Accepted and Granted Priority Review by US FDA for Treatment of Classic Galactosemia, PDUFA Target Action Date of August 28, 2024; MAA under CHMP Review by EMA.** In February 2024, the Company announced that the U.S. Food and Drug Administration (FDA) has accepted the filing of the New Drug Application (NDA) for govorestat (AT-007) for the treatment of Classic Galactosemia. The NDA was granted Priority Review status and the FDA assigned a Prescription Drug User Free Act (PDUFA) target action date of August 28, 2024. The FDA also noted that it is planning to hold an advisory committee meeting to discuss the application. Govorestat was previously granted Pediatric Rare Disease designation and will qualify for a Priority Review Voucher (PRV) upon approval. The Company has also submitted a Marketing Authorization Application (MAA) for govorestat for the treatment of Classic Galactosemia to the European Medicines Agency (EMA), which was validated in December 2023 and is under review by the EMA's Committee for Medicinal Products for Human Use (CHMP). The Company expects a decision by the EMA in the fourth quarter of 2024. The NDA and MAA submission packages include clinical outcomes data from the Phase 3 registrational ACTION-Galactosemia Kids study in children aged 2-17 with Galactosemia, the Phase 1/2 ACTION-Galactosemia study in adult patients with Galactosemia, and preclinical data.

59. On March 29, 2024, the Company filed a Form 8-K with the SEC that it announced that the FDA had extended the review period and moved the PDUFA date three months to November 28, 2024. The explanation offered by the Company stated:

> The FDA notified the Company that it required additional time to review supplemental analyses of previously submitted data that had been provided by the Company in response to the FDA's routine information requests and determined that the additional information constitutes a Major Amendment to the NDA.

60. On May 9, 2024, the Company issued a press release titled "Applied Therapeutics Reports First Quarter 2024 Financial Results" that stated:

> NEW YORK, May 09, 2024 (GLOBE NEWSWIRE) -- Applied Therapeutics, Inc. (Nasdaq: APLT) (the "Company"), a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular targets in indications of high unmet medical need, today reported financial results for the first quarter ended March 31, 2024.
>
> "Preparations are underway for the potential approval and commercial launch of govorestat for the treatment of Classic Galactosemia in the US and EU, following the significant regulatory progress we have already made in 2024," said Shoshana Shendelman, PhD, Founder and CEO of Applied Therapeutics . . .

Recent Highlights

Govorestat NDA Under Priority Review by US FDA for Treatment of Classic Galactosemia, PDUFA Target Action Date of November 28, 2024; MAA under CHMP Review by EMA. In March 2024, the Company announced that the U.S. Food and Drug Administration (FDA) has extended the review period for the New Drug Application (NDA) for govorestat (AT-007) for the treatment of Classic Galactosemia to allow more time to review supplemental analyses of previously submitted data that had been provided by Applied in response to the FDA's routine information requests. No additional data or studies have been requested by the FDA at this time. The new PDUFA action date is November 28, 2024. The NDA was granted Priority Review Status, and the FDA also noted that it plans to hold an advisory committee meeting to discuss the application. Govorestat was previously granted Pediatric Rare Disease designation and will qualify for a Priority Review Voucher (PRV) upon approval. The Company has also submitted a Marketing Authorization Application (MAA) for govorestat for the treatment of Classic Galactosemia to the European Medicines Agency (EMA), which was validated in December 2023 and is under review by the EMA's Committee for Medicinal Products for Human Use (CHMP). In April 2024, the EMA granted a 3-month extension to the Day 120 clock stop period to allow sufficient time for responses to the CHMP's Day 120 list of questions. As a result, the Company now expects a decision by the EMA in early first quarter of 2025. The NDA and MAA submission packages include clinical outcomes data from the Phase 3 registrational ACTION-Galactosemia Kids study in children aged 2-17 with Galactosemia, the Phase 1/2 ACTION-Galactosemia study in adult patients with Galactosemia, and preclinical data.

61. On May 14, 2024, during the RBC Capital Markets Global Healthcare Conference, Defendant Shendelman made the following statements:

Q. (Brian Abrahams - RBC Capital Markets): And maybe starting on Galactosemia, can you talk about the latest status of the FDA review?

A. (Defendant Shendelman): Yes. So, **things are going very well with the FDA**. Just to recall the timeline here, we submitted our NDA in December and the NDA was accepted in February with priority review, which gave us an initial PDUFA date of August 28th, which is a very close timeline if you think about all the things that have to happen during that review period. We engaged with the FDA. They did delay the PDUFA by three months, we believe because they needed additional time during the review and the PDUFA date is currently November 28th.

In that time frame though, **we have worked very successfully with them.** We've been having some interesting conversations. You don't just submit an NDA and then wait for the PDUFA date to come. As you well know, there's a lot of meetings that happen. There's a lot of interactions with the FDA in the interim and **that's all going very well and on track and we feel very encouraged.**

> Q. (Brian Abrahams): Can you elaborate a little bit more? I guess, was there any sort of particular area that the FDA seems to be sort of honing in on that you think may have been responsible for the delay? Or where they wanted to -- there were sort of a couple of one or two major questions that they wanted answers to or wanted a little bit more time to analyze the data? Or, should we think about the delay as really, look, this is just, it's a complex data set, it's a new disease to them, they just need more time? Like, I guess, how confident are you that there aren't a few different, one or two major sticking points with the agency at this point?
>
> A. (Defendant Shendelman): **We actually don't think that there are any major sticking points with the agency. We just believe there is a six-month review for a first-in-disease state asset,** so this is the first drug ever developed and under review by the FDA for Galactosemia. **So, we don't think that there are any sticking points. We did meet very collaboratively with the FDA prior to submitting our NDA. And we asked them very openly if the data we had generated was acceptable for a potential submission and approval. We wouldn't have submitted otherwise if their answer was no.**
>
> And I think that, **the NDA acceptance and the positive interactions that we've had have also provided a lot of additional comfort there. So, we feel very good about their review. We don't think that there are any big issues. We think it's all a risk-benefit analysis, with diseases like Galactosemia.** And with Govorestat having a very positive safety profile, we think the risks are very low. And then we look to the benefit that we have demonstrated in our clinical studies is very clear and substantial, and clinically meaningful to parents and to patients. And so, **we're very confident in the process and we're very hopeful that this will be the first drug approved for Galactosemia.**

(Emphasis added).

62. Furthermore, during the May 14, 2024 conference, Defendant Shendelman made the following statements:

> Q (Abrahams): How has your communication been with the agency since the announcement of the delay?
>
> A (Shendelman): It's been **very positive and sort of normal course**
>
> …
>
> Q (Abrahams): And what would you expect the key discussion points would be once this is put before an Adcomm?
>
> A (Shendelman): We are anticipating an Adcomm . . . And we believe that . . . they are moving towards having Advisory Committee Meetings for diseases, where it's the first-in-class, first in disease state, which is clearly the case for Galactosemia.

> And that they would like to see those discussions really focused on risk-benefit. So, our anticipation is that if there is an Adcomm, it will really be a risk-benefit analysis, which is very similar to the conversations that we've been having with [the] FDA.

63. Notably, the analyst asked if there were "[a]ny additional non-clinical or other work that needs to be done ahead of the PDUFA to satisfy all the requirements for the FDA" and Defendant Shendelman responded:

> I think just like any program that's under review, there are certain points that you need to hit from a manufacturing perspective, from an informational perspective along the review timeline. **We've met all of those points. So, I think, we're in great shape. There's nothing really outstanding that we have --**

64. On August 7, 2024, Applied issued a press release title "Applied Therapeutics Reports Second Quarter 2024 Financial Results" that stated:

> NEW YORK, Aug. 07, 2024 (GLOBE NEWSWIRE) -- Applied Therapeutics, Inc. (Nasdaq: APLT) (the "Company"), a clinical-stage biopharmaceutical company developing a pipeline of novel drug candidates against validated molecular targets in indications of high unmet medical need, today reported financial results for the second quarter ended June 30, 2024.
>
> "Momentum continues with our steady regulatory progress in Classic Galactosemia and SORD Deficiency," said Shoshana Shendelman, PhD, Founder and CEO of Applied Therapeutics . . .
>
> **Recent Highlights**
>
> - **Govorestat PDUFA Target Action Date of November 28, 2024; MAA under CHMP Review by EMA; Updated Cognition Data Included in Review.** In the process of preparing for the United States Food and Drug Administration (FDA) inspection, it was discovered that the vendor hired to compile NIH Toolbox data for the Company used an adult formula for calculation of about one third of composite cognition and motor skills scores. Adjusting the formula to the pediatric formula resulted in significantly improved data for cognition as compared to the prior data, demonstrating improvement in the govorestat (AT-007) treated group of approximately 8 points on a standard scale, which was statistically significant compared to placebo (p=0.032). This also resulted in a statistically significant effect on the primary endpoint sensitivity analysis which included cognition (p=0.034). The motor skills data did not change substantially. These updates were disclosed and discussed with the FDA and European Medicines Agency (EMA) and will be used in the ongoing evaluation of the New Drug Application (NDA) and Marketing Authorization Application

> (MAA). As previously announced, the FDA Prescription Drug User Fee Act (PDUFA) target action date is November 28, 2024. . . The submission packages include clinical outcomes data from the Phase 3 registrational ACTION-Galactosemia Kids study in children aged 2-17 with Galactosemia, the Phase 1/2 ACTION-Galactosemia study in adult patients with Galactosemia, and preclinical data. If approved, govorestat would be the first medication indicated for the treatment of Galactosemia and would be Applied Therapeutics' first commercial product.

65. Defendant Shendelman caused the Company to file the Q2 2024 10-Q. The Q2 2024 10-Q stated that repeated the representations in the August 7, 2024 press release concerning adjustments to cognition data.

66. On September 10, 2024, Defendant Shendelman stated at the Baird Global Healthcare Conference with investors and analysts: "we see an approval in galactosemia in the near term," "I think that we're in really good shape with both programs," and "I think we're in a good place with regard to . . . being prepared for that big transition ahead of us from a development stage to a commercial-stage company. So I'm excited about what's ahead. I think we have a few really big things coming ahead, and we're excited."

67. On September 18, 2024, Defendants issued a press release titled "Applied Therapeutics Provides Regulatory Update on Govorestat for the Treatment of Classic Galactosemia" that stated the following:

> The Company recently completed its late-cycle review meeting with the United States Food and Drug Administration (FDA). The FDA communicated that an Advisory Committee meeting would no longer be required, which was previously tentatively scheduled for October 9, 2024. The FDA informed the Company that the Priority Review of the NDA is continuing as planned with alignment on post-marketing requirements expected in October 2024. The previously announced Prescription Drug User Fee Act (PDUFA) target action date remains on track for November 28, 2024.
>
> "We are incredibly pleased by the ongoing collaborative dialogue with the FDA during the NDA review process, and we look forward to continuing to work together with the agency to bring the first potential treatment to Classic Galactosemia patients," said Shoshana Shendelman, PhD, Founder and CEO of Applied Therapeutics. "Galactosemia is a progressive disease in urgent need of

> treatment, and the potential approval of govorestat will be transformative for the many patients and families living with this serious disease. Our commitment to the Classic Galactosemia community is further supported by our thoughtful commercial preparation, focused on establishing an effective patient access program, high physician awareness and strong payor engagement."

68. Also on September 18, 2024, at the Cantor Fitzgerald Global Healthcare Conference 2024 with investors and analysts, Defendant Shendelman represented that, with regards to govorestat: "We had some positive news this morning . . . We recently completed our late cycle review meeting with [the] FDA, which was very positive. They had previously communicated maybe there would be an advisory committee meeting. They let us know at the late cycle meeting that they no longer felt that was needed. Our next interaction with them will be in about a month when we discuss post-marketing requirements."

69. Defendant Shendelman further stated: "And overall, our message [with FDA approval for govorestat] is that things are going well. We're very encouraged by the dialogue with [the] FDA and we're excited about moving forward into this late stage of regulatory review."

70. On November 7, 2024, Defendants issued a press release reporting Applied's third quarter 2024 financial results, that stated the following:

> "As we approach the final stages of the NDA review process for Classic Galactosemia . . . we remain confident in the promise of govorestat and its ability to address the underlying mechanisms of both diseases. We look forward to the opportunity to bring govorestat to patients in 2025."
>
> **Recent Highlights**
>
> - **NDA Review of Govorestat for the Treatment of Classic Galactosemia Ongoing with PDUFA Target Action Date of November 28, 2024; MAA under CHMP Review by EMA.** The New Drug Application (NDA) review of govorestat for the treatment of Classic Galactosemia remains ongoing within the U.S. Food and Drug Administration (FDA)'s Division of Rare Diseases and Medical Genetics with a Prescription Drug User Fee Act (PDUFA) target action date of November 28, 2024 . . . The submission packages include clinical outcomes data from the Phase 3 registrational ACTION-Galactosemia Kids study in children aged 2-17 with Galactosemia, the Phase 1/2 ACTION-Galactosemia study in adult patients with Galactosemia, and preclinical data. . . .

71. Defendants statements alleged in paragraphs 56-70 were materially false and misleading at the time they were made because Defendants failed to disclose material facts that they had a duty to disclose in order to make the statements made by Defendants, in light of the circumstances under which they were made, not misleading, including: 1) that Defendants failed to provide sufficient information at the time of submission of the NDA to enable FDA to make an informed decision regarding the impact of the Dosing Errors on study data; 2) that Defendants' failure to provide a description or analysis of the Dosing Errors raised significant concerns about the validity, reliability, and integrity of the data and the Company's failure to disclose this critical information in the NDA for govorestat raised significant concerns about the Company's oversight and conduct of clinical investigations; 3) a third-party vendor contracted by the Company deleted certain electronic study data results, including associated audit trails for all 47 subjects enrolled in the ACTION-Galactosemia Kids study; 4) that as a result of the Study Data Deletion, during the inspection of the Company, the FDA was unable to access and copy and verify records and reports relating to the study in contravention of FDA requirements; 4) that FDA investigators discussed with Defendant Shendelman its significant findings and presented a Form FDA 483 for Inspectional Observations regard the Study Data Deletion; and that 6) as a result of the Dosing Errors and Study Data Deletion issues, that the Company's NDA for govorestat did not adhere to FDA requirements and Defendants' positive representations about the NDA for govorestat lacked a reasonable basis.

VII. THE TRUTH BEGINS TO EMERGE

72. On November 27, 2024, after the close of trading, the Company issued a press release titled "Applied Therapeutics Receives Complete Response Letter from U.S. FDA Regarding New Drug Application for Govorestat for Classic Galactosemia" that stated:

NEW YORK, Nov. 27, 2024 (GLOBE NEWSWIRE) -- Applied Therapeutics, Inc.

> (Nasdaq: APLT), a biopharmaceutical company dedicated to creating transformative treatments for rare disease, today announced that the U.S. Food and Drug Administration (FDA) has issued a Complete Response Letter (CRL) for the New Drug Application (NDA) for govorestat, a novel, central nervous system (CNS)-penetrant aldose reductase inhibitor (ARI), for the treatment of Classic Galactosemia.
>
> The CRL indicates that the FDA completed its review of the application and determined that it is unable to approve the NDA in its current form, citing deficiencies in the clinical application.
>
> Applied Therapeutics is reviewing the feedback from the FDA and plans to immediately request a meeting to discuss requirements for a potential resubmission of the NDA or appeal of the decision along with appropriate next steps.
>
> "We are disappointed by the FDA's decision today. Our strong commitment to the Galactosemia community is rooted in our belief that govorestat has the potential to change the lives of patients with Galactosemia, which we believe is evidenced by the breadth of efficacy and safety data demonstrating its ability to stop the decline on progressive clinical outcomes, including cognition and behavior," said Shoshana Shendelman, PhD, Founder and CEO of Applied Therapeutics. "Galactosemia is a progressive and debilitating disease without any existing treatment options and there remains a high unmet medical need for this community. As we move forward, we plan to work with the FDA to address the concerns in the CRL and determine an expeditious path to bring this much needed treatment to patients. We are grateful to the patients, families, and healthcare providers who participated in the govorestat clinical studies."

73. As a result of this news, shares of Applied's common stock declined from a closing price of $8.57 per share on November 27, 2024, to a close at $2.03 per share on November 29, 2024, a decline of $6.54 per share, or over 76% on heavier than usual volume.

74. On November 28, 2024, research analyst William Blair published a report that described the CRL as "a Major Setback" and that stated the following: "[a]fter speaking with management, it noted that the FDA had not provided enough information on the reason for the CRL, but suspects it was related to the efficacy package as opposed to CMC or safety." The analyst also noted: "Management also shared that leading into the PDUFA, communication with the FDA during the review cycle was productive and discussion of the primary endpoint in the study not reaching statistical significance was exhaustive." In response, William Blair lowered the

"probability of success for the galactosemia program to 30%."

75. On November 29, 2024, research analyst Leerink Partners published a report that stated that the CRL "comes as a major surprise, given the progress the company appeared to be making with the FDA" and "[w]e thought the FDA review had been progressing favorably based on the information available to us."

76. Also on November 29, 2024, analyst RBC Capital Markets published a report that stated that "[t]he CRL for govorestat in galactosemia is disappointing, and we believe creates significant uncertainties around a future path forward for the drug in that indication." Notably, the analysts thought that "next steps would likely require another clinical trial, pushing back galactosemia timelines meaningfully and adding considerable risk." This caused RBC Capital Markets to adjust the probability of success to 20%, from 70%.

77. On December 2, 2024, after the close of trading, the Company disclosed it received the Warning Letter from the FDA:

> In the normal course of Applied Therapeutics' NDA review for govorestat, FDA performed an inspection relating to the AT-007-1002 study. The Company responded to the FDA's inspectional observations and believed it addressed any outstanding questions or issues. Following issuance of a Complete Response Letter the Company received a warning letter limited to the AT-007-1002 study. The letter identified issues related to electronic data capture, which the Company believes were addressed in prior communications with the agency, including by providing detailed paper and video records. The letter also refers to a dosing error in the dose-escalation phase of the study resulting in slightly lower-levels than targeted in a limited number of patients, which was remedied prior to achieving maintenance dosing. Detailed records were maintained by the Company under FDA regulatory requirements, and this information was provided to [the] FDA. The Company intends to respond within the permitted 15 business days to address these issues.

78. On December 3, 2024, the FDA posted the Warning Letter on its website. The

Warning Letter was dated November 27, 2024 and was addressed to Defendant Shendelman.[2]

79. As a result of this news, shares of Applied's common stock further declined from a closing price of $1.75 per share on December 2, 2024, to a close at $1.38 per share on December 4, 2024, a decline of $ 0.37 per share, or over 21% on heavier than usual volume.

VIII. ADDITIONAL SCIENTER ALLEGATIONS

80. During the Class Period, Defendants had both the motive and opportunity to conduct fraud. They also had actual knowledge of the misleading nature of the statements they made or acted in reckless disregard of the true information known to them at the time. In so doing, Defendants participated in a scheme to defraud and committed acts, practices, and participated in a course of business that operated as a fraud or deceit on purchasers of Applied common stock during the Class Period. Defendants were motivated to commit the acts alleged herein in order to inflate the price of Applied common stock and sell it at artificially prices as alleged above in paragraphs 13 and 26.

IX. LOSS CAUSATION

81. During the Class Period, as detailed herein, Defendants engaged in a scheme to deceive the market and a course of conduct that artificially inflated the prices of Applied common stock and operated as a fraud or deceit on purchasers of Applied common stock. As detailed above, when the truth about Applied's misconduct was revealed, the value of the Company's stock declined precipitously as the prior artificial inflation no longer inflated the stock's prices. The declines in the price of Applied shares were the direct result of the nature and extent of Defendants' fraud finally being revealed to investors and the market. The timing and magnitude of the share

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[2] Warning Letter, Applied Therapeutics, Inc., MARC 2-CMS 696833, U.S. Food & Drug Administration (Dec. 3, 2024), Applied Therapeutics, Inc. - 696833 - 12/03/2024 | FDA (last visited Dec. 26, 2024).

price declines negate any inference that the losses suffered by Plaintiff and other members of the Class were caused by changed market conditions, macroeconomic or industry factors, or Company specific facts unrelated to the Defendants' fraudulent conduct. The economic loss, *i.e.*, damages, suffered by Plaintiff and other Class members, was a direct result of Defendants' fraudulent scheme to artificially inflate the prices of the Company's stock and the subsequent significant decline in the value of the Company's stock when Defendants' prior misrepresentations and other fraudulent conduct were revealed.

82. At all relevant times, Defendants' materially false and misleading statements or omissions alleged herein directly or proximately caused the damages suffered by the Plaintiff and other Class members. Those statements were materially false and misleading through their failure to disclose a true and accurate picture of their communications with the FDA, the Dosing Errors, and Study Data Deletion relating to the clinical study data submitted as part of the govorestat for galactosemia NDA. Throughout the Class Period, Defendants issued materially false and misleading statements and omitted material facts necessary to make Defendants' statements not false or misleading, causing the prices of Applied's common stock to be artificially inflated. Plaintiff and other Class members purchased Applied stock at those artificially inflated prices, causing them to suffer damages.

X. THE STATUTORY SAFE HARBOR IS INAPPLICABLE

83. Applied's "Safe Harbor" warnings accompanying any forward-looking statements ("FLS") issued during the Class Period were ineffective to shield those statements from liability.

84. Defendants are liable for any false or misleading FLS pleaded herein because, at the time each FLS was made, the speaker knew the FLS was false or misleading and the FLS was authorized and/or approved by an executive officer of Applied who knew that the FLS was false. None of the historic or present tense statements made by Defendants were assumptions underlying

or relating to any plan, projection, or statement of future performance, as they were not stated to be such assumptions underlying or relating to any projection or statement of future economic performance when made, nor were any of the projections or forecasts made by Defendants expressly related to or stated to be dependent on those historic or present tense statements when made.

85. In addition, the FLS were contradicted by existing, undisclosed material negative facts that were required to be disclosed so that the FLS would not be misleading. Finally, most of the purported "Safe Harbor" warnings were themselves misleading because they warned of "risks" that had already materialized or failed to provide any meaningful disclosures of the relevant risks.

XI. APPLICABILITY OF PRESUMPTION OF RELIANCE: FRAUD ON THE MARKET

86. Plaintiff will rely upon the presumption of reliance established by the fraud-on-the-market doctrine in that, among other things:

(a) Defendants made public misrepresentations or failed to disclose material facts during the Class Period;

(b) The omissions and misrepresentations were material;

(c) The Company's common stock traded in an efficient market;

(d) The misrepresentations alleged would tend to induce a reasonable investor to misjudge the value of the Company's common stock; and

(e) Plaintiff and other members of the Class purchased Applied common stock between the time Defendants misrepresented or failed to disclose material facts and the time the true facts were disclosed, without knowledge of the misrepresented or omitted facts.

87. A Class-wide presumption of reliance is also appropriate in this action under the

Supreme Court's holding in *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128 (1972). Here, the Class' claims are also grounded on Defendants' failure to disclose material adverse information regarding the material, adverse communications with the FDA relating to issues with the clinical study data submitted with the govorestat for galactosemia NDA—information that the Defendants should have disclosed and proof that positive reliance is not a prerequisite to recovery. Instead, the withheld facts must be material in the sense that a reasonable investor may have considered them important in making investment decisions. Based on the alleged omissions herein, this requirement is satisfied here.

88. At all relevant times, the market for Applied common stock was efficient for the following reasons, among others:

(a) As a regulated issuer, Applied filed periodic public reports with the SEC;

(b) The Company's shares traded on NASDAQ, an efficient market;

(c) Defendants regularly communicated with public investors via established market communication mechanisms, including through regular disseminations of press releases on the major news wire services and through other wide-ranging public disclosures, such as communications with the financial press, securities analysts and investors, and other similar reporting services;

(d) The Company was covered by research analysts, including Citigroup, Leerink Partners, RBC Capital Markets, Robert W. Baird & Co., UBS Securities, and William Blair; and

(e) Applied was eligible to file a Form S-3 Registration Statement under the Securities Act of 1933 with the SEC, and, in fact, filed a Registration

Statement on Form S-3 on March 22, 2024.

XII. CLASS ACTION ALLEGATIONS

89. Plaintiff brings this action as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure on behalf the Class. Excluded from the Class are Defendants, directors and officers of Applied, and their families and affiliates. The members of the Class are so numerous that joinder of all members is impracticable.

90. The disposition of Class members' claims in a class action will provide substantial benefits to the parties and the Court. Applied had more than 114 million shares of common stock outstanding as of August 6, 2024 and more than 116 million shares outstanding as of November 6, 2024.

91. There is a well-defined community of interest in the questions of law and fact involved in this case. Questions of law and fact common to the members of the Class which predominate over questions which may affect individual Class members include:

(a) Whether the Exchange Act was violated by Defendants;

(b) Whether Defendants omitted and/or misrepresented material facts;

(c) Whether Defendants' statements omitted material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading;

(d) Whether Defendants knew, or disregarded with at least recklessness, that their statements were false and misleading at the time they were made;

(e) Whether the prices of Applied common stock were artificially inflated; and

(f) The extent of damage sustained by Class members and the appropriate measure of damages.

92. Plaintiff's claims are typical of those of the Class because Plaintiff and the Class

sustained damages from Defendants' wrongful conduct.

93. Plaintiff will adequately protect the interests of the Class and has retained counsel (Kaplan Fox) who are experienced in class action securities litigation. Plaintiff has no interests which conflict with those of the Class.

94. A class action is superior to other available methods for the fair and efficient adjudication of this controversy.

XIII. CAUSES OF ACTION

COUNT I
For Violation of Section 10(b) of the Exchange Act and Rule 10b-5
Against All Defendants

95. Plaintiff incorporates paragraphs 1-94 by reference.

96. During the Class Period, Defendants disseminated or approved the false and misleading statements specified above, which they knew, or disregarded with at least recklessness, were misleading in that they contained misrepresentations or failed to disclose material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading.

97. Defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 in that they:

(a) Employed devices, schemes, and artifices to defraud;

(b) Made untrue statements of material fact or omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; or

(c) Engaged in acts, practices, and a course of business that operated as a fraud or deceit upon Plaintiff and others similarly situated in connection with their purchases of Applied common stock during the Class Period.

98. Plaintiff and the Class have suffered damages in that, in reliance on the integrity of

the market, they paid artificially inflated prices for Applied common stock. Plaintiff and the Class would not have purchased Applied common stock at the prices they paid, or at all, if they had been aware that the market prices had been artificially and falsely inflated by Defendants' misleading statements.

99. As a direct and proximate result of these Defendants' wrongful conduct, Plaintiff and the other members of the Class suffered damages in connection with their purchases of Applied common stock during the Class Period.

COUNT II
For Violation of Section 20(a) of the Exchange Act
Against Defendant Shendelman

100. Plaintiff incorporates paragraphs 1-99 by reference.

101. Defendant Shendelman acted as a controlling person of Applied within the meaning of Section 20 of the Exchange Act. By virtue of her position as a senior executive and director of the Company and her power to control public statements to investors about Applied, which she exercised throughout the Class Period, Defendant Shendelman had the power and ability to control the actions of Applied and its employees.

102. By reason of such conduct, Defendant Shendelman is liable pursuant to Section 20(a) of the Exchange Act.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for judgment as follows:

A. Declaring this action to be a proper class action pursuant to Fed. R. Civ. P. 23, certifying Plaintiff as class representative, and appointing Plaintiff's counsel as class counsel;

B. Awarding Plaintiff and the members of the Class damages and interest;

C. Awarding Plaintiff reasonable costs, including attorneys' fees; and

D. Awarding such equitable injunctive or other relief as the Court may deem just and proper.

JURY DEMAND

Plaintiff demands a trial by jury.

Dated: December 27, 2024

Respectfully submitted,

KAPLAN FOX & KILSHEIMER LLP

/s/ *Jeffrey P. Campisi*

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Counsel for Plaintiff and the Proposed Class

CERTIFICATION

I, Mohammad Ali Ikram, hereby certify and swear as follows:

1. I have reviewed a complaint against Applied Therapeutics, Inc. alleging violations of the securities laws and authorize the filing of a complaint or the filing of a lead plaintiff motion;
2. I am willing to serve as a representative party on behalf of a class, or to be a member of a group representing a class, including providing testimony at deposition and trial, if necessary;
3. I have not within the 3-year period preceding the date hereof sought to serve, or served, as a representative party on behalf of a class in an action brought under the federal securities laws;
4. My transactions in Applied Therapeutics, Inc. common stock during the proposed class period are set forth in Schedule A, which is attached hereto.
5. I did not purchase Applied Therapeutics, Inc. common stock at the direction of my counsel or in order to participate in any private action under the federal securities laws; and
6. I will not accept any payment for serving as a representative party on behalf of a class beyond my pro rata share of any recovery, except as ordered or approved by the Court.

I declare under penalty of perjury that the foregoing is true and correct.

Date: 12/26/2024, 2024

Signed by:
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Mohammad Ali Ikram

Schedule A

Mohammad Ali Ikram's Transactions in Applied Therapeutics, Inc.

Security Description	CUSIP	Date	Transaction	Quantity	Price
Applied Therapeutics, Inc.	03828A101	8/15/2024	Buy	100	$5.44
Applied Therapeutics, Inc.	03828A101	8/16/2024	Buy	95	$5.82
Applied Therapeutics, Inc.	03828A101	8/23/2024	Buy	2	$5.69
Applied Therapeutics, Inc.	03828A101	8/27/2024	Buy	1	$5.94
Applied Therapeutics, Inc.	03828A101	8/29/2024	Buy	3	$6.39
Applied Therapeutics, Inc.	03828A101	8/29/2024	Buy	1	$6.36
Applied Therapeutics, Inc.	03828A101	9/5/2024	Buy	153	$5.75
Applied Therapeutics, Inc.	03828A101	9/13/2024	Buy	31	$4.84
Applied Therapeutics, Inc.	03828A101	9/16/2024	Buy	2	$4.69
Applied Therapeutics, Inc.	03828A101	9/16/2024	Buy	11	$4.69
Applied Therapeutics, Inc.	03828A101	9/18/2024	Buy	11	$6.50
Applied Therapeutics, Inc.	03828A101	9/18/2024	Buy	22	$7.70
Applied Therapeutics, Inc.	03828A101	9/18/2024	Buy	68	$7.60
Applied Therapeutics, Inc.	03828A101	9/18/2024	Buy	45	$7.45
Applied Therapeutics, Inc.	03828A101	9/19/2024	Buy	3	$7.95
Applied Therapeutics, Inc.	03828A101	9/20/2024	Buy	2	$7.80
Applied Therapeutics, Inc.	03828A101	9/24/2024	Buy	6	$7.70
Applied Therapeutics, Inc.	03828A101	9/24/2024	Buy	80	$7.60
Applied Therapeutics, Inc.	03828A101	9/26/2024	Buy	2	$8.40
Applied Therapeutics, Inc.	03828A101	9/26/2024	Buy	10	$8.31
Applied Therapeutics, Inc.	03828A101	9/27/2024	Buy	1	$8.23
Applied Therapeutics, Inc.	03828A101	9/27/2024	Buy	4	$8.27
Applied Therapeutics, Inc.	03828A101	9/30/2024	Buy	100	$8.30
Applied Therapeutics, Inc.	03828A101	10/1/2024	Buy	2	$8.29
Applied Therapeutics, Inc.	03828A101	10/2/2024	Buy	7	$8.22
Applied Therapeutics, Inc.	03828A101	10/2/2024	Buy	2	$8.21
Applied Therapeutics, Inc.	03828A101	10/3/2024	Buy	3	$8.15
Applied Therapeutics, Inc.	03828A101	10/3/2024	Buy	28	$7.99
Applied Therapeutics, Inc.	03828A101	10/3/2024	Buy	29	$7.81
Applied Therapeutics, Inc.	03828A101	10/4/2024	Buy	1	$7.63
Applied Therapeutics, Inc.	03828A101	10/4/2024	Buy	20	$7.60
Applied Therapeutics, Inc.	03828A101	10/7/2024	Buy	21	$7.71
Applied Therapeutics, Inc.	03828A101	10/7/2024	Buy	6	$7.62
Applied Therapeutics, Inc.	03828A101	10/7/2024	Buy	6	$7.63
Applied Therapeutics, Inc.	03828A101	10/9/2024	Buy	10	$7.95
Applied Therapeutics, Inc.	03828A101	10/10/2024	Buy	12	$7.91
Applied Therapeutics, Inc.	03828A101	10/10/2024	Buy	1	$7.88
Applied Therapeutics, Inc.	03828A101	10/17/2024	Buy	162	$8.64
Applied Therapeutics, Inc.	03828A101	10/17/2024	Buy	4	$8.62
Applied Therapeutics, Inc.	03828A101	10/25/2024	Buy	10	$8.63
Applied Therapeutics, Inc.	03828A101	10/25/2024	Buy	2	$8.54

Applied Therapeutics, Inc.	03828A101	10/25/2024	Buy	125	$8.51
Applied Therapeutics, Inc.	03828A101	11/13/2024	Buy	31	$9.42
Applied Therapeutics, Inc.	03828A101	11/13/2024	Buy	6	$9.39
Applied Therapeutics, Inc.	03828A101	11/15/2024	Buy	20	$8.84
Applied Therapeutics, Inc.	03828A101	11/19/2024	Buy	1	$8.90
Applied Therapeutics, Inc.	03828A101	11/22/2024	Buy	3	$9.15
Applied Therapeutics, Inc.	03828A101	11/25/2024	Buy	2	$9.40
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	8	$9.45
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	1	$8.95
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	261	$1.80
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	100	$2.20
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	400	$2.18
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	4	$2.05
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	60	$1.98
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	349	$2.04
Applied Therapeutics, Inc.	03828A101	11/27/2024	Buy	1	$2.03
Applied Therapeutics, Inc.	03828A101	11/29/2024	Buy	250	$2.21
Applied Therapeutics, Inc.	03828A101	12/2/2024	Buy	400	$1.95