UNITED STATES DISTRICT COURT DISTRICT OF NEW JERSEY

Master No. 3:15-cv-07658-MAS-LHG

IN RE VALEANT PHARMACEUTICALS INTERNATIONAL, INC. SECURITIES LITIGATION

DECLARATION OF
PROFESSOR STEVEN P. FEINSTEIN, PH.D., CFA
MAY 20, 2020

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I. SCOPE OF PROJECT AND REPORT

- 1. I assisted Robbins Geller Rudman & Dowd LLP, Lead Counsel for Plaintiffs, with developing the Proposed Plan of Allocation of the Net Settlement Fund ("Plan of Allocation"). At that time and subsequently, I was asked to assist in evaluating whether the Plan of Allocation calculated in a fair and equitable manner each Claimant's Recognized Loss for each share of Valeant common stock purchased, each eligible Valeant note purchased, and each call option contract purchased or put option contract written, during the period of 4 January 2013 to 15 March 2016 (the "Class Period"). 3
- 2. I also provided expert testimony in this case. I submitted a Report on Market Efficiency, dated 28 September 2018 (the "Feinstein Market Efficiency Report").
- 3. I have now been asked to consider and evaluate the arguments and conclusions in the Declaration of Michael A. Marek, CFA (the "Marek Declaration"), submitted by Timber Hill LLC ("Timber Hill") in this matter. I was also asked to review and consider Timber Hill LLC's Objections to Settlement and Plan of Allocation, (the "Timber Hill Objection"), dated 6 May 2020.
- 4. My credentials and compensation, as well as the documents that I reviewed and relied upon in the course of this engagement are listed in the Feinstein Market Efficiency Report.

 Additional materials are referenced herein.

¹ Unless stated otherwise, all capitalized terms in this report have the same meaning ascribed to them in the Plan of Allocation.

² The eligible Valeant notes are identified and described in the Plan of Allocation.

³ Valeant common stock, the eligible Valeant notes, and Valeant option contracts are collectively referred to as the "Valeant Securities" or a "Valeant Security".

II. CONCLUSIONS

- 5. The Plan of Allocation provides a fair and reasonable methodology for calculating each Claimants' Recognized Loss for each Valeant Security purchased (or put option contract sold) during the Class Period. The Plan of Allocation provides for fair and equitable *pro rata* distribution of the Net Settlement Fund to all Claimants who suffered economic losses proximately caused by the alleged fraud.
- 6. It is reasonable in this case to cap at 5% the portion of the Net Settlement Fund allocated to Valeant option investors in the aggregate. Contrary to Mr. Marek's opinion, there are several economic bases in this case to limit the portion of the Net Settlement Fund allocable to option investors to 5%. The application of a cap on the portion of a settlement allocable to option investors is reasonable and is common practice, as the economic bases for such a cap that are present in this case are common across most securities cases involving options in addition to stocks and/or bonds.
- 7. Factors that support capping the portion of the Net Settlement Fund allocated to Valeant option investors are: 1) the damage computation formula used to compute Recognized Losses for option investors relative to the formulas used for Valeant common stock and note investors; 2) the numerous significant non-fraud causes of the declines in call options prices (or increases in the prices of written puts) during the Class Period; and 3) potentially offsetting gains for option investors deriving from commonly used option hedging and combination strategies that are not otherwise accounted for in the computation of Recognized Losses.

III. OVERVIEW OF THE PLAN OF ALLOCATION FOR VALEANT SECURITIES

8. As set forth in the Complaint in this matter, Plaintiffs alleged that Valeant and certain of its officers made false and misleading statements or omissions of material fact, in violation of federal securities laws. According to Plaintiffs, false and misleading statements and omitted material facts regarded, among other things, Valeant's business operations and financial performance. Plaintiffs contended that Defendants' alleged misstatements and omissions artificially inflated the prices of the Valeant Securities, and this artificial inflation was removed from the prices of Valeant Securities by subsequent corrective disclosures, causing investor losses.⁴

A. Exchange Act Recognized Losses for Class Members' with Section 10(b) Claims for Valeant Common Stock and Notes

- 9. Artificial inflation is the difference between what a security price actually was at a point in time and what the price would have been absent the alleged fraud. An inflation ribbon is a time series indicating how much artificial inflation caused by the alleged fraud was present in the price of a particular security on each day of the Class Period. When the security price falls on account of a corrective disclosure, the artificial inflation dissipates, meaning that the amount of artificial inflation after such a corrective disclosure is generally less than prior to the disclosure.
- 10. In order to measure the artificial inflation in the prices of the Valeant common stock and notes during the Class Period, and to assess whether the alleged corrective disclosures caused artificial inflation to dissipate thereby causing economic losses, I conducted event studies for the Valeant common stock and each of the Valeant notes. The event studies employed regression

⁴ Artificial inflation is positive for the call options and negative for the put options.

analyses to assess and control for the price effects of market-wide, industry, and interest rate factors, that are unrelated to the alleged fraud. The remaining Valeant common stock and Valeant note prices movements elicited by the alleged corrective disclosure events, after accounting for market effects, and after removing the impact of confounding information, if necessary, represent the amount of artificial inflation dissipated by the corrective disclosures.

- 11. An investor's "inflation loss" for a given security and holding period is the price inflation on the date of purchase minus the price inflation remaining on the date of sale, if inflation is greater on the purchase date than on the sale date, and zero otherwise. The inflation loss over an investor's holding period is the economic loss caused specifically by the alleged fraud. By contrast, the investor's "investment loss" or "market loss" is equal to the entire decline in the security price from purchase to sale (or zero if the security did not decline in price), and may include losses caused both by the fraud and non-fraud-related factors.
- 12. Under the Plan of Allocation, the Recognized Loss for Valeant common stock or Valeant notes is the *lesser* of (i) the inflation loss and (ii) the investment loss. Thus, the Recognized Loss formula for Valeant common stock and Valeant notes is equal to or less than the declines proximately caused by fraud-related factors.

B. Recognized Loss for Option Investors in the Plan of Allocation

13. For reasons explained below, under the Plan of Allocation, the Recognized Loss for Valeant option investors is equal to the investment loss over an investor's holding period. Unlike for Valeant common stock and Valeant notes, the Recognized Loss calculation for options is not restricted to the lesser of the inflation loss and investment loss, and thus is not constrained to be equal to or less than the change in artificial inflation over the investor's holding period.

Therefore, the Recognized Loss formula for Valeant option investors may include both fraudrelated and non-fraud-related declines.

- 14. The Recognized Loss for Valeant option investors is set equal to the investment loss in the Plan of Allocation, rather than the lesser of the investment loss and inflation loss. This is because of the cost and complexity of presenting in a reasonable and timely manner in connection with the Settlement the numerous and complex formulas necessary to compute the inflation losses for the wide array of Valeant options traded during the Class Period. Options values are a function of several variables that may complicate the measure of daily inflation. These variables include the underlying stock price, the contract strike price, market interest rates, expected future stock volatility, time to expiration, and expected dividends. The effects of these variables change over time and vary across option contracts.
- 15. Option price dynamics are complex. Misrepresentations and omissions that artificially inflate a stock price will also artificially inflate a call option price and embed artificial negative inflation in a put option price, all else equal. A corrective disclosure that dissipates artificial inflation from a stock price will, all else equal, dissipate positive artificial inflation from a call option price and negative inflation from a put option price. However, the passage of time, and changes in the other option pricing variables, may cause both call option and put option prices to decay even when there is no stock price movement, all else equal.
- 16. A wide variety of Valeant option contracts were available during the Class Period, differing in expiration dates, strike prices, and whether they were puts or calls. While it is possible to compute the inflation loss for every option investor, on account of the wide variety of option contracts, and the array of impactful variables, which vary across contracts and over time, doing so would require the claims administrator to perform a separate valuation for each submitted claim.

In my experience, computing inflation loss for every option investor is consequently too burdensome and time consuming to be realistically undertaken by the claims administrator in connection with the administration of a settlement.

- 17. These challenges that complicate the computation of inflation loss for option investors at the plan of allocation stage are common. These complications are typically addressed in settlement administration by setting the Recognized Loss as the investment loss for options investors rather than as the lesser of the investment loss and inflation loss. The investment loss is treated as an upper bound proxy for the inflation loss. However, the investment loss comprises both fraud- and non-fraud-related declines, and thus generates a larger Recognized Loss for option investors, relative to the Recognized Loss formulas applied for stock and note investors.
- 18. In order to compensate for this difference and avoid inequity between Valeant options investors and Valeant common stock and Valeant notes investors, an adjustment was included, as is typical, in the Plan of Allocation.⁵
- 19. The adjustment to rectify the differential treatments between options investors on the one hand and common stock and notes investors on the other hand is commonly applied in one of two ways: (i) applying a discount to the Recognized Loss of the affected security; or (ii) capping the allocation of the total settlement fund for the affected security. In this case, the rectifying adjustment was limiting the Valeant option investors' allocation of the Net Settlement Fund through use of what has been referred to as 5% cap on the option investors' overall Settlement recovery.

⁵ If any option investors were eligible to recover Section 20A claims under the Plan of Allocation, those Recognized Losses would be computed in the same manner as the option investors' 10(b) claims, i.e., those option investors would receive their investment losses unconstrained by the inflation loss.

20. In my experience in being retained as an expert in numerous prior securities class actions and in connection with developing plans of allocation for settlements for such cases, it is common to develop a plan of allocation as used in this case and for the reasons described herein.

IV. OVERVIEW OF MAREK DECLARATION

21. Mr. Marek was asked by counsel for Timber Hill to "calculate the approximate Recognized Loss sustained by" Valeant common stock investors, Valeant Notes investors, and Valeant options investors eligible for recovery under the Plan of Allocation. He explained that he was asked to:

"compare the quantitative difference, if any, between my calculations of the percentage of the total Recognized Loss incurred by (1) Options Class members versus (2) Common Stock and Notes Class members; and the percentage of the Net Settlement Fund allocated to those two categories of Class members under the proposed POA."

Marek Declaration, P3.

22. Mr. Marek's declaration estimated that Valeant common stock Recognized Losses accounted for approximately 80.79% of the total Recognized Losses, Valeant notes Recognized Losses accounted for approximately 9.72% of the total Recognized Losses, and Valeant options Recognized Losses accounted for approximately 9.49% of the total Recognized Losses.⁷ For the purposes of discussion in this declaration only, I use Mr. Marek's computations of Class-wide Recognized Losses.

⁶ Marek Declaration, ₱2.

⁷ Marek Declaration, №19.

- 23. Mr. Marek further opined that "the 5% cap represents almost a 50% discount to Options Class members' *pro rata* estimated 9.49% economic interest in the settlement," and that he is "aware of no economic basis for limiting the aggregate recovery of Recognized Losses for Options Class members to a maximum of 5% of the Net Settlement Fund in this matter." The implication from Mr. Marek is that option investors' losses are being discounted by nearly 50%, and therefore option investors are being treated unfairly under the Plan of Allocation. This is inaccurate.
- 24. As introduced above and further explained below, the economic basis for limiting the share of the Net Settlement Fund allocable to option investors in this matter to a maximum of 5% is sound and treats them fairly relative to other Class members. Notably, Mr. Marek's analysis does not consider the differential treatment in the calculation of Recognized Loss for option investors relative to stock and note claimants. Further, Mr. Marek does not acknowledge or address the accepted use of option caps in many prior cases.

V. THE PERCENTAGE ALLOCATION OF THE NET SETTLEMENT FUND TO OPTION INVESTORS HAS AN ECONOMIC BASIS AND TREATS CLASS MEMBERS FAIRLY

25. Timber Hill and Mr. Marek contend that the 5% cap to the allocation of the Net Settlement Fund to Valeant option Class members treats them unfairly and lacks an economic basis. Timber Hill estimates that the total losses sustained by option investors, which is not restricted to only those losses realized when corrective disclosures impacted the option prices, sum to approximately 9.49% of the total Recognized Losses for all Valeant Securities under the Plan of Allocation. But, Mr. Marek's contention fails to compare option and other Class members on

⁸ Marek Declaration, ₱₱22-23.

an appropriately uniform basis. Mr. Marek's claim that option investors' Recognized Losses account for 9.49% of the Settlement is overstated because option losses are necessarily computed as total investment loss (rather than as the lesser of investment loss and inflation loss), which includes losses caused both by fraud and non-fraud factors, while stock and note losses are restricted to losses caused only by fraud-related factors. This difference, as discussed herein, explains why the cap on the share of the Net Settlement Fund allocated to option investors is fair and equitable. The next section further explains the justification for the 5% cap to the allocation and further addresses Mr. Marek's concerns.

- 26. First, as discussed above, under the Plan of Allocation, the Recognized Loss for Valeant option investors is computed equal to the investment loss, while the Recognized Loss for Valeant common stock and Valeant note investors is computed as the lesser of the investment loss and inflation loss. As such, Valeant option investors have larger computed Recognized Losses relative to Valeant common stock and note investors.
- 27. Second, due to complex option price dynamics, option values decline as time progresses, even when there is no corrective disclosure and no concomitant fall in the underlying stock price, all else equal. That is, option values naturally decay over time. This effect is especially pronounced for the many Valeant options with short remaining times to expirations that were traded during the Class Period. Therefore, it is likely that a substantial portion of option investors' losses were caused by non-fraud factors and would have been lost even if there had been no fraud and/or no corrective disclosures.
- 28. Third, options are commonly used as hedges, or in combination strategies with other option contracts, stocks, and notes. These strategies generally involve some combination of purchases and sales of the underlying security, call options, and put options. Investors who engage

in option combination strategies typically have losses in one component of their portfolio offset by profits earned on another component. Because options are commonly used as hedging instruments, it is common that Recognized Loss for options are already compensated by offsetting gains earned on other positions than is the case for stocks and notes.

- 29. Under the Plan of Allocation, potentially fraud-induced gains from sales of call options and purchases of put options have a Recognized Loss of zero, i.e., these gains to do not offset Recognized Losses on purchases of call options and sales of put options. As such, the 9.49% Valeant Option Recognized Loss computed by Mr. Marek represents only the *gross* estimate of Recognized Losses, and does not consider the gains that these option investors may have made on sales of other call options and purchases of other put options. A Class-wide estimate of Recognized Losses for Valeant option investors *net* of potential gains would be significantly lower than the 9.49% *gross* estimate. Mr. Marek does not calculate the extent of the offset which would depend on each investor's transactions. However, in my experience in estimating class-wide damages and assisting in the development of plans of allocation, the offset would be substantial. Mr. Marek does not contend otherwise as he simply ignores how options are commonly used by investors and the differential treatment for calculating Recognize Losses under the Plan of Allocation.
- 30. Given how Recognized Loss is computed differently for option investors relative to Valeant common stock and note investors, given the non-fraud related factors that may cause declines in option prices, and given potentially offsetting option investor gains from combination and hedging strategies, it is reasonable to either discount the Recognized Losses for option investors or apply a cap to the allocation of the Net Settlement Fund that Valeant option investors may recover in the aggregate. In my experience, a cap to the allocation of 5% of the Net Settlement

Fund to option investors is reasonable given these factors and considerations, and is consistent with the quantification of Recognized Losses provided by Mr. Marek.

31. The treatment of options in the Valeant Plan of Allocation is a generally accepted and widely used methodology for equitably allocating a settlement fund in light of the differentiating factors affecting option damages. Mr. Marek has also applied a discount to the recovery allocable to options holders. In the *Luminent Mortgage Capital Inc. Securities Litigation*, in which Mr. Marek assisted in developing the Plan of Allocation, Mr. Marek applied a 50% discount to the Recognized Losses of option investors. Specifically, Mr. Marek stated:

"Finally, Class members who (i) held an open long position in Luminent common stock call options or held an open short position in Luminent put options as of the close of trading on August 2, 2007, and/or; (ii) purchased Luminent common stock call options to open a long position between August 3, 2007 and August 6, 2007 and/or sold Luminent common stock put options to open a short position between August 3, 2007 and August 6, 2007 will receive 50% of their recognized losses because: (i) option prices include a time premium that diminishes over time independent of the underlying common stock price, and (ii) the expected additional volatility of derivative securities such as common stock options makes it more difficult to prove that all losses sustained on the purchase or sale on such securities are causally related to the alleged wrongdoing, as opposed to non-actionable causes."

Declaration of Michael A. Marek in Support of Preliminary Approval of Settlement and Plan of Allocation, In re Luminent Mortgage Capital Inc. Securities Litigation, P12.

32. Both factors that Mr. Marek used to justify his 50% discount to options losses in the *Luminent Mortgage* case, diminishing time premiums and volatility, are present in the instant Valeant case. If Mr. Marek applied that same 50% discount to option losses in this case, his adjusted Recognized Loss for Valeant options investors would equal less than 5% of the total Recognized Losses for all Valeant Securities. In other words, if Mr. Marek's approach of reducing

⁹ Applying Mr. Marek's 50% discount from the *Luminent Mortgage* case to the computed Recognized Losses for options investors in this case, Mr. Marek's estimate of class-wide options damages would decrease from \$3.766 billion

Recognized Losses for options investors by 50% were done in the instant case the result would be similar to using the 5% cap to the allocation of the Net Settlement Fund to option investors applied in the Plan of Allocation here. In fact, rather than being unfair to options claimants, the 5% cap may be more fair to them because applying the 5% cap to the allocation of the Net Settlement Fund available to Valeant option investors that is currently used would only impact the Recognized Loss of Valeant option investors if the 5% cap is exceeded. In contrast, the 50% discount applied by Mr. Marek in the *Luminent Mortgage* case would reduce the Valeant option investors' Recognized Losses regardless of whether the 5% cap is reached and could ultimately result in a smaller allocation of the settlement to Timber Hill and other option investors.

33. Finally, Timber Hill claims that the Plan of Allocation is unfair to options investors because their losses are only calculated under the Plan of Allocation in connection with the Section 10(b) claims, whereas stock purchasers are able to recover the greater of their Section 10(b) Recognized Loss or losses under Section 20A. However, the Plan of Allocation only permits affected stock transactions to recognize a market loss under the Section 20A section of the Plan of Allocation, which options investors are already permitted to do under the Section 10(b) portion of the Plan of Allocation.

to \$1.883 billion, and total damages would decrease from \$39.687 billion to \$37.804 billion. Applying this discount, options damages in the aggregate would represent 4.98% of the total damages (equal to \$1.883 billion divided by \$37.804 billion).

VI. LIMITING FACTORS AND OTHER ASSUMPTIONS

34. This report is furnished solely for the purpose of court proceedings in the above referenced matter and may not be used or referred to for any other purpose. The analysis and opinions contained in this report are based on information available as of the date of this report. I reserve the right to supplement or amend this report, including in the event additional information becomes available.

Steven P. Feinstein, Ph.D., CFA