VIA ELECTRONIC MAIL, EDGAR AND FEDEX

Jeffrey P. Riedler Assistant Director United States Securities and Exchange Commission Division of Corporate Finance 100 F Street, N.E. Washington, D.C. 20549

Re: Agile Therapeutics, Inc.

Registration Statement on Form S-1

Filed March 17, 2014 File No. 333-194621

Dear Mr. Riedler:

On behalf of our client, Agile Therapeutics, Inc. ("we" or the "Company"), set forth below is the Company's supplemental response to the letter dated April 11, 2014 (the "April 11 Comment Letter") from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission"), which relates to the Company's Registration Statement on Form S-1, File No. 333-194621 (the "Registration Statement") filed with the Commission on March 17, 2014 (the "Initial Filing"), which was subsequently amended in response to the April 11 Comment Letter and filed with the Commission on April 17, 2014 ("Amendment No. 1"). In this letter, we are responding only to comment number 15 in the April 11 Comment Letter, the text of which is set forth in bold, followed by the Company's response to such comment. The page numbers in the bold captions refer to pages in the Initial Filing, while the page numbers in the Company's responses refer to page numbers in Amendment No. 1. Capitalized terms used in this letter but not defined herein have the meaning given to such terms in Amendment No. 1.

Confidential Treatment Request

Due to the commercially sensitive nature of information contained herein, the Company hereby requests, pursuant to 17 C.F.R. § 200.83, that certain portions of this letter be maintained in confidence, not be made part of any public record and not be disclosed to any person as they contain confidential information. The Company has filed a copy of this letter, marked to show the portions redacted from the version filed via EDGAR and for which the Company is requesting confidential treatment. In accordance with 17 C.F.R. § 200.83(d)(1), if any person (including any governmental employee who is not an employee of the Commission) should request access to or an opportunity to inspect this letter, we request that we be immediately notified of any such request, be furnished with a copy of all written materials pertaining to such

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request (including, but not limited to, the request itself) and be given at least ten business days advance notice of any intended release so that the Company may, if deemed necessary or appropriate, pursue any remedies available to it. In such an event, we request that you telephone the undersigned rather than rely upon the U.S. mail for such notice. The address and telephone number for Emilio Ragosa, the responsible representative, is c/o Morgan, Lewis & Bockius LLP, 502 Carnegie Center, Princeton, New Jersey 08540, telephone number (609) 919-6640.

Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Significant Judgments and Estimates

Stock-Based Compensation, page 80

15. We may have additional comments on your accounting for stock compensation or any beneficial conversion features once you have disclosed an estimated offering price. Please supplementally provide us with a quantitative and qualitative analysis explaining the difference between the estimated offering price and the fair value of the most recent equity issuance.

Response:

The Company advises the Staff that it presently estimates, based in part on input received on Sunday, April 27, 2014 from the underwriters (the "Underwriters") for the initial public offering ("IPO") of our common stock, that the public offering price per share for the IPO will be based on a pre-money equity value range of \$[***] to \$[***], with a midpoint of the estimated range of \$[***], which considers information currently available and current market conditions.

Before any consideration for stock splits, the pre money equity value range is based on approximately 6.5 million shares outstanding as of March 31, 2014 and results in a range of common stock values of \$[***] per share to \$[***] per share, with a midpoint of the estimated range of \$[***] (the "Midpoint Price"). This compares to our estimated equity valuation of \$73.5 million which resulted in an estimated common share value of \$11.22 per share.

The following response is a quantitative and qualitative analysis explaining the difference between the estimated offering price and the Company's most recent valuation exercise. However, in simplistic terms, the single largest difference between the estimated offering price and the Company's most recent valuation is the discount for lack of marketability factor. The Company's most recent equity valuation used for financial reporting purposes included a 30% discount for lack of marketability. Assuming no discount for lack of marketability, the Company's most recent equity valuation would have been approximately \$105 million, or \$16.08 per share based on 6.5 million shares outstanding,

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which is comparable to the Midpoint Price of \$[***] per share as discussed in more detail below.

Please note that the Company is currently estimating a 1:1.4 stock split to reduce the offering price per share to \$[***] to \$[***], which the Company plans to effect prior to the closing of the IPO.

COMMON STOCK VALUATION METHODOLOGIES

The Company's discussion of share-based compensation is primarily contained in the section of the Registration Statement entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates—Stock-Based Compensation" (the "Section"), which has previously been filed with the Commission and is included on pages 82 through 85 of the Registration Statement. As described in the Section, the Company has historically determined the fair value of its common stock using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants (the "AICPA"), Audit and Accounting Practice Aid Series: *Valuation of Privately Held Company Equity Securities Issued as Compensation* (the "AICPA Practice Guide").

For the most recent valuation of the Company's common stock, the Company used a combination of the Option Pricing Model (the "OPM") and of the probability-weighted expected return method (the "PWERM"), which the Company refers to as the hybrid method. The OPM treats the rights of the holders of preferred and common shares as equivalent to that of call options on any value of the enterprise above certain break points of the value based upon the liquidation preferences of the holders of preferred shares, as well as their rights to participation and conversion. The value of the common stock can be determined by estimating the value of its portion of each of these call rights. Under the PWERM, the value of a company's common stock is estimated based upon an analysis of value for the company assuming an IPO as the only possible future event. The per share value of the common stock is based upon the probability-weighted present value of expected future equity values, under each of the possible future event scenarios, as well as the rights and preferences of each share class.

The OPM method sets the implied price of the most recent round of preferred stock to its original issuance price, and then calculates the implied equity value. The implied equity value is then used to calculate the value per common share. The values derived from the OPM method are then used to determine an initial estimated equity value. The implied equity value using the OPM method was \$112 million for the first quarter of 2014. The Company then used an option-pricing model to allocate the calculated equity value

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between the shares of preferred stock and common stock outstanding, including estimated liquidation payments to the preferred stockholders for all series of preferred stock. A discount was then applied to reach the final valuation of the common stock based on the fact that, in as much as the Company was a private company, there were impediments to liquidity, including lack of publicly available information and the lack of a trading market. The discount was determined after considering a number of empirical studies related to discounts for lack of marketability and by using a protective put option model that considered such variables as an estimated time to liquidity of 1.5 years, estimated volatility of 67.0%, expected dividend yield of 0% of the underlying stock and a risk-free rate of 0.26%. In addition, the current restrictions on the marketability of the Company's common stock were considered. The Company estimated a 30.0% discount for the lack of marketability.

In order to estimate the investment return for the IPO scenario, high and low IPO exit value scenarios were estimated, all plus or minus a standard deviation for value and timing. The rights and preferences of each shareholder class are considered in order to determine the appropriate allocation of value to common shares. The value of each common share is then multiplied by a discount factor derived from the calculated discount rate and the expected timing of the IPO. A risk-adjusted discount rate is applied, as the probability weightings in the PWERM address the success rates of each scenario. The value per common share, taking into account sensitivities to the timing of the IPO, is then multiplied by an estimated probability for the IPO. The high and low exit value scenarios were each weighted equally (50%). A probability-weighted value per share of common stock is then determined.

The Company estimated the fair value of the Company's common stock by assigning a 25.0% weighting to the estimated fair value using the OPM back-solve method and a 75.0% weighting to the estimated fair value under the IPO scenario. The Company believes that the 25.0% weighting on the OPM back-solve method is appropriate due to the proximity of a potential Series D preferred stock financing to the valuation date and the fact that the issuance included and was led by a new investor. The 75.0% weighting for the IPO scenario was deemed appropriate because at the time of the valuation, the Company believed that there was the possibility of an IPO to fund a Phase 3 clinical trial of the Company's lead product candidate, Twirla, based on several factors including the late stage nature of Twirla as well as the strength of the biotech IPO market.

MOST RECENT FAIR VALUE DETERMINATION

On March 28, 2014, the date on which the Board of Directors most recently authorized the issuance of stock option grants, the Board of Directors determined the fair value of the Company's common stock to be \$11.22 per share after taking into account input from

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management and an independent third-party valuation specialist, which determined the fair value of the Company's common stock to be \$11.22 per share (the "Estimated Fair Value") as of December 31, 2013 using the hybrid method described earlier. The Board of Directors determined the fair value of the Company's common stock remained substantially unchanged between December 31, 2013 and March 28, 2014, due to the lack of significant clinical and regulatory developments with respect to the Company during such period.

COMPARISON OF ESTIMATED FAIR VALUE AND ASSUMED IPO PRICE

As is typical in initial public offerings, the estimated price range for the offering was not derived using a formal determination of fair value, but was determined primarily by negotiation between the Company and its underwriters. Among the factors that were considered in setting the estimated price range for the offering were the following:

- · an analysis of the typical valuation ranges seen in recent initial public offerings for companies in the biotechnology industry;
- the general condition of the securities markets and the recent market prices of, and the demand for, publicly traded common stock of generally comparable companies;
- · an assumption that there would be a receptive public trading market for pre-commercial biotechnology companies such as the Company; and
- an assumption that there would be sufficient demand for the Company's common stock to support an offering of the size contemplated by the Registration Statement.

As described above, and not giving consideration to stock split that the Company expects to include in a future amendment, the Midpoint Price of \$[***] per share exceeds the fair value of the Company's common stock of \$11.22 per share as of December 31, 2013 and March 28, 2014, which was determined as described above (the "Prior Valuation Price"), by approximately \$[***] per share. The Company respectfully submits that the difference between the Prior Valuation Price and the Midpoint Price is primarily attributable to the discount for the lack of marketability as an active trading market for the common stock will exist following the IPO and the fact that the methodology for determining the Prior Valuation Price incorporated two different liquidity scenarios, not all of which allocate value to the Company's stockholders on a fully-diluted, as-converted to common stock basis.

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In contrast, the Midpoint Price assumes with 100% probability that the Company completes an initial public offering of the Company's common stock (the "IPO") and that the Company's preferred stock will be converted into common stock during the second quarter of 2014. As a result, the Midpoint Price was not reduced by other expected business equity values from other potential future liquidity events nor discounted for lack of marketability.

The December 31, 2013 valuation report prepared by the Company's valuation specialist contained two separate liquidity scenarios. Under IPO scenarios (high and low), which used a guideline public company market approach, and for which a cumulative probability weighting of 75% was assigned, the fair value of the Company's common stock was determined to be \$14.41 per share prior to a discount for lack of marketability. The December valuation report also utilized a liquidity scenario in which the Company's preferred stockholders would retain their rights and preferences in liquidation, and for which a cumulative probability weighting of 25% was assigned. This scenario (stay private) resulted in a fair value determination of \$1.67 per share, prior to a discount for marketability.

The Company respectfully submits that the IPO scenario results in a higher fair value per share determination than the stay private scenario because under the IPO scenario, the Company's preferred stock would convert into common stock in connection with the offering and, therefore, the liquidation preferences of the preferred stock would be eliminated upon the completion of the offering. Since the holders of the Company's preferred stock hold approximately \$70.8 million in liquidation preference over the common stock, the majority of all value in the other liquidity event transactions would be allocated to the preferred stockholders. Accordingly, after applying the indicated probability weighting, the consideration of the stay private scenario accounted for a portion of the per share difference between the Prior Valuation Price and the Midpoint Price.

The Company believes that the remaining difference between the Prior Valuation Price and the Midpoint Price is justified by (i) the fact that the valuation report prepared by the Company's third-party valuation specialist utilized a quantitative methodology to determine the fair value of the Company's common stock, which may differ from the more qualitative and subjective methodology used by some public market investors to determine the price that they are willing to pay in the offering, and (ii) other factors, such as the inherent uncertainty of completing a successful IPO and the possibility that the actual offering price could be substantially lower than the estimated offering price range provided by the Company's underwriters.

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In conclusion, the Company respectfully submits that the difference between the latest valuation (i.e., the Prior Valuation Price) and the estimated IPO price (i.e., the Midpoint Price) is reasonable in light of the considerations outlined above. The Company will add disclosure to this effect in its next amendment to the Registration Statement and intends to describe the changes in the key valuation assumptions used to determine the most recent valuation.

The Company believes that the above response will be acceptable to the Staff. Please contact the undersigned at (609) 919-6633 if you have any questions regarding the foregoing.

Sincerely,

/s/ Emilio Ragosa

cc: Alfred Altomari, Agile Therapeutics, Inc. Steven M. Cohen, Morgan, Lewis & Bockius LLP Peter N. Handrinos, Latham & Watkins LLP