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FOIA CONFIDENTIAL TREATMENT REQUEST

The entity requesting confidential treatment is:
Agios Pharmaceuticals, Inc.
38 Sidney Street, 2nd Floor
Cambridge, MA 02139
Attn: David P. Schenkein, M.D.
Chief Executive Officer
(617) 649-8600

July 1, 2013

VIA EDGAR SUBMISSION

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE Mail Stop 6010
Washington, DC 20549-6010

Attention: Jeffrey P. Riedler

Re: Agios Pharmaceuticals, Inc.
Registration Statement on Form S-1
File No. 333-189216

Ladies and Gentlemen:

On behalf of Agios Pharmaceuticals, Inc. (the "Company"), set forth below is additional information to supplement the Company's prior response to comment 19 contained in the letter dated June 19, 2013 (the "Letter") from Jeffrey P. Riedler of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") to David P. Schenkein, the Company's Chief Executive Officer, with respect to the Registration Statement referenced above. The supplemental response set forth below is based upon information provided to Wilmer Cutler Pickering Hale and Dorr LLP by the Company.

On behalf of the Company, we advise you as follows:

19. Please expand your disclosure to include a discussion of each significant factor contributing to the difference between the fair value as of the date of each grant and the estimated IPO price.

Rule 83 Confidential Treatment Request by Agios Pharmaceuticals, Inc.
Request #1

Response: To provide additional context and further information for the Staff's consideration, the Company supplementally advises the Staff that the Company currently anticipates that the price range for this offering will be within the range of $[****] to $[****] per share (before giving effect to a reverse stock split that the Company plans to implement prior to effectiveness of the Registration Statement). This price range is based on a number of factors, including the Company's prospects and the history of and prospects for the Company's industry, the general condition of the securities markets, the recent market prices of, and the demand for, publicly-traded common stock of generally similar companies and preliminary discussions with the underwriters regarding potential valuations of the Company. The actual price range to be included in a subsequent amendment to the Registration Statement (which will comply with the Staff's interpretation regarding the parameters of a bona fide price range) has not yet been determined and remains subject to adjustment based on factors outside of the Company's control. However, the Company believes that the foregoing indicative price range will not be subject to significant change.

Once the estimated price range for this offering has been determined, the Company will reflect in a subsequent amendment to the Registration Statement an additional list of significant factors contributing to any difference between the most recent common stock valuation and the midpoint of the estimated price range for this offering. The Company expects that such disclosure would be generally consistent with the following currently contemplated disclosure:

"On _____ __, 2013, we and our underwriters determined the estimated price range for this offering, as set forth on the cover page of this prospectus. The midpoint of the price range is $[****] per share. In comparison, our estimate of the fair value of our common stock was $3.29 per share as of April 30, 2013. We note that, as is typical in IPOs, the estimated price range for this offering was not derived using a formal determination of fair value, but was determined by negotiation between us

_____ _____ _____ _____ _____ _____

Agios Pharmaceuticals, Inc. respectfully requests that the information contained in Request #1 be treated as confidential information and that the Commission provide timely notice to David P. Schenkein, M.D., Chief Executive Officer, 38 Sidney Street, 2nd Floor, Cambridge, MA 02139, telephone (617) 649-8600, before it permits any disclosure of the bracketed information contained in Request #1.

and the underwriters. Among the factors that were considered in setting this range were our prospects and the history of and prospects for our industry, the general condition of the securities markets and the recent market prices of, and the demand for, publicly-traded common stock of generally similar companies. In addition, at the time these awards were granted, our underwriters had not yet communicated to us the estimated price range for this offering.

Specifically, we believe that the difference between the fair value of our common stock as of April 30, 2013 that was used to determine the $3.29 per share exercise price of stock options granted on April 30, 2013 and the midpoint of the estimated price range for this offering is primarily the result of the following company specific and external factors:

Key business milestones:

- On June 20, 2013 we filed an investigational new drug application, or IND, for our first product candidate, AG-221, with the U.S. Food and Drug Administration, or FDA. We believe filing our first IND along with successfully completing all of the related IND-enabling safety and profiling studies was a significant milestone for the Company.
- Subsequent to April 30, 2013, we generated AML mouse models leveraging primary samples from both IDH1 and IDH2 mutant positive patients. With these models we have been able to demonstrate robust efficacy data, which we believe to be an important milestone for both of our IDH2 and IDH1 programs. Specifically, in an IDH2 mutant positive AML model, we were able to reproduce an aggressive form of leukemia. Using our lead IDH2 mutant inhibitor, AG-221, we demonstrated a clear survival advantage in comparison to standard chemotherapy. The efficacy data achieved in our animal models significantly increases our confidence in targeting IDH2 and IDH1 mutations in cancer patients and that our programs have the potential to be single agent therapies.
- In mid-May 2013, AG-348, our lead IEM program, which relates to certain genetic defects of the pyruvate kinase enzyme causing a form of hemolytic anemia known as pyruvate kinase deficiency, or PK deficiency, successfully completed our internal development candidate requirements, which include two species of exploratory safety studies.

Market and other external factors:

- Based upon preliminary discussions with our investors and potential investors, we believe there will be interest in investing in a company with our profile and at our stage of development.
- Since our April 2013 valuation, the market conditions specific to the biotechnology industry continue to perform well and have demonstrated receptivity to investing in earlier stage biotechnology companies, as evidenced by the NASDAQ Biotechnology Index, which was up approximately 10% during the second quarter of 2013, and 15 pre-commercial biopharmaceutical companies completing IPOs during the second quarter of 2013 as compared to four pre-commercial biopharmaceutical companies completing IPOs during the first quarter of 2013 and on average approximately three pre-commercial biopharmaceutical companies completing IPOs per quarter during 2012.
- The estimated initial public offering price range necessarily assumes that the initial public offering has occurred, a public market for our common stock has been created and that our preferred stock converted into common stock in connection with the initial public offering; and, therefore excludes any discount for lack of marketability of our common stock, which was factored into our estimated value on April 30, 2013.
- In addition, our April 2013 valuation used a probability weighting of 70% that this offering would close by September 2013;
- Upon closing of this offering, all outstanding shares of preferred stock will convert into common stock, thus eliminating the superior rights and preferences of our preferred stock as compared to our common stock.

If you have any further questions or comments, or if you require additional information, please contact the undersigned by telephone at (617) 526-6393 or electronically at cynthia.mazareas@wilmerhale.com. Thank you for your assistance.

Very truly yours,

/s/ Cynthia T. Mazareas

Cynthia T. Mazareas

cc: David P. Schenkein, M.D.
Glenn Goddard