August 11, 2017

By EDGAR Submission

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, NE
Washington, DC 20549
Attention: Suzanne Hayes
Christine Westbrook
Mary Beth Breslin

Re: Agios Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2016
Filed February 16, 2017
File No. 001-36014

Ladies and Gentlemen:

This letter is in response to the letter (the "Letter") dated July 31, 2017 from Suzanne Hayes, Assistant Director, Office of Healthcare and Insurance, on behalf of the Staff (the "Staff") of the U.S. Securities and Exchange Commission (the "Commission"), to David P. Schenkein, M.D., the President and Chief Executive Officer of Agios Pharmaceuticals, Inc. ("we," the "Company" or "Agios"). The responses are keyed to the numbering of the comments and the headings used in the Letter.

Intellectual Property, page 20

1. *Please expand your disclosure in future filings to include the expiry dates of your key patents. Also disclose in future filings the foreign jurisdictions where you have issued patents or pending patent applications. Refer to Item 101(c)(iv) of Regulation S-K.*

Response:

The Company proposes to include revised disclosure in the Intellectual Property portion of the Business section in its Annual Report on Form 10-K for the fiscal year ending December 31, 2017 regarding the Company's patent portfolio that is consistent with the following (subject only to completing the bracketed language below):

"**Intellectual Property**

Our commercial success depends in part on our ability to obtain and maintain proprietary or intellectual property protection for our product candidates and our core technologies, including novel biomarker and diagnostic discoveries, and other know-how, to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary or intellectual property rights. Our policy is to seek to protect our proprietary and intellectual property position by, among other methods, filing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development

and implementation of our business. We also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position.

We file patent applications directed to our key product candidates, including IDHIFA®, ivosidenib, AG-881, AG-348 and AG-270, in an effort to establish intellectual property positions regarding new chemical entities relating to these product candidates as well as uses of new chemical entities in the treatment of diseases. We also seek patent protection with respect to biomarkers that may be useful in selecting the right patient population for therapies with our product candidates. As of [date] we owned or licensed [number] issued US patents, [number] US patent applications, [number] issued foreign patents, [number] foreign patent applications, and [number] pending Patent Cooperation Treaty, or PCT, patent applications. The foreign issued patent and patent applications are in a number of jurisdictions, including [include preponderance of jurisdictions across primary geographic regions].

The intellectual property portfolios for our most advanced programs as of [date] are summarized below. Prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the USPTO can be significantly narrowed by the time they issue, if they issue at all. We expect this could be the case with respect to some of our pending patent applications referred to below.

IDH mutant inhibitor programs

The intellectual property portfolio for our IDH mutant inhibitor programs contains patent applications directed to compositions of matter for IDHIFA®, ivosidenib, and AG-881, as well as analogs thereof, and compositions of matter for IDH mutant inhibitors with different compound families, as well as methods of use for these novel compounds and diagnostic methods for detecting various IDH1 and IDH2 mutations. As of [date], we owned [number] issued US patents, [number] issued foreign patents, [number] pending U.S. patent applications, [number] pending foreign patent applications in a number of jurisdictions, and [number] pending PCT patent applications directed to our IDH mutant inhibitor programs, including our clinical candidates. Any U.S. or ex-U.S. issued patents or patents issuing from the pending applications covering our IDH mutant inhibitor programs will have a statutory expiration date from [year] to [year]. Patent term adjustments or patent term extensions could result in later expiration dates.

PK deficiency program

The intellectual property portfolio for our PK deficiency program contains patent applications directed to compositions of matter for AG-348, as well as analogs thereof, and compositions of matter for PKR activators with different compound families, as well as methods of use for these novel compounds. As of [date], we owned [number] issued US patents, [number] issued foreign patents, [number] pending U.S. patent applications, [number] pending foreign patent applications in a number of jurisdictions, and [number] pending PCT patent applications directed to our PK deficiency program, including our clinical candidates. Any U.S. or ex-U.S. issued patents or patents issuing from the pending applications covering our PK deficiency program will have a statutory expiration date from [year] to [year]. Patent term adjustments or patent term extensions could result in later expiration dates.

MTAP-deleted cancer program

The intellectual property portfolio for our MTAP-deleted cancer program contains patent applications directed to compositions of matter for AG-270, as well as analogs thereof and other compound families, as well as methods of use for these novel compounds and diagnostic methods for detecting MTAP deletions. As of [date], we owned [number] pending U.S. patent applications, [number] pending foreign patent applications in a number of jurisdictions, and [number] pending PCT patent applications directed to our MTAP-deleted cancer program. Any U.S. or ex-U.S. patents issuing from the pending applications covering our MTAP-deleted cancer program will have a statutory expiration date from [year] to [year]. Patent term adjustments or patent term extensions could result in later expiration dates.

The term of individual patents depends upon the legal term for patents in the countries in which they are obtained. In most countries, including the United States, the patent term is 20 years from the earliest filing date of a non-provisional patent application. In the United States, a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office, or the USPTO, in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier filed patent. The term of a patent that covers a drug or biological product may also be eligible for patent term extension when FDA approval is granted, provided statutory and regulatory requirements are met. In the future, if and when our product candidates receive approval by the FDA or foreign regulatory authorities, we expect to apply for patent term extensions on issued patents covering those products, depending upon the length of the clinical trials for each medicine and other factors. There can be no assurance that any of our pending patent applications will issue or that we will benefit from any patent term extension or favorable adjustment to the term of any of our patents.

As with other biotechnology and pharmaceutical companies, our ability to maintain and solidify our proprietary and intellectual property position for our product candidates and technologies will depend on our success in obtaining effective patent claims and enforcing those claims if granted. However, patent applications that we may file or license from third parties may not result in the issuance of patents. We also cannot predict the breadth of claims that may be allowed or enforced in our patents. Any issued patents that we may receive in the future may be challenged, invalidated or circumvented. For example, we cannot be certain of the priority of inventions covered by pending third-party patent applications. If third parties prepare and file patent applications in the United States that also claim technology or therapeutics to which we have rights, we may have to participate in interference proceedings in the USPTO to determine priority of invention, which could result in substantial costs to us, even if the eventual outcome is favorable to us. In addition, because of the extensive time required for clinical development and regulatory review of a product candidate we may develop, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of any such patent.

In addition to patents, we rely upon unpatented trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our collaborators, scientific advisors, employees and consultants, and invention assignment agreements with our employees. We also have agreements requiring assignment of inventions with selected consultants, scientific advisors and collaborators. The confidentiality agreements are designed to protect our proprietary information and, in the case of agreements or clauses requiring invention assignment, to grant us ownership of technologies that are developed through a relationship with a third party.

With respect to our proprietary cellular metabolism technology platform, we consider trade secrets and know-how to be our primary intellectual property. Trade secrets and know-how can be difficult to protect. In particular, we anticipate that with respect to this technology platform, these trade secrets and know-how will over time be disseminated within the industry through independent development, the publication of journal articles describing the methodology, and the movement of personnel skilled in the art from academic to industry scientific positions."

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If you have any further questions or comments, or if you require additional information, please contact the undersigned by telephone at (617) 649-8600 or electronically at andrew.hirsch@agios.com. Thank you for your assistance.

Very truly yours,

/s/ Andrew Hirsch
Andrew Hirsch
Chief Financial Officer

cc: Min Wang, Senior Vice President and General Counsel
Steven D. Singer, Wilmer Cutler Pickering Hale and Dorr LLP
Cynthia T. Mazareas, Wilmer Cutler Pickering Hale and Dorr LLP