AGIOS PHARMACEUTICALS INC Form SC 13G/A February 12, 2015

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES

13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED

PURSUANT TO RULE 13d-2

(Amendment No. 1)

Agios Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, \$0.01 par value per share

(Title of Class of Securities)

00847X104

(CUSIP Number)

December 31, 2014

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- " Rule 13d-1(b)
- "Rule 13d-1(c)
- x Rule 13d-1(d)
- * The remainder of this cover page shall be filled out for a reporting person s initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 (Act) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

- 1. Names of Reporting Persons.
 - I.R.S. Identification Nos. of above persons (entities only).
 - Flagship Ventures Fund 2007, L.P.
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- 4. Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of

Shares -0-

6. Shared Voting Power

Beneficially

Owned by

1,930,369

Each

7. Sole Dispositive Power

Reporting

-0-

Person - C

8. Shared Dispositive Power

With:

1,930,369

9. Aggregate Amount Beneficially Owned by Each Reporting Person

	1,930,369
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)
	•
11.	Percent of Class Represented by Amount in Row (9)
	5.3%
12.	Type of Reporting Person (See Instructions)
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1. I tailles of Reporting I ersons.	1.	Names	of Reporti	ing Persons.
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- Flagship Ventures 2007 General Partner LLC
- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- 3. SEC Use Only
- Citizenship or Place of Organization

Delaware

5. Sole Voting Power

Number of

-0-Shares

6. Shared Voting Power

Beneficially

Owned by

1,930,369

Each

7. Sole Dispositive Power

Reporting

Person

-0-

8. Shared Dispositive Power

With:

1,930,369

Aggregate Amount Beneficially Owned by Each Reporting Person 9.

1,930,369

Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) 10.

11.	Percent of Class Represented by Amount in Row (9)
12.	5.3% Type of Reporting Person (See Instructions)
	00
	Page 3 of 10 pages

- Names of Reporting Persons.
 - I.R.S. Identification Nos. of above persons (entities only).
 - Noubar B. Afeyan Ph.D.
- Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- SEC Use Only
- Citizenship or Place of Organization
 - **United States**
 - 5. Sole Voting Power

Number of

-0-Shares

6. Shared Voting Power

Beneficially

Owned by

1,930,369

Each

7. Sole Dispositive Power

Reporting

Person

-0-

8. Shared Dispositive Power

With:

1,930,369

Aggregate Amount Beneficially Owned by Each Reporting Person

1,930,369

Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) 10.

11.	Percent of Class Represented by Amount in Row (9)
12.	5.3% Type of Reporting Person (See Instructions)
	IN
	Page 4 of 10 pages

- Names of Reporting Persons.
 - I.R.S. Identification Nos. of above persons (entities only).
 - Edwin M. Kania, Jr.
- Check the Appropriate Box if a Member of a Group (See Instructions)
 - (a) " (b) x
- SEC Use Only
- Citizenship or Place of Organization

United States

5. Sole Voting Power

Number of

-0-Shares

6. Shared Voting Power

Beneficially

Owned by

1,930,369

Each

7. Sole Dispositive Power

Reporting

Person

8. Shared Dispositive Power

With:

1,930,369

-0-

Aggregate Amount Beneficially Owned by Each Reporting Person

1,930,369

10. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)

Page 5 of 10 pages

11.	Percent of Class Represented by Amount in Row (9)
12.	5.3% Type of Reporting Person (See Instructions)
	IN

Item 1(a) Name of Issuer:

Agios Pharmaceuticals, Inc.

<u>Item 1(b)</u> <u>Address of Issuer s Principal Executive Offices:</u>

38 Sidney St, 2nd Floor

Cambridge, Massachusetts 02139 USA

<u>Item 2(a)</u> <u>Name of Person Filing:</u>

The reporting persons are:

Flagship Ventures Fund 2007, L.P. (Flagship Fund)

Flagship Ventures 2007 General Partner LLC (Flagship GP)

Noubar B. Afeyan, Ph.D. (Mr. Afeyan)

Edwin M. Kania, Jr. (Mr. Kania)

Item 2(b) Address of Principal Business Office or, if None, Residence:

The address of each of the reporting persons is:

c/o Flagship Ventures

One Memorial Drive, 7th Floor

Cambridge, Massachusetts 02142

<u>Item 2(c)</u> <u>Citizenship:</u>

Flagship Fund Delaware limited partnership

Flagship GP Delaware limited liability company

Mr. Afeyan U.S. citizen
Mr. Kania U.S. citizen

<u>Item 2(d)</u> <u>Title of Class of Securities:</u>

This Schedule 13G report relates to the Common Stock, par value \$0.01 per share (Common Stock), of Agios Pharmaceuticals, Inc.

<u>Item 2(e)</u> <u>CUSIP Number:</u>

00847X104

Page 6 of 10 pages

<u>Item 3</u> <u>Description of Person Filing:</u>

Not applicable.

<u>Item 4</u> <u>Ownership:</u>

(a) Amount Beneficially Owned:

As of December 31, 2014 Flagship Fund was the record holder of 1,930,369 shares of Common Stock (the Shares).

As the general partner of Flagship Fund, Flagship GP may be deemed to beneficially own the Shares.

Messrs. Afeyan and Kania, as managing members of Flagship GP with shared voting and dispositive power over the Shares, may be deemed to beneficially own the Shares.

Each of the Reporting Persons expressly disclaims beneficial ownership of the Shares except to the extent of its or his pecuniary interest therein.

(b) Percent of Class:

Flagship Fund	5.3%
Flagship GP	5.3%
Mr. Afeyan	5.3%
Mr. Kania	5.3%

The ownership percentages above are based on an aggregate of 36,628,994 shares of Common Stock outstanding, as reported in the Form 424B5 filed by the Issuer with the SEC on December 11, 2014.

(c) Number of Shares as to which the Person has:

	NUMBE	R OF SHARES	OF COM	MON STOCK
Reporting Person	(i)	(ii)	(iii)	(iv)
Flagship Fund	0	1,930,369	0	1,930,369
Flagship GP	0	1,930,369	0	1,930,369
Mr. Afeyan	0	1,930,369	0	1,930,369
MrKania	0	1,930,369	0	1,930,369

- (i) Sole power to vote or direct the vote
- (ii) Shared power to vote or to direct the vote

- (iii) Sole power to dispose or to direct the disposition of
- (iv) Shared power to dispose or to direct the disposition of

Page 7 of 10 pages

<u>Item 5</u> <u>Ownership of Five Percent or Less of a Class:</u>

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following ".

<u>Item 6</u> <u>Ownership of More than Five Percent on Behalf of Another Person:</u>

Not applicable.

<u>Item 7</u> <u>Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person:</u>

Not applicable.

<u>Item 8</u> <u>Identification and Classification of Members of the Group:</u>

Each of the Reporting Persons expressly disclaims membership in a Group as defined in Rule 13d-1(b)(ii)(K).

<u>Item 9</u> <u>Notice of Dissolution of Group:</u>

Not applicable.

<u>Item 10</u> <u>Certification:</u>

Not applicable.

This Schedule 13G is not filed pursuant to Rule 13d-1(b) or Rule 13d-1(c).

Page 8 of 10 pages

SIGNATURES

After reasonable inquiry and to the best of the knowledge and belief of each of the undersigned, each of the undersigned hereby certifies that the information set forth in this statement is true, complete and correct.

DATED: February 10, 2015

FLAGSHIP VENTURES FUND 2007, L.P.

By: Flagship Ventures 2007 General Partner LLC, its general partner

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D. Title: Managing Member

FLAGSHIP VENTURES 2007 GENERAL PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D. Title: Managing Member

/s/ Noubar B. Afeyan, Ph. D NOUBAR B. AFEYAN, PH.D.

/s/ Edwin M. Kania, Jr. EDWIN M. KANIA, JR.

Page 9 of 10 pages

Exhibit I

Joint Filing Agreement

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that only one statement containing the information required by Schedule 13G need be filed with respect to the ownership by each of the undersigned of the shares of Common Stock of Agios Pharmaceuticals, Inc. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original.

EXECUTED as of this 10th day of February, 2015.

FLAGSHIP VENTURES FUND 2007, L.P.

By: Flagship Ventures 2007 General Partner LLC, its general partner

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D. Title: Managing Member

FLAGSHIP VENTURES 2007 GENERAL PARTNER LLC

By: /s/ Noubar B. Afeyan, Ph. D. Name: Noubar B. Afeyan, Ph. D. Title: Managing Member

/s/ Noubar B. Afeyan, Ph. D NOUBAR B. AFEYAN, PH.D.

/s/ Edwin M. Kania, Jr. EDWIN M. KANIA, JR.

Page 10 of 10 pages