## 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)

**⊠** 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) ⊠				
3.	SEC Use Only				
4.	Citizenship or Place of Organization				
	Delaware				
	5. Sole Voting Power				
	0-				
Numbe Share	er of Construction D				
Benefic	ially				
Owned	lby 1,930,369				
Eacl Report	71 Sole Bispositive Tower				
Perso	on   <sub>-0-</sub>				
With	8. Shared Dispositive Power				
	1,930,369				
9.	Aggregate Amount Beneficially Owned by Each Reporting Person				
10.	1,930,369 Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions)				
10.	Check if the Aggregate Amount in Row (7) Excludes Certain Shales (See instructions)				
11.	Percent of Class Represented by Amount in Row (9)				
	5.3%				
12.	Type of Reporting Person (See Instructions)				
	PN				

1.	Names of Reporting Persons.				
	Flagship Ventures 2007 General Partner LLC				
2.	Check the Appropriate Box if a Member of a Group (See Instructions)				
	(a) □ (b) ⊠				
3.	SEC Use Only				
4.	Citizenship or Place of Organization				
	Delaware				
	5. Sole Voting Power				
Numbe	rof -0-				
Share	Shared Voting Power				
Benefic Owned					
Eacl Report	7. Sole Dispositive Power				
Perso	n     -0-				
With	8. Shared Dispositive Power				
	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)				
12.	Type of responding Leison (occ moductions)				
	00				

Page 3 of 10 pages

1.	Names of Reporting Persons.  I.R.S. Identification Nos. of above persons (entities only).				
	Noubar B. Afeyan Ph.D.				
2.	Check the Appropriate Box if a Member of a Group (See Instructions)				
	(a) □ (b) ⊠				
3.	SEC Use Only				
4.	Citizenship or Place of Organization				
	United States				
	5. Sole Voting Power				
Numbe	er of -0-				
Share Benefic					
Owned	lby 1,930,369				
Eacl Report	71 Sole Bispositive Tower				
Perso With	-U-				
***	8. Shared Dispositive Power				
	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)				
	IN				

Page 4 of 10 pages

1.	Names of Reporting Persons.  I.R.S. Identification Nos. of above persons (entities only).
	Edwin M. Kania, Jr.
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
	(a) □ (b) ⊠
3.	SEC Use Only
4.	Citizenship or Place of Organization
	United States
	5. Sole Voting Power
Numbe	or of -0-
Share	6. Shared Voting Power
Benefic Owned	lby 1,930,369
Eacl Report	71 Sole Bispositive Tower
Perso With	on
With	8. Shared Dispositive Power
	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)
	IN

Page 5 of 10 pages

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")

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

The address of each of the reporting persons is:

c/o Flagship Ventures

One Memorial Drive, 7th Floor Cambridge, Massachusetts 02142

Item 2(c) <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.

Item 2(e) CUSIP Number:

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:

		NUMBER OF SHARES OF COMMON 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

<sup>(</sup>i) Sole power to vote or direct the vote

<sup>(</sup>ii) Shared power to vote or to direct the vote

<sup>(</sup>iii) Sole power to dispose or to direct the disposition of

<sup>(</sup>iv) Shared power to dispose or to direct the disposition of

Ownership of Five Percent or Less of a Class: Item 5

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  $\Box$ .

Item 6 Ownership of More than Five Percent on Behalf of Another Person:

Not applicable.

Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or

Control Person: Not applicable.

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

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

Item 9 Notice of Dissolution of Group:

Not applicable.

<u>Item 10</u> Certification:

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

#### **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