
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

Agios Pharmaceuticals, Inc.
(Name of Issuer)

Common Stock, \$0.001 par value
(Title of Class of Securities)

00847X104
(CUSIP Number)

Robert J. Hugin
Chairman of the Board,
President and Chief Executive Officer
Celgene Corporation
86 Morris Avenue
Summit, New Jersey 07901
(908) 673-9000

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

April 29, 2014
(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g) check the following box:

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

* 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 disclosures provided in a prior cover page.

The information required on 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).

SCHEDULE 13D

CUSIP No. 00847X104

1	Name of reporting person: I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) CELGENE EUROPEAN INVESTMENT COMPANY LLC 90-0587060	
2	Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds* WC	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware, U.S.A.	
Number of shares beneficially owned by each reporting person with	7	Sole voting power -0-
	8	Shared voting power 4,010,926
	9	Sole dispositive power -0-
	10	Shared dispositive power 4,010,926
11	Aggregate amount beneficially owned by each reporting person 4,010,926	
12	Check box if the aggregate amount in Row (9) excludes certain shares* <input type="checkbox"/>	
13	Percent of class represented by amount in Row (9) 11.8% (1)	
14	Type of reporting person* OO (limited liability company)	

- (1) The percentage ownership is based upon 33,919,046 shares of Common Stock outstanding as of April 29, 2014, which includes (a) 31,919,046 shares of Common Stock outstanding as of April 23, 2014, as reported by Agios to Celgene on such date, and (b) 2,000,000 shares of Common Stock issued by Agios on April 29, 2014.

1	Name of reporting person: I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) CELGENE ALPINE INVESTMENT CO., LLC 45-4054818	
2	Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds* WC	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware, U.S.A.	
Number of shares beneficially owned by each reporting person with	7	Sole voting power -0-
	8	Shared voting power 708,333
	9	Sole dispositive power -0-
	10	Shared dispositive power 708,333
11	Aggregate amount beneficially owned by each reporting person 708,333	
12	Check box if the aggregate amount in Row (9) excludes certain shares* <input type="checkbox"/>	
13	Percent of class represented by amount in Row (9) 2.1% (1)	
14	Type of reporting person* OO (limited liability company)	

(1) The percentage ownership is based upon 33,919,046 shares of Common Stock outstanding as of April 29, 2014, which includes (a) 31,919,046 shares of Common Stock outstanding as of April 23, 2014, as reported by Agios to Celgene on such date, and (b) 2,000,000 shares of Common Stock issued by Agios on April 29, 2014.

1	Name of reporting person: I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) CELGENE CORPORATION 22-2711928	
2	Check the appropriate box if a member of a group* (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3	SEC use only	
4	Source of funds* WC	
5	Check box if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e) <input type="checkbox"/>	
6	Citizenship or place of organization Delaware, U.S.A.	
Number of shares beneficially owned by each reporting person with	7	Sole voting power -294,800-
	8	Shared voting power 4,719,259
	9	Sole dispositive power -294,800-
	10	Shared dispositive power 4,719,259
11	Aggregate amount beneficially owned by each reporting person 5,014,059	
12	Check box if the aggregate amount in Row (9) excludes certain shares* <input type="checkbox"/>	
13	Percent of class represented by amount in Row (9) 14.8% (1)	
14	Type of reporting person* CO	

(1) The percentage ownership is based upon 33,919,046 shares of Common Stock outstanding as of April 29, 2014, which includes (a) 31,919,046 shares of Common Stock outstanding as of April 23, 2014, as reported by Agios to Celgene on such date, and (b) 2,000,000 shares of Common Stock issued by Agios on April 29, 2014.

This Amendment No. 1 amends the Schedule 13D (the “**Schedule 13D**”) filed with the Securities and Exchange Commission on August 6, 2013 by Celgene European Investment Company LLC, Celgene Alpine Investment Co., LLC (“**Celgene Alpine**”) and Celgene Corporation (“**Celgene**”) with respect to common stock, par value \$0.001 per share (“**Common Stock**”), of Agios Pharmaceuticals, Inc., a Delaware corporation (“**Agios**”). Capitalized terms used, but not defined herein, have the meanings ascribed to them in the Schedule 13D.

Item 1. Security and Issuer.

No modification.

Item 2. Identity and Background.

No modification.

Item 3. Source and Amount of Funds or Other Consideration.

No modification.

Item 4. Purpose of Transaction.

Item 4 is hereby amended and supplemented by adding the following:

On April 29, 2014, Agios completed its underwritten public offering (the “**Offering**”) of 2,000,000 shares of Common Stock at a public offering price of \$44.00 per share, and Celgene purchased (the “**Purchase**”) 294,800 shares of Common Stock at a purchase price of \$44.00 per share in the Offering for investment purposes. Following the Offering and the Purchase, Celgene beneficially owns 294,800 shares of Common Stock and shares beneficial ownership of 4,719,259 shares of Common Stock, collectively representing approximately 14.8% of the shares of Common Stock outstanding as of April 29, 2014, which includes (a) 31,919,046 shares of Common Stock outstanding as of April 23, 2014, as reported by Agios to Celgene on such date, and (b) 2,000,000 shares of Common Stock issued by Agios on April 29, 2014.

Item 5. Interest in Securities of the Issuer.

Item 5(a)-(c) is hereby amended and supplemented as follows:

On April 29, 2014, Agios completed the Offering and Celgene completed the Purchase. Following the Offering and the Purchase, Celgene beneficially owns 294,800 shares of Common Stock and shares beneficial ownership of 4,719,259 shares of Common Stock, collectively representing approximately 14.8% of the shares of Common Stock outstanding as of April 29, 2014, which includes (a) 31,919,046 shares of Common Stock outstanding as of April 23, 2014, as reported by Agios to Celgene on such date, and (b) 2,000,000 shares of Common Stock issued by Agios on April 29, 2014.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

Item 6 is hereby amended and supplemented by adding the following:

On April 29, 2014, Celgene Alpine entered into an Adoption Agreement with Agios (the “ **Adoption Agreement**”), pursuant to which Celgene Alpine became a party to the Investor Rights Agreement. A copy of the Adoption Agreement is filed as Exhibit 8 hereto.

Item 7. Material to Be Filed as Exhibits.

Item 7 is hereby amended and supplemented by adding the following:

Exhibit 8 – Adoption Agreement, dated as of April 29, 2014, between Agios and Celgene Alpine.

SIGNATURE

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

CELGENE EUROPEAN INVESTMENT COMPANY LLC

By: /s/ Jonathan Biller

Jonathan Biller
Manager

CELGENE ALPINE INVESTMENT CO., LLC

By: /s/ Jonathan Biller

Jonathan Biller
Manager

CELGENE CORPORATION

By: /s/ Perry Karsen

Perry Karsen
Executive Vice President and Chief Operations Officer

ADOPTION AGREEMENT

This Adoption Agreement (the “**Adoption Agreement**”) is executed on April 29, 2014, by the undersigned (the “**Holder**”) pursuant to the terms of that certain Second Amended and Restated Investor Rights Agreement dated as of November 16, 2011 (the “**Agreement**”), by and among Agios Pharmaceuticals, Inc., a Delaware corporation (the “**Company**”), and the Purchasers listed therein, as such Agreement may be amended or amended and restated hereafter. Capitalized terms used but not defined in this Adoption Agreement shall have the respective meanings ascribed to such terms in the Agreement. By the execution of this Adoption Agreement, the Holder agrees as follows.

1.1 Acknowledgement. Holder acknowledges that Holder has acquired certain shares of common stock, \$0.001 par value per share, of the Company (the “**Stock**”) pursuant to that certain Common Stock Purchase Agreement dated as of July 16, 2013 (the “**Stock Purchase Agreement**”), between the Company and Holder.

1.2 Agreement. In connection with the Stock Purchase Agreement, Holder hereby (a) agrees that the Stock shall be bound by and subject to the terms of the Agreement as Registrable Shares for all purposes thereunder and (b) adopts the Agreement with the same force and effect as if Holder were originally a Purchaser thereunder.

1.3 Notice. Any notice required or permitted by the Agreement shall be given to Holder at the address listed below Holder’s signature hereto.

HOLDER:

CELGENE ALPINE INVESTMENT CO., LLC

By: Celgene International Sarl, sole member

By: /s/ Perry Karsen
Name: Perry Karsen
Title: Authorized Person

ACCEPTED AND AGREED:

AGIOS PHARMACEUTICALS, INC.

By: /s/ David Schenkein
Name: David Schenkein
Title: Chief Executive Officer