

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934
(Amendment No. 5)*

Agios Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

00847X104

(CUSIP Number)

Mark J. Alles
Chairman of the Board 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)

November 12, 2019

(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 that is the subject of this Schedule 13D, and is filing this schedule because of §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-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 Section 240.13d-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, as amended ("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.	
	CELGENE SWITZERLAND LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a) <input type="checkbox"/>	
	(b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions)	
	WC	
5.	Check 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, USA	
	7.	Sole Voting Power
Number of Shares Beneficially Owned by Each Reporting Person With		0
	8.	Shared Voting Power
		624,575
	9.	Sole Dispositive Power
		0
	10.	Shared Dispositive Power
		624,575
11.	Aggregate Amount Beneficially Owned by Each Reporting Person	
	624,575	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11)	
	0.9% (1)	
14.	Type of Reporting Person (See Instructions)	
	OO	

(1) The percentage ownership is based upon 67,127,691 shares of Common Stock outstanding as of November 12, 2019, which includes the shares of Common Stock issued by Agios in the Offering (as defined below), as reported by Agios in its prospectus supplement filed with the Securities and Exchange Commission on November 11, 2019.

1. Names of Reporting Persons.

CELGENE EUROPEAN INVESTMENT COMPANY LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware, USA

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 if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
6.0% (1)

14. Type of Reporting Person (See Instructions)
OO

(1) The percentage ownership is based upon 67,127,691 shares of Common Stock outstanding as of November 12, 2019, which includes the shares of Common Stock issued by Agios in the Offering (as defined below), as reported by Agios in its prospectus supplement filed with the Securities and Exchange Commission on November 11, 2019.

1. Names of Reporting Persons.

CELGENE ALPINE INVESTMENT CO., LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware, USA

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 if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)
1.1% (1)

14. Type of Reporting Person (See Instructions)
OO

(1) The percentage ownership is based upon 67,127,691 shares of Common Stock outstanding as of November 12, 2019, which includes the shares of Common Stock issued by Agios in the Offering (as defined below), as reported by Agios in its prospectus supplement filed with the Securities and Exchange Commission on November 11, 2019.

1.	Names of Reporting Persons.	
	CELGENE CORPORATION	
2.	Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a) <input type="checkbox"/>	
	(b) <input checked="" type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds (See Instructions)	
	WC	
5.	Check 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, USA	
	7.	Sole Voting Power
Number of Shares Beneficially Owned by Each Reporting Person With		1,777,824
	8.	Shared Voting Power
		5,343,834
	9.	Sole Dispositive Power
		1,777,824
	10.	Shared Dispositive Power
		5,343,834
11.	Aggregate Amount Beneficially Owned by Each Reporting Person	
	7,121,658	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11)	
	10.6% (1)	
14.	Type of Reporting Person (See Instructions)	
	CO	

(1) The percentage ownership is based upon 67,127,691 shares of Common Stock outstanding as of November 12, 2019, which includes the shares of Common Stock issued by Agios in the Offering (as defined below), as reported by Agios in its prospectus supplement filed with the Securities and Exchange Commission on November 11, 2019.

This Amendment No. 5 amends the Schedule 13D (the “**Schedule 13D**”) filed with the Securities and Exchange Commission (the “**Commission**”) on August 6, 2013 by Celgene Switzerland LLC, Celgene European Investment Company LLC, Celgene Alpine Investment Co., LLC and Celgene Corporation (“**Celgene**”), as amended by Amendment No. 1 thereto filed with the Commission on April 30, 2014, as amended by Amendment No. 2 thereto filed with the Commission on December 17, 2014, as amended by Amendment No. 3 thereto filed with the Commission on April 24, 2017, and as amended by Amendment No. 4 thereto filed with the Commission on January 23, 2018, 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

Item 2 is hereby amended and supplemented by adding the Schedule A hereto. During the past five years, none of the Reporting Persons, nor, to the knowledge of the Reporting Persons, any of the persons listed on Schedule A hereto, has been (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors), or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

The Reporting Persons acquired beneficial ownership of the shares of the Common Stock in the transactions described in Item 5 at a purchase price of \$31.00 per share. The source of these funds was the working capital of Celgene.

Item 4. Purpose of Transaction

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

On November 12, 2019, Agios completed its underwritten public offering (the “**Offering**”) of 8,250,000 shares of Common Stock at a public offering price of \$31.00 per share, and Celgene purchased (the “**Purchase**”) 403,225 shares of Common Stock at a purchase price of \$31.00 per share in the Offering for investment purposes.

Item 5. Interest in Securities of the Issuer

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

On November 12, 2019, Agios completed the Offering and Celgene completed the Purchase. Following the Offering and the Purchase, Celgene beneficially owns 1,777,824 shares of Common Stock and Celgene shares beneficial ownership of an aggregate of 7,121,658 shares of Common Stock, collectively representing approximately 10.6% of the 67,127,691 shares of Common Stock outstanding as of November 12, 2019, which includes the shares of Common Stock issued in the Offering, as reported by Agios in its prospectus supplement filed with the Commission on November 11, 2019.

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:

In connection with the Offering, Celgene and the underwriters of the Offering entered into a letter agreement (the “**Lock-up Agreement**”), pursuant to which Celgene agreed not to, among other things, offer, pledge, sell or transfer any Agios securities for a period of 60 days after the date of the final prospectus relating to the Offering without the consent of the underwriters of the Offering, subject to certain limited exceptions.

Item 7. Material to be Filed as Exhibits

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

Exhibit 8 – Form of Lock-up Agreement (incorporated by reference to Exhibit A-2 to Exhibit 1.1 filed with Agios’s Form 8-K on November 8, 2019)

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

CELGENE SWITZERLAND LLC

Date: November 14, 2019

By: /s/ Kevin Mello

Kevin Mello
Manager

CELGENE EUROPEAN INVESTMENT COMPANY LLC

Date: November 14, 2019

By: /s/ Kevin Mello

Kevin Mello
Manager

CELGENE ALPINE INVESTMENT CO., LLC

Date: November 14, 2019

By: /s/ Kevin Mello

Kevin Mello
Manager

CELGENE CORPORATION

Date: November 14, 2019

By: /s/ David V. Elkins

David V. Elkins
Executive Vice President and
Chief Financial Officer

SCHEDULE A

Name, business address, present principal occupation or employment and place of citizenship of the directors and executive officers of the Reporting Persons

The name, business address and present principal occupation or employment of each of the directors and executive officers of the Reporting Persons are set forth below. The business address of each director and executive officer is c/o 86 Morris Avenue, Summit, New Jersey 07901. Unless otherwise indicated, each director and executive officer is a citizen of the United States.

CELGENE CORPORATION – BOARD OF DIRECTORS

Name and Position	Present Principal Occupation or Employment
Mark J. Alles Chairman of the Board and Chief Executive Officer	Chairman of the Board and Chief Executive Officer of Celgene Corporation
Richard W. Barker, D.Phil., OBE Director (Citizen of the United Kingdom)	Chairman of the Health Innovation Network of South London, UK; Chairman of International Health Partners; Chairman of Image Analysis Group
Hans Bishop Director	Chief Executive Officer of GRAIL, Inc.; Chairman of the Board of Directors of Lyell Immunopharma, Inc.; member of the Board of Directors of Agilent Technologies, Inc.
Michael W. Bonney Director	Executive Chair of Kaleido Biosciences, Inc.; Chairman of the Board of Alnylam Pharmaceuticals, Inc.; Chairman of the Board of Directors of Magenta Therapeutics; member of the Board of Directors of Sarepta Therapeutics Inc. and Syros Pharmaceuticals
Michael D. Casey Director	Formerly Chairman, President, Chief Executive Officer and a director of Matrix Pharmaceutical, Inc.
Carrie S. Cox Director	Chairman of the Board of Directors of Humacyte, Inc.; Chairman of the Board of Array BioPharma, Inc. and electroCore Inc.; member of Board of Directors of Texas Instruments; member of Board of Directors of Cardinal Health, Inc.
Michael A. Friedman, M.D. Director	Emeritus Chief Executive Officer of City of Hope; member of the Board of Directors of Intuitive Surgical, Inc. and MannKind Corporation; member of Board of Trustees of Tulane University
Julia A. Haller, M.D. Director	Ophthalmologist-in-Chief of the Wills Eye Hospital, Philadelphia, PA; Professor and Chair of the Department of Ophthalmology at Jefferson Medical College of Thomas Jefferson University and Thomas Jefferson University Hospitals
Patricia A. Hemingway Hall Director	Former President and Chief Executive Officer of Health Care Service Corporation; member of the Board of Directors of Cardinal Health, Inc., ManpowerGroup Inc. and Halliburton Company
James J. Loughlin Director	Formerly National Director of the Pharmaceuticals Practice at KPMG LLP; member of Board of Directors of Edge Therapeutics, Inc.
Ernest Mario, Ph.D. Director	Chairman of the Board of Soleno Therapeutics Inc. (formerly Capnia, Inc.); member of the Board of Directors of Eyenovia Inc. and Kindred Biosciences, Inc.
John H. Weiland Director	Former President and Chief Operating Officer of C. R. Bard, Inc.; member of the Board of Directors of Cardinal Health, Inc. and the Horatio Alger Association.

CELGENE CORPORATION – EXECUTIVE OFFICERS

Name	Title
Mark J. Alles	Chairman of the Board and Chief Executive Officer
Nadim Ahmed	President, Global Hematology & Oncology
Jonathan Biller	Executive Vice President and General Counsel
Terrie J. Curran	President, Global Inflammation and Immunology
David V. Elkins	Executive Vice President and Chief Financial Officer
Alise Reicin, M.D.	President, Global Clinical Development
S.J. Rupert Vessey, MA, BM BCh, FRCP, D.Phil	President, Research and Early Development

CELGENE SWITZERLAND LLC

Name	Present Principal Occupation or Employment
Kevin Mello (Citizen of Bermuda)	Manager of Celgene Switzerland LLC

CELGENE EUROPEAN INVESTMENT COMPANY LLC

Name	Present Principal Occupation or Employment
Kevin Mello (Citizen of Bermuda)	Manager of Celgene European Investment Company LLC

CELGENE ALPINE INVESTMENT CO., LLC

Name	Present Principal Occupation or Employment
Kevin Mello (Citizen of Bermuda)	Manager of Celgene Alpine Investment Co., LLC
