Anthera Pharmaceuticals Inc Form SC 13D/A July 03, 2012

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D (Amendment No. 4)

Under the Securities Exchange Act of 1934

Anthera Pharmaceuticals, Inc.

(Name of Issuer)

Common Stock, Par Value \$0.001 Per Share

(Title of Class of Securities)

03674U 102

(CUSIP Number)

OrbiMed Advisors LLC OrbiMed Capital GP IV LLC Samuel D. Isaly 601 Lexington Avenue, 54th Floor New York, NY 10022 Telephone: (212) 739-6400

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

June 29, 2012

(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 §§ 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g) check the following box o.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §§ 240.13d-7(b) 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).

(Continued on following pages)

SCHEDULE 13D

CUSIP No. 03674U 102

Page 2 of 10 Pages

1	NAME OF REP	ORTING PERSON	S	
1	OrbiMed Advisors LLC			
2	CHECK THE A Instructions) (a) o (b) o	PPROPRIATE BO	X IF A MEMBER OF A GROUP (See	
3	SEC USE ONLY	7		
4	SOURCE OF FU	JNDS (See Instructi	ions)	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED o PURSUANT TO ITEMS 2(d) or 2(e)			
6	CITIZENSHIP (Delaware	OR PLACE OF OR	GANIZATION	
В	NUMBER OF SHARES ENEFICIALLY OWNED BY EACH REPORTING PERSON	7 8 9	SOLE VOTING POWER 0 SHARED VOTING POWER 1,333,334 SOLE DISPOSITIVE POWER 0	
** 1 1 1 1		10	SHARED DISPOSITIVE POWER	

1,333,334

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

11

- 1,333,334
- 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES o CERTAIN SHARES (See Instructions)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

3.14%*

IA

TYPE OF REPORTING PERSON (See Instructions)

14

* All percentage calculations set forth herein assume that there are 41,081,870 Shares (as herein defined) outstanding, based on information provided by Anthera Pharmaceuticals, Inc.

SCHEDULE 13D

CUSIP No. 03674U 102

Page 3 of 10 Pages

1	NAME OF REPO	ORTING PERSONS		
1	OrbiMed Capital GP IV LLC			
2	CHECK THE AF Instructions) (a) o (b) o	PPROPRIATE BOX I	F A MEMBER OF A GROUP (See	
3	SEC USE ONLY			
4	SOURCE OF FU N/A	NDS (See Instruction	is)	
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6	CITIZENSHIP O Delaware	R PLACE OF ORGA	NIZATION	
В	NUMBER OF SHARES ENEFICIALLY OWNED BY EACH REPORTING PERSON	7 8 9	SOLE VOTING POWER 0 SHARED VOTING POWER 1,333,334 SOLE DISPOSITIVE POWER	
WITH		10	0 SHARED DISPOSITIVE POWER	

1,333,334

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SCHEDULE 13D

CUSIP No. 03674U 102

Page 4 of 10 Pages

1	NAME OF REPORTING PERSONS			
1	Samuel D. Isaly			
2	CHECK THE Al Instructions) (a) o (b) o	PPROPRIATE BOX I	F A MEMBER OF A GROUP (See	
3	SEC USE ONLY	7		
4	SOURCE OF FU	INDS (See Instruction	as)	
	N/A			
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED o PURSUANT TO ITEMS 2(d) or 2(e)			
	CITIZENSHIP OR PLACE OF ORGANIZATION			
6	United States			
		7	SOLE VOTING POWER	
I	NUMBER OF	7	0	
SHARES BENEFICIALLY OWNED BY EACH		8	SHARED VOTING POWER	
			1,333,334	
]	REPORTING	9	SOLE DISPOSITIVE POWER	
PERSON WITH		9	0	
			SHARED DISPOSITIVE POWER	
		10	1,333,334	
11	AGGREGATE A	MOUNT BENEFICI	ALLY OWNED BY EACH REPORTING PERSON	
11				

- 1,333,334
- 12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES o CERTAIN SHARES (See Instructions)

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

13

3.14%*

IN

TYPE OF REPORTING PERSON (See Instructions)

14

* All percentage calculations set forth herein assume that there are 41,081,870 Shares (as herein defined) outstanding, based on information provided by Anthera Pharmaceuticals, Inc.

Item 1. Security and Issuer.

This Schedule 13D relates to the common stock, par value \$0.001 per share ("Shares"), of Anthera Pharmaceuticals, Inc., a corporation organized under the laws of the state of Delaware (the "Issuer"), with its principal executive offices located at 25801 Industrial Boulevard, Suite B, Hayward, California 94545. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

Item 2.

Identity and Background.

(a) This Statement is being filed by OrbiMed Advisors LLC, a limited liability company organized under the laws of Delaware, OrbiMed Capital GP IV LLC, a limited liability company organized under the laws of Delaware, and Samuel D. Isaly ("Isaly"), an individual (collectively, the "Reporting Persons").

(b) – (c) OrbiMed Advisors LLC, a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the sole managing member of OrbiMed Capital GP IV LLC. OrbiMed Capital GP IV LLC is the sole general partner of OrbiMed Private Investments IV, LP ("OPI IV"), which holds Shares, as more particularly described in Item 6 below. OrbiMed Advisors LLC has its principal offices at 601 Lexington Avenue, 54th Floor, New York, NY 10022.

OrbiMed Capital GP IV LLC has its principal offices at 601 Lexington Avenue, 54th Floor, New York, NY 10022.

Isaly, a natural person, owns a controlling interest in OrbiMed Advisors LLC.

The directors and executive officers of OrbiMed Advisors LLC and OrbiMed Capital GP IV LLC are set forth on Schedules I and II, attached hereto. Schedules I and II set forth the following information with respect to each such person:

(i) name;

(ii) business address (or residence address where indicated);

(iii) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted;

(iv) citizenship.

(d) - (e) During the last five years, neither the Reporting Persons nor any Person named in Schedules I or II have been (i) convicted in a criminal proceeding (excluding traffic violations or 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.

(f) Isaly is a citizen of the United States.

Item 3.

Source and Amount of Funds or Other Considerations.

Not Applicable.

Item 4.

Purpose of Transaction.

As described more fully in Item 5 below, this statement relates to the disposition of Shares by the Reporting Persons. The Shares initially had been acquired (and those that continue to be held, are held) by the Reporting Persons for the purpose of making an investment in the Issuer and not with the intention of acquiring control of the Issuer's business on behalf of OPI IV.

The Reporting Persons from time to time intend to review their investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general

economic and industry conditions, the securities markets in general and those for the Issuer's Shares in particular, as well as other developments and other investment opportunities. Based upon such review, the Reporting Persons will take such actions in the future as the Reporting Persons may deem appropriate in light of the circumstances existing from time to time. If the Reporting Persons believe that further investment in the Issuer is attractive, whether because of the market price of the Issuer's Shares or otherwise, they may acquire Shares or other securities of the Issuer either in the open market or in privately negotiated transactions. Similarly, depending on market and other factors, the Reporting Persons may determine to dispose of some or all of the Shares currently owned by the Reporting Persons or otherwise acquired by the Reporting Persons either in the open market or in privately negotiated transactions.

Except as set forth herein, the Reporting Persons have not formulated any plans or proposals which relate to or would result in: (a) the acquisition by any person of additional securities of the Issuer or the disposition of securities of the Issuer, (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries, (c) a sale or transfer of a material amount of the assets of the Issuer or any of its subsidiaries, (d) any change in the present Board of Directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board, (e) any material change in the Issuer's capitalization or dividend policy, (f) any other material change in the Issuer's business or corporate structure, (g) any change in the Issuer's charter or bylaws or other or instrument corresponding thereto or other action which may impede the acquisition of control of the Issuer by any person, (h) causing a class of the Issuer's securities to be deregistered or delisted from a national securities association, (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act or (j) any action similar to any of those enumerated above.

Item 5.

Interest in Securities of the Issuer.

(a) – (b) As of this date of this filing, OrbiMed Advisors LLC, OrbiMed Capital GP IV LLC and Isaly may be deemed directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of 1,333,334 Shares. Based upon information contained in the most recent available filing by the Issuer with the SEC, such Shares constitute approximately 3.14% of the issued and outstanding Shares. As a result of the agreements and relationships described in Item 2 above and Item 6 below, OrbiMed Advisors LLC, OrbiMed Capital GP IV LLC and Isaly share power to direct the vote and to direct the disposition of the Shares described in this Item 5.

(c) Since the transactions reported in Amendment No. 3 to the Schedule 13D, the Reporting Persons have engaged in the following transactions with respect to the Shares effected in the open market:

(i) On June 29, 2012, OrbiMed Advisors LLC and OrbiMed Capital GP IV LLC, pursuant to their authority under the limited partnership agreement of OPI IV, as more particularly referred to in Item 6 below, caused OPI IV to dispose of in the aggregate 1,283,300 Shares at a weighted-average price per share of \$0.7341 (all such Shares were purchased more than 60 days prior to June 29, 2012);

(d) Not applicable.

(e) On June 29, 2012, the Reporting Persons ceased to be the beneficial owners of more than five percent of the Shares.

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

In addition to the relationships between the Reporting Persons described in Items 2 and 5, OrbiMed Capital GP IV LLC is the sole general partner of OPI IV, pursuant to the terms of the limited partnership agreement of OPI IV, and

OrbiMed Advisors LLC is the sole managing member of OrbiMed Capital GP IV LLC, pursuant to the terms of the limited liability company agreement of OrbiMed Capital GP IV LLC. Pursuant to these agreements and relationships, OrbiMed Advisors LLC and OrbiMed Capital GP IV LLC have discretionary investment management authority with respect to the assets of OPI IV. Such authority includes the power to vote and otherwise dispose of securities purchased by OPI IV. The number of outstanding Shares of the Issuer attributable to OPI IV is 0 (zero) Shares and a warrant to purchase 1,333,334 Shares. OrbiMed Advisors LLC, pursuant to its authority as the

managing member of OrbiMed Capital GP IV LLC may be considered to hold indirectly 0 (zero) Shares and a warrant to purchase 1,333,334 Shares and OrbiMed Capital GP IV LLC, pursuant to its authority as the general partner of OPI IV, may be considered to hold indirectly 0 (zero) Shares and a warrant to purchase 1,333,334 Shares.

The Issuer disclosed on February 1, 2011 that its Board of Directors had appointed Peter Thompson, M.D., a Venture Partner with OrbiMed Advisors LLC, to serve thereon. Accordingly, the Reporting Persons may have the ability to affect and influence control of the Issuer.

Other than the agreements and the relationships mentioned above, to the best knowledge of the Reporting Persons, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any persons with respect to any securities of the Issuer, including, but not limited to, transfer or voting of any of the Shares, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving of withholding of proxies.

Item 7.

Materials to be Filed as Exhibits.

1. Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital GP IV LLC and Samuel D. Isaly

SIGNATURES

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

Dated: July 3, 2012

OrbiMed Advisors LLC

By:	/s/ Samuel D. Isaly			
•	Name:	Samuel D. Isaly		
	Title:	Managing Member		
OrbiMed Capital GP IV LLC				
By:	OrbiMed Advisors LLC, its Managing Member			
By:	/s/ Samuel D. Isaly			
	Name:	Samuel D. Isaly		
	Title:	Managing Member		
By: /o/ Somuel D. Isoly				

By: /s/ Samuel D. Isaly Name: Samuel D. Isaly

Schedule I

The name and present principal occupation of each of the executive officers and directors of OrbiMed Advisors LLC are set forth below. Unless otherwise noted, each of these persons are United States citizens and have as their business address 601 Lexington Avenue, 54th Floor, New York, NY 10022.

Position with Reporting				
Name	Person	Principal Occupation		
Samuel D. Isaly	Managing Member	Managing Member OrbiMed Advisors LLC		
Michael B. Sheffery	Member	Member OrbiMed Advisors LLC		
Carl L. Gordon	Member	Member OrbiMed Advisors LLC		
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Advisors LLC		
Jonathan T. Silverstein	Member	Member OrbiMed Advisors LLC		
W. Carter Neild	Member	Member OrbiMed Advisors LLC		
Geoffrey C. Hsu	Member	Member OrbiMed Advisors LLC		
Evan D. Sotiriou	Chief Financial Officer	Chief Financial Officer OrbiMed Advisors LLC		

Schedule II

The business and operations of OrbiMed Capital GP IV LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth on Schedule I attached hereto.

EXHIBIT INDEX

Exhibit	Description	Page No.
A.	Joint Filing Agreement among OrbiMed Advisors LLC, OrbiMed Capital GP IV LLC and Samuel D. Isaly	A-1