SOFINNOVA VENTURE PARTNERS VI L P Form SC 13D March 12, 2010

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

SCHEDULE 13D

(Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT

TO RULE 13d-l(a) AND AMENDMENTS THERETO FILED PURSUANT

TO RULE 13d-2(a)

(Amendment No. ___)*

ANTHERA PHARMACEUTICALS, INC.

(Name of Issuer)

COMMON STOCK, PAR VALUE \$0.001 PER SHARE

(Title of Class of Securities)

03674U 102

(CUSIP number)

Nathalie Auber

Sofinnova Ventures, Inc.

140 Geary Street, 10th Floor

San Francisco, CA 94108

(415) 228-3393

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

March 4, 2010

(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 Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box ".

(Continued on the following pages)

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^{*} 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 (the Act) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

CUSIP No. 03674U 102 13D Page 2 of 20 pages 1. NAMES OF REPORTING PERSONS Sofinnova Venture Partners VI, L.P. (Sofinnova) 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. WC CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) 5. CITIZENSHIP OR PLACE OF ORGANIZATION 6. Delaware 7. SOLE VOTING POWER NUMBER OF 4,088,648 (1) shares, except that Sofinnova Management VI, L.L.C. (Sofinnova **SHARES** Management), the general partner of Sofinnova, may be deemed to have sole voting power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the BENEFICIALLY managing members of Sofinnova Management, may be deemed to have shared power to vote OWNED BY these shares. 8. SHARED VOTING POWER **EACH** REPORTING **PERSON** See response to row 7 9. SOLE DISPOSITIVE POWER WITH 4,088,648 (1) shares, except that Sofinnova Management, the general partner of Sofinnova,

may be deemed to have sole dispositive power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the managing members of Sofinnova Management,

may be deemed to have shared power to dispose of these shares.

10. SHARED DISPOSITIVE POWER

11.	See response to row 9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
12.	4,088,648 (1) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11

18.8*%

14. TYPE OF REPORTING PERSON

PN

- (1) Includes 3,983,230 shares of Common Stock and 105,418 shares of Common Stock subject to currently exercisable warrants.
- * All percentage calculations set forth herein assume that there are 21,618,334 shares of Common Stock outstanding, based on information provided by Anthera Pharmaceuticals, Inc.

CUSIP No. 03674U 102 13D Page 3 of 20 pages 1. NAMES OF REPORTING PERSONS Sofinnova Venture Affiliates VI, L.P. (SVA VI) 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. WC CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) 5. CITIZENSHIP OR PLACE OF ORGANIZATION 6. **Delaware** 7. SOLE VOTING POWER 5,727 shares, except that Sofinnova Management, the general partner of SVA VI, may be deemed to have sole voting power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the managing members of Sofinnova Management, may be NUMBER OF deemed to have shared power to vote these shares. **SHARES** 8. SHARED VOTING POWER BENEFICIALLY OWNED BY See response to row 7 **EACH** 9. SOLE DISPOSITIVE POWER REPORTING **PERSON** 5,727 shares, except that Sofinnova Management, the general partner of SVA VI, may be WITH deemed to have sole dispositive power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the managing members of Sofinnova Management,

may be deemed to have shared power to dispose of these shares.

10. SHARED DISPOSITIVE POWER

See response to row 9 11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

5,727

- 12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
- 13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11

<0.1%

14. TYPE OF REPORTING PERSON

PN

CUSIP No. 03674U 102 13D Page 4 of 20 pages 1. NAMES OF REPORTING PERSONS Sofinnova Venture Partners VI GmbH & Co. KG (SVP VI KG) 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. WC CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) 5. CITIZENSHIP OR PLACE OF ORGANIZATION 6. Germany 7. SOLE VOTING POWER 83,246 shares, except that Sofinnova Management, the managing limited partner of SVP VI KG, may be deemed to have sole voting power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the managing members of Sofinnova Management, NUMBER OF may be deemed to have shared power to vote these shares. **SHARES** 8. SHARED VOTING POWER BENEFICIALLY OWNED BY See response to row 7 **EACH** 9. SOLE DISPOSITIVE POWER REPORTING **PERSON** 83,246 shares, except that Sofinnova Management, the managing limited partner of SVP VI WITH KG, may be deemed to have sole dispositive power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the managing members of Sofinnova

Management, may be deemed to have shared power to dispose of these shares.

10. SHARED DISPOSITIVE POWER

See response to row 9 11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 83,246 12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES ... 13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11

PN

14.

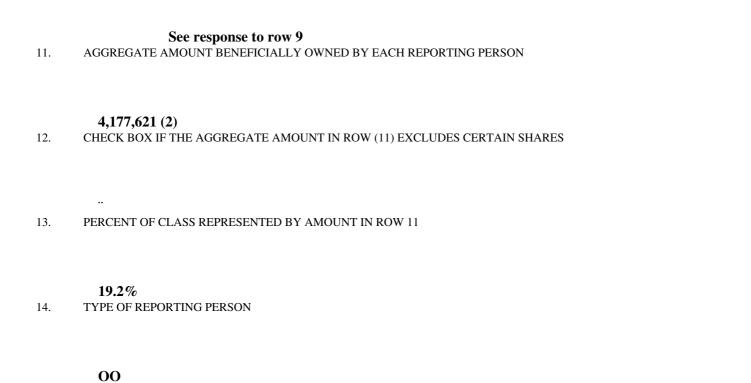
TYPE OF REPORTING PERSON

CUSIP No. 03674U 102 13D Page 5 of 20 pages 1. NAMES OF REPORTING PERSONS Sofinnova Management VI, L.L.C. 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) 5. CITIZENSHIP OR PLACE OF ORGANIZATION 6. **Delaware** 7. SOLE VOTING POWER 4,177,621 (2) shares, which are owned directly by Sofinnova, SVA VI and SVP VI KG. NUMBER OF Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the **SHARES** managing limited partner of SVP VI KG, may be deemed to have sole voting power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the BENEFICIALLY OWNED BY managing members of Sofinnova Management, may be deemed to have shared power to vote these shares. **EACH** 8. SHARED VOTING POWER REPORTING **PERSON** See response to row 7 9. SOLE DISPOSITIVE POWER WITH

4,177,621 (2) shares, which are owned directly by Sofinnova, SVA VI and SVP VI KG. Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the

managing limited partner of SVP VI KG, may be deemed to have sole dispositive power, and Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, the managing members of Sofinnova Management, may be deemed to have shared power to dispose of these shares.

10. SHARED DISPOSITIVE POWER



(2) Includes 4,072,203 shares of Common Stock and 105,418 shares of Common Stock subject to currently exercisable warrants.

CUSIP No. 03674U 102 13D Page 6 of 20 pages 1. NAMES OF REPORTING PERSONS Alain L. Azan 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. AF 5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) CITIZENSHIP OR PLACE OF ORGANIZATION 6. **United States** 7. SOLE VOTING POWER 4,177,621 (3) shares held directly by Sofinnova, SVA VI and SVP VI KG. Alain L. Azan, a managing member of Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to have shared NUMBER OF power to vote these shares. **SHARES** 8. SHARED VOTING POWER BENEFICIALLY OWNED BY See response to row 7 **EACH** 9. SOLE DISPOSITIVE POWER REPORTING **PERSON** 4,177,621 (3) shares held directly by Sofinnova, SVA VI and SVP VI KG. Alain L. Azan, a WITH managing member of Sofinnova Management, the general partner of each of Sofinnova and

SVA VI and the managing limited partner of SVP VI KG, may be deemed to have shared

power to dispose of these shares.

10. SHARED DISPOSITIVE POWER

See response to row 9 11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 12. 4,177,621 (3) 13. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES ... 13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 19.2% 14. TYPE OF REPORTING PERSON IN

(3) Includes 4,072,203 shares of Common Stock and 105,418 shares of Common Stock subject to currently exercisable warrants.

CUSIP No. 03674U 102 13D Page 7 of 20 pages 1. NAMES OF REPORTING PERSONS Eric P. Buatois 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. AF 5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) CITIZENSHIP OR PLACE OF ORGANIZATION 6. France 7. SOLE VOTING POWER 4,177,621 (4) shares held directly by Sofinnova, SVA VI and SVP VI KG. Eric P. Buatois, a managing member of Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to have shared NUMBER OF power to vote these shares. **SHARES** 8. SHARED VOTING POWER BENEFICIALLY OWNED BY See response to row 7 **EACH** 9. SOLE DISPOSITIVE POWER REPORTING **PERSON** 4,177,621 (4) shares held directly by Sofinnova, SVA VI and SVP VI KG. Eric P. Buatois, a WITH managing member of Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to have shared

power to dispose of these shares.

10. SHARED DISPOSITIVE POWER

IN

See response to row 9 11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,177,621 (4) 12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES ... 13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 19.2% 14. TYPE OF REPORTING PERSON

(4) Includes 4,072,203 shares of Common Stock and 105,418 shares of Common Stock subject to currently exercisable warrants.

CUSIP No. 03674U 102 13D Page 8 of 20 pages 1. NAMES OF REPORTING PERSONS Michael F. Powell, Ph.D 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) 5. CITIZENSHIP OR PLACE OF ORGANIZATION 6. **United States** 7. SOLE VOTING POWER 4,177,621 (5) shares held directly by Sofinnova, SVA VI and SVP VI KG. Michael F. Powell, Ph.D, a managing member of Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to NUMBER OF have shared power to vote these shares. **SHARES** 8. SHARED VOTING POWER BENEFICIALLY OWNED BY See response to row 7 **EACH** 9. SOLE DISPOSITIVE POWER REPORTING **PERSON** 4,177,621 (5) shares held directly by Sofinnova, SVA VI and SVP VI KG. Michael F. Powell, WITH Ph.D, a managing member of Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to

have shared power to dispose of these shares.

10. SHARED DISPOSITIVE POWER

See response to row 9 11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,177,621 (5) 12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES ... 13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 19.2% 14. TYPE OF REPORTING PERSON IN

(5) Includes 4,072,203 shares of Common Stock and 105,418 shares of Common Stock subject to currently exercisable warrants.

CUSIP No. 03674U 102 13D Page 9 of 20 pages 1. NAMES OF REPORTING PERSONS Dr. James I. Healy 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) " (b) x 3. SEC USE ONLY SOURCE OF FUNDS* 4. AF 5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e) CITIZENSHIP OR PLACE OF ORGANIZATION 6. **United States** 7. SOLE VOTING POWER 4,177,621 (6) shares held directly by Sofinnova, SVA VI and SVP VI KG. Dr. James I. Healy, a managing member of Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to NUMBER OF have shared power to vote these shares. **SHARES** 8. SHARED VOTING POWER BENEFICIALLY OWNED BY See response to row 7 **EACH** 9. SOLE DISPOSITIVE POWER REPORTING **PERSON** 4,177,621 (6) shares held directly by Sofinnova, SVA VI and SVP VI KG. Dr. James I. WITH Healy, a managing member of Sofinnova Management, the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to

have shared power to dispose of these shares.

10. SHARED DISPOSITIVE POWER

See response to row 9 11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 12. 4,177,621 (6) 13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 11 14. 19,2% 14. TYPE OF REPORTING PERSON IN

Includes 4,072,203 shares of Common Stock and 105,418 shares of Common Stock subject to currently exercisable warrants.

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ITEM 1. Security and Issuer.

This Schedule 13D relates to the common stock, par value \$0.001 per share (the <u>Common Stock</u>), of Anthera Pharmaceuticals, Inc., a corporation organized under the laws of the state of Delaware (the <u>Issuer</u>), 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 Schedule 13D is being filed by Sofinnova Venture Partners VI, L.P., a Delaware limited partnership (<u>Sofinnova</u>), Sofinnova Venture Affiliates VI, L.P., a Delaware limited partnership (<u>SVA VI</u>), Sofinnova Venture Partners VI GmbH & Co. KG, a German limited partnership (<u>SVP VI KG</u> and collectively with Sofinnova and SVA VI, the <u>Sofinnova Funds</u>), Sofinnova Management VI, L.L.C., a Delaware limited liability company (<u>Sofinnova Management</u>), Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy.

Each of the foregoing persons or entities are referred to herein as a Reporting Person or collectively as Reporting Persons.

Each of the Sofinnova Funds is a private investment fund engaged in the business of acquiring, holding and disposing of investments in various companies. Sofinnova Management is the general partner of each of Sofinnova and SVA VI. Sofinnova Management is the managing limited partner of SVP VI KG.

Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy are the managing members of Sofinnova Management.

Each Reporting Person disclaims beneficial ownership of all shares of Common Stock, other than those reported herein as being owned by such Reporting Person.

- (b) The business address of each of the foregoing Reporting Persons is 850 Oak Grove Ave., Menlo Park, California 94025.
- (c) Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy are the managing members of Sofinnova Management.
- (d) During the last five years, none of the Reporting Persons has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the last five years, none of the Reporting Persons was 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) Each of Alain L. Azan, Michael F. Powell, Ph.D and Dr. James I. Healy is a citizen of the United States. Eric P. Buatois is a citizen of France.

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

The Sofinnova Funds purchased 509,139 shares of Common Stock on March 4, 2010 in the Issuer s initial public offering for total consideration of \$3,563,973, funded by available cash of the Sofinnova Funds. In addition, on March 4, 2010, the Issuer issued to Sofinnova a total of 3,563,064 shares of Common Stock upon the conversion of certain convertible securities held by Sofinnova, which convertible securities had previously been purchased by Sofinnova for an aggregate consideration of \$21,715,997. Each of the Sofinnova Funds is a venture capital fund that calls capital from its limited partners in order to make investments.

ITEM 4. Purpose of Transaction.

Board of Directors

Dr. Healy is a member of the Issuer s Board of Directors.

Equity Ownership

The Issuer s IPO was completed on March 4, 2010. In connection with the Issuer s IPO:

All shares of preferred stock previously held by Sofinnova automatically converted into 2,077,353 shares of Common Stock;

The 2009 Notes automatically converted into 586,088 shares of Common Stock;

The Escrow Notes automatically converted into 155,127 shares of Common Stock;

The Company issued 744,496 shares of Common Stock, constituting Escrow Shares, to Sofinnova upon the release of the remaining \$4,898,784 from the escrow account; and

The Sofinnova Funds purchased an additional 509,139 shares of Common Stock in such public offering. The 2009 Warrants remain outstanding and were not converted in connection with the Issuer s IPO.

Registration Rights

Sofinnova has certain rights under the terms of a Second Amended and Restated Investor Rights Agreement (the Investor Rights Agreement (the Investor Rights Agreement) to require the Issuer to file registration statements under the Securities Act of 1933, as amended, subject to limitations and restrictions, or request that their shares be covered by a registration statement that the Issuer is otherwise filing, subject to specified exceptions. The registration rights granted under the Investor Rights Agreement will terminate on the seventh anniversary of the completion of the Issuer s IPO.

Demand Registration Rights. At any time after the earlier of (i) 180 days following the effective date of the Issuer s registration statement in connection with the IPO or (ii) July 17, 2012, subject to certain exceptions, the holders of (a) a

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majority of the registrable securities issued upon the conversion of the Issuer s Series A-1 convertible preferred stock or (b)

two-thirds of the then-outstanding registrable securities issued upon the conversion of the Issuer s Series A-2 convertible preferred stock, Series B-1 convertible preferred stock and Series B-2 convertible preferred stock have the right to demand that the Issuer file a registration statement covering the offering and sale of at least a majority of the registrable securities then outstanding (or a lesser percent if the anticipated aggregate offering price, net of underwriting discounts and commissions, would exceed \$5.0 million).

The Issuer has the ability to delay the filing of such registration statement under specified conditions, such as during the period starting with the date of filing of and ending on the date 180 days following the effective date of the Issuer s IPO or if the Issuer s board of directors deems it advisable to delay such filing or if the Issuer is in possession of material nonpublic information that would be in the Issuer s best interests not to disclose. Postponements at the discretion of the Issuer s board of directors cannot exceed 120 days during any twelve-month period. The Issuer is not obligated to file a registration statement on more than one occasion upon the request of the holders of a majority of the registrable securities issued upon the conversion of the Issuer s Series A-1 convertible preferred stock, and the Issuer is not obligated to file a registration statement on more than two occasions upon the request of the holders of two-thirds of the then-outstanding registrable securities issued upon the conversion of the Issuer s Series A-2 convertible preferred stock, Series B-1 convertible preferred stock and Series B-2 convertible preferred stock.

Form S-3 Registration Rights. If the Issuer is eligible to file a registration statement on Form S-3, the holders of the registrable securities described above have the right, on one or more occasions, to request registration on Form S-3 of the sale of the registrable securities held by such holder provided such securities are anticipated to have an aggregate sale price (net of underwriting discounts and commissions, if any) in excess of \$1.0 million. The Issuer has the ability to delay the filing of such registration statement under specified conditions, such as for a period of time prior to the Issuer s intention to make a public offering, if the Issuer s board of directors deems it advisable to delay such filing or if the Issuer is in possession of material nonpublic information that would be in the Issuer s best interests not to disclose. Such postponements cannot exceed 120 days during any 12-month period. The Issuer is not obligated to effect more than two registrations of registrable securities on Form S-3 in any 12-month period.

Piggyback Registration Rights. The holders of the registrable securities described above have piggyback registration rights. Under these provisions, if the Issuer registers any securities for public sale, including pursuant to any stockholder-initiated demand registration, these holders will have the right to include their shares in the registration statement, subject to customary exceptions. The underwriters of any underwritten offering will have the right to limit the number of shares having registration rights to be included in the registration statement, and piggyback registration rights are also subject to the priority rights of stockholders having demand registration rights in any demand registration.

Expenses of Registration. Under the Investor Rights Agreement, the Issuer is required to pay all registration expenses, other than underwriting discounts and commissions, related to any demand, Form S-3 or piggyback registration, including reasonable attorneys fees and disbursements of one counsel for the holders of registrable securities in an amount not to exceed an aggregate of \$25,000.

Indemnification. The Investor Rights Agreement contains customary cross-indemnification provisions, under which the Issuer is obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to the Issuer, and each selling stockholder is obligated to indemnify the Issuer for material misstatements or omissions in the registration statement due to information provided by such stockholder provided that such information was not changed or altered by the Issuer.

The descriptions of the 2009 Notes, 2009 Warrants, Stock Purchase Agreement, Escrow Agreement, Escrow Shares, Note Purchase Agreement, Escrow Notes and the Investor Rights Agreement contained elsewhere in this Statement are incorporated herein by reference, and are qualified in their entirety by the full text of the 2009 Notes, 2009 Warrants, Stock Purchase Agreement, Escrow Agreement, Escrow Shares, Note Purchase Agreement, Escrow Notes and the Investor Rights Agreement which are included as Exhibits 2, 3, 4, 5, 6, 7, 8 and 9, respectively, to this Statement.

Additional Disclosure

The shares of Common Stock reported herein were acquired solely for investment purposes. None of the Reporting Persons have any present plans or proposals that relate to or would result in any change in the business, policies,

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management, structure or capitalization of the Issuer. The Reporting Persons reserve the right to acquire, or dispose of, additional securities of the Issuer in the ordinary course of their business, to the extent deemed advisable in light of their general investment and trading policies, market conditions or other factors. The Reporting Persons may engage in discussions from time to time with other stockholders of the Issuer regarding the acquisition by the Reporting Persons of others of shares of the Issuer s Common Stock held by such stockholders.

The Reporting Persons may seek information from management and the Issuer s Board of Directors, and may engage in further discussions with management, the Issuer s Board of Directors, other stockholders of the Issuer and other relevant parties, concerning the business, operations, governance, management, strategy, capitalization and/or future plans of the Issuer, or in proposing one or more of the other actions described in subparagraphs (a) through (j) of this Item 4. In addition, the Reporting Persons may exercise their rights under the Investor Rights Agreement.

Other than as described above and as set forth in the 2009 Notes, 2009 Warrants, Stock Purchase Agreement, Escrow Agreement, Escrow Shares, Note Purchase Agreement, Escrow Notes and the Investor Rights Agreement, the Reporting Persons do not have any plans or proposals which would result in any of the following:

- (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 assets of the Issuer or any of its subsidiaries;
- (d) Any change in the present Issuer s 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 present capitalization or dividend policy of the Issuer;
- (f) Any other material change in the Issuer s business or corporate structure;
- (g) Changes in the Issuer s charter, bylaws or instruments corresponding thereto or other actions that may impede the acquisition of control of the Issuer by any person;
- (h) Causing a class of securities of the Issuer to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered 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 Securities Exchange Act of 1934, as amended; or
- (i) Any action similar to any of those enumerated above.

ITEM 5. Interest in Securities of the Issuer.

(a)-(b) Sofinnova may be deemed, for purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended (<u>Rule 13d-3</u>), to have sole power to direct the voting and disposition of 4,088,648 shares of Common Stock, representing approximately 18.8% of the 21,618,334 shares of Common Stock outstanding, based on information provided by the Issuer.

SVA VI may be deemed, for purposes of Rule 13d-3, to have sole power to direct the voting and disposition of 5,727 shares of Common Stock, representing less than 0.1% of the 21,618,334 shares of Common Stock outstanding, based on information provided by the Issuer.

SVP VI KG may be deemed, for purposes of Rule 13d-3, to have sole power to direct the voting and disposition of 83,246 shares of Common Stock, representing approximately 0.4% of the 21,618,334 shares of Common Stock outstanding, based on information provided by the Issuer.

Sofinnova Management, as the general partner of each of Sofinnova and SVA VI and the managing limited partner of SVP VI KG, may be deemed to have sole power to direct the voting and disposition of the 4,177,621 shares of Common Stock beneficially owned by the Sofinnova Funds, over which Sofinnova Management has sole voting and investment power, representing approximately 19.2% of the 21,618,334 shares of

Common Stock outstanding, based on information provided by the Issuer.

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Each of Alain L. Azan, Eric P. Buatois, Michael F. Powell, Ph.D and Dr. James I. Healy, as managing members of Sofinnova Management, may be deemed to have shared power to direct the voting and disposition of the 4,177,621 shares of Common Stock beneficially owned by Sofinnova Management, representing approximately 19.2% of the 21,618,334 shares of Common Stock outstanding, based on information provided by the Issuer.

- (c) Except as described in this Schedule 13D, none of the Reporting Persons has effected any transaction in the securities of the Issuer in the last 60 days.
- (d) No persons other than the Reporting Persons and their investment clients have the right to participate in the receipt of dividends from, or the proceeds from the sale of, the shares of Common Stock covered hereby.
- (e) Not Applicable.

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ITEM 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.

The information set forth in Item 4 hereof is hereby incorporated by reference into this Item 6.

ITEM 7. Materials to be Filed as Exhibits.

Exhibit 1:	Joint Filing Agreement as required by Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended.
Exhibit 2:	Note and Warrant Purchase Agreement by and among the Issuer and the persons and entities party thereto, dated July 17, 2009 (Incorporated by reference to Exhibit No. 10.13 to Form S-1 filed by the Issuer on September 15, 2009).
Exhibit 3:	Form of Senior Secured Promissory note sold pursuant to Note and Warrant Purchase Agreement, dated July 17, 2009 (Incorporated by reference to Exhibit No. 10.14 to Form S-1 filed by the Issuer on September 15, 2009).
Exhibit 4:	Form of Stock Purchase Warrant sold pursuant to Note and Warrant Purchase Agreement, dated July 17, 2009 (Incorporated by reference to Exhibit No. 10.15 to Form S-1 filed by the Issuer on September 15, 2009).
Exhibit 5	Stock Purchase Agreement by and among the Issuer and the other persons and entities party thereto, dated September 25, 2009 (Incorporated by reference to Exhibit No. 10.16 to Amendment No. 1 to Form S-1 filed by the Issuer on October 19, 2009).
Exhibit 6	Escrow Agreement by and among the Issuer, Fremont Bank and the other persons and entities party thereto, dated September 25, 2009 (Incorporated by reference to Exhibit No. 10.17 to Amendment No. 1 to Form S-1 filed by the Issuer on October 19, 2009).
Exhibit 7	Note Purchase Agreement by and among the Company and the other persons and entities party thereto, dated as of December 11, 2009 (Incorporated by reference to Exhibit No. 10.21 to Amendment No. 3 to Form S-1 filed by the Issuer on January 29, 2010).
Exhibit 8	Form of Senior Secured Promissory Note sold pursuant to that certain Note Purchase Agreement, dated as of December 11, 2009 (Incorporated by reference to Exhibit No. 10.22 to Amendment No. 3 to Form S-1 filed by the Issuer on January 29, 2010).
Exhibit 9	Second Amended and Restated Investor Rights Agreement by and among the Issuer and the other persons and entities party thereto, dated July 17, 2009 (Incorporated by reference to Exhibit No. 4.2 to Amendment No. 3 to Form S-1 filed by the Issuer on January 29, 2010).

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SIGNATURE

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

EXECUTED as a sealed instrument this 11th day of March, 2010.

SOFINNOVA VENTURE PARTNERS VI, L.P.,

a Delaware Limited Partnership

By: Sofinnova Management VI, L.L.C.,

a Delaware Limited Liability Company

Its: General Partner

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact*

SOFINNOVA VENTURE AFFILIATES VI, L.P.,

a Delaware Limited Partnership

By: Sofinnova Management VI, L.L.C.,

a Delaware Limited Liability Company

Its: General Partner

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact*

SOFINNOVA VENTURE PARTNERS VI GMBH & CO. KG,

a German Limited Partnership

By: Sofinnova Management VI, L.L.C.,

a Delaware Limited Liability Company

Its: Managing Limited Partner

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact*

SOFINNOVA MANAGEMENT VI, L.L.C.,

a Delaware Limited Liability Company

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact*

ALAIN L. AZAN

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact* **CUSIP No.** 03674U 102 **Page 17 of 20 pages**

ERIC P. BUATOIS

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact*

MICHAEL F. POWELL, PH.D

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact*

JAMES I. HEALY, M.D., PH.D.

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact*

^{*} Signed pursuant to a Power of Attorney already on file with the appropriate agencies.

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EXHIBIT INDEX

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Exhibit 1

JOINT FILING AGREEMENT PURSUANT TO RULE 13d-1(k)(1)

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them of the Schedule 13D to which this Agreement is an exhibit (and any further amendment filed by them) with respect to the shares of Common Stock of Anthera Pharmaceuticals, Inc. This agreement may be executed simultaneously in any number of counterparts, all of which together shall constitute one and the same instrument.

SOFINNOVA VENTURE PARTNERS VI, L.P.,

a Delaware Limited Partnership

By: Sofinnova Management VI, L.L.C.,

a Delaware Limited Liability Company

Its: General Partner

By: /s/ Nathalie Auber

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ALAIN L. AZAN

By: /s/ Nathalie Auber

Nathalie Auber Attorney-in-Fact* **CUSIP No.** 03674U 102 **Page 20 of 20 pages**

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