
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

SCHEDULE 13D

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

MEI Pharma, Inc.

(Name of Issuer)

Common Stock, par value \$0.0000002 per share
(Title of Class of Securities)

572322402
(CUSIP number)

Craig L. Slutzkin
New Leaf Venture Management II, L.L.C.
Times Square Tower
7 Times Square, Suite 3502
New York, NY 10036
(646) 871-6420

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

November 28, 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 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 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).

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	New Leaf Ventures II, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input 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 Limited Partnership	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	New Leaf Venture Associates II, L.P.	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 Limited Partnership	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	New Leaf Venture Management II, L.L.C..	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 Limited Liability Company	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Philippe O. Chambon	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 French citizen	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	James Niedel	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 United States Citizen	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Vijay Lathi	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 United States Citizen	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Ronald Hunt	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 United States Citizen	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Srinivas Akkaraju	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 United States citizen	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

1	NAMES OF REPORTING PERSONS. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)	
	Jeani Delagardelle	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) AF	
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 United States citizen	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 0 shares
	8	SHARED VOTING POWER 30,600,000 shares (1)
	9	SOLE DISPOSITIVE POWER 0 shares
	10	SHARED DISPOSITIVE POWER 30,600,000 shares (1)
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 30,600,000 shares (1)	
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) 32.5% (2)	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

- (1) Includes 18,000,000 shares of common stock and 12,600,000 shares of common stock issuable upon exercise of the Warrants (as defined in Item 4 below), which shares of common stock and Warrants are to be issued to New Leaf Ventures II, L.P. pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below.
- (2) The percentage ownership is based upon 26,500,482 shares of common stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of common stock to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below and 12,600,000 shares of common stock issuable upon exercise of the Warrants.

Item 1. Security and Issuer.

This Schedule 13D relates to shares of Common Stock, \$0.00000002 par value (the “Common Stock”) of MEI Pharma, Inc., a Delaware corporation (the “Issuer”) having its principal executive offices at 11975 El Camino Real, Suite 101, San Diego, California 92130. References to numbers of shares of Common Stock contained in this Schedule do not give effect to the Issuer’s contemplated reverse stock split. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

Item 2. Identity and Background.

This statement is being filed by New Leaf Ventures II, L.P. (“NLV II”), New Leaf Venture Associates II, L.P. (“NLV Associates”) and New Leaf Venture Management II, L.L.C. (“NLV Management” and together with NLV II and NLV Associates, the “Reporting Entities”) and Philippe O. Chambon (“Chambon”), James Nidel (“Nidel”), Vijay Lathi (“Lathi”), Ronald Hunt (“Hunt”), Srinivas Akkaraju (“Akkaraju”) and Jeani Delagardelle (“Delagardelle” and together with Chambon, Nidel, Lathi, Hunt and Akkaraju, the “Managing Directors”). The Reporting Entities and the Managing Directors collectively are referred to as the “Reporting Persons”.

The address of the principal business office of NLV II, NLV Associates, NLV Management, Chambon, Nidel and Hunt is New Leaf Venture Partners, Times Square Tower, 7 Times Square, Suite 3502, New York, NY 10036. The address of the principal business office of Lathi, Akkaraju and Delagardelle is New Leaf Venture Partners, 2500 Sand Hill Road, Suite 203, Menlo Park, CA 94025.

The principal business of NLV II is to make, hold and dispose of equity and equity-related investments, principally in healthcare, medical device and life sciences companies. The principal business of NLV Associates is to act as the sole general partner of NLV II. The principal business of NLV Management is to act as the sole general partner of NLV Associates. The principal business of each of the Managing Directors is to manage the Reporting Entities and a number of affiliated partnerships with similar businesses.

During the five years prior to the date hereof, none of the Reporting Persons has been convicted in a criminal proceeding or has been a party to a civil proceeding ending in 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.

Each of NLV II and NLV Associates is a limited partnership organized under the laws of the State of Delaware. NLV Management is a limited liability company organized under the laws of the State of Delaware. Each Managing Director other than Philippe O. Chambon is a citizen of the United States. Philippe O. Chambon is a citizen of France.

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

As of the date hereof, each of the Reporting Persons may be deemed to beneficially own the Units (as defined in Item 4 below), consisting of 18,000,000 shares of Common Stock and warrants to purchase an additional 12,600,000 shares of Common Stock, which shares of Common Stock and warrants are to be issued pursuant to the Purchase Agreement dated November 4, 2012 described in Item 4 below. The source of the purchase price for the Units is expected to be from working capital. It is not expected that any borrowed funds will be used to purchase the Units.

Item 4. Purpose of the Transaction.

Purchase Agreement and Warrants

On November 4, 2012, the Issuer entered into a Securities Purchase Agreement (the “Purchase Agreement”) by and among the Issuer, NLV II and certain other accredited investors (collectively with NLV II, the “Purchasers”), pursuant to which the Issuer agreed, subject to stockholder approval and the satisfaction of certain other conditions, to issue an aggregate of 18,000,000 units (the “Units”) to NLV II for an aggregate purchase price of \$9,000,000 in a private placement (the “Transaction”). Each Unit consists of one share of Common Stock and warrants to acquire 0.70 shares of Common Stock at an exercise price of \$0.52 per share (the “Warrants”). The Units that NLV II has agreed to purchase consist of an aggregate of 18,000,000 shares of Common Stock (the “Shares”) and Warrants exercisable for an aggregate of 12,600,000 shares of Common Stock (the “Warrant Shares”). The Warrants will expire 5 years after the date of issuance.

The Board of Directors of the Issuer (the “Board of Directors”) approved the Purchase Agreement and transactions contemplated thereby on November 4, 2012, and the Issuer’s then majority stockholder, Novogen Limited (“Novogen”), provided its written consent with respect thereto on November 5, 2012. Novogen’s approval by written consent, as majority stockholder, will not be effective until 20 days after the Issuer mailed an information statement to its other stockholders in accordance with Schedule 14C under the Act. The Issuer mailed such information statement to its stockholders on November 28, 2012.

The purchase and sale of the Units under the Purchase Agreement (the “Closing”) is subject to certain conditions, including, among others, the entry by the Issuer into a governance agreement with NLV II and the entry by the Issuer into a governance agreement with certain funds affiliated with Vivo Ventures (“Vivo”), another Purchaser under the Purchase Agreement (such agreements, the “Governance Agreements”), the entry by the Issuer and each of the Purchasers into a registration rights agreement (the “Registration Rights Agreement”), the effectiveness of the stockholder approval of the Transaction, the prior obtained waiver of the 2011 PIPE Participation Right (as defined below), the continued listing of the Common Stock on the NASDAQ Capital Market and the delivery of certain certificates and opinions and other customary closing conditions. The Governance Agreements and Registration Rights Agreement are described in more detail below.

The Purchase Agreement provides that, subject to certain exceptions, if the Issuer proposes to offer equity or equity equivalent securities to any person prior to December 31, 2013 (a “Subsequent Financing”), if NLV II is then holding at least 3,000,000 shares of Common Stock (with such amount to be adjusted for any stock splits, stock dividends, or recapitalizations of the Issuer or similar events), NLV II will have the right to purchase (the “Right of First Refusal”) its pro rata portion of such equity securities, based on its equity ownership of the Issuer; provided, however, that the amount of equity securities that NLV II will have the right to purchase will be based on such amount as may be available after the Issuer has fulfilled its obligation under the Amended and Restated Securities Purchase Agreement, dated as of May 16, 2011, by and among the Issuer and the investors listed on the Schedule of Buyers attached thereto (the “2011 PIPE Investors”), to permit such investors to purchase up to 35% of certain offerings of equity securities (such obligation, the “2011 PIPE Participation Right”). If the Subsequent Financing is a public offering in which NLV II is unable to participate as a matter of law, then the Issuer will make a concurrent private offering of securities to NLV II on the same terms and conditions as the securities that NLV II would otherwise have been entitled to purchase in the Subsequent Financing and shall provide registration rights substantially identical to those provided in the Registration Rights Agreement described below.

The Issuer has agreed, pursuant to the terms of the Purchase Agreement, to use its best efforts to hold a meeting of stockholders, within three (3) months of the Closing, to consider, and the Issuer has agreed to recommend the approval of, an Amended and Restated Certificate of Incorporation that, among other things, eliminates the Issuer's classified Board of Directors, resulting in the annual election of directors, and alters certain existing provisions relating to corporate opportunities presented to stockholders of the Issuer. The Issuer has agreed that, upon the approval of such Amended and Restated Certificate of Incorporation, that the Issuer will amend and restate the Amended and Restated By-laws of the Issuer to, among other things, modify the provisions relating to indemnification of directors and officers.

The Purchase Agreement may be terminated by the mutual written consent of the Issuer and each Purchaser, and by either the Issuer or any Purchaser (with respect to such Purchaser) if the Closing has not occurred by 5:00 p.m. New York City time on March 15, 2013 (other than by any party whose failure to comply with its obligations under the Purchase Agreement caused or resulted in the failure of such Closing to occur by such time).

NLV II Governance Agreement

Pursuant to the terms of the Purchase Agreement, concurrently with the Closing, the Issuer has agreed to enter into a separate Governance Agreement with each of NLV II and Vivo. Under the Governance Agreement with NLV II (the "NLV II Governance Agreement"), the Issuer will agree, effective at the Closing, to increase the size of the Board of Directors from six members to seven members, consisting of the Chief Executive Officer of the Issuer, five continuing directors who each qualify as independent directors under Nasdaq listing rules and one member proposed by either NLV II or Vivo for nomination by the Nominating Committee of the Issuer (the "Nominating Committee") for election by the Board of Directors. NLV II does not anticipate proposing any director for nomination at the Closing. In addition, the Issuer will agree that, from and after the Closing, for so long as NLV II beneficially owns at least 10% of the shares of Common Stock outstanding, NLV II will be entitled to propose a candidate for election to the Board of Directors for consideration by the Nominating Committee in connection with each annual meeting of the Issuer's stockholders following the effectiveness of the Amended and Restated Certificate of Incorporation eliminating the Issuer's classified Board of Directors and at such other times as NLV II may propose. The Issuer will agree to use its best efforts to cause the Nominating Committee to nominate such candidates for election to the Board of Directors. Subject to compliance with applicable laws, rules and regulations, the Issuer will also agree to use its best efforts to cause the Board of Directors to elect one of the directors proposed by either Vivo or NLV II to be Chairman of the Board and to cause the Board to appoint at least one of such directors to serve on each standing and special committee of the Board of Directors.

The NLV II Governance Agreement will terminate with respect to the Issuer and NLV II at the earliest of (i) such time as NLV II and its affiliates beneficially owns all of the shares of Common Stock then outstanding, (ii) such time as NLV II and its affiliates beneficially own less than 10% of the shares of Common Stock then outstanding, or (iii) the effectiveness of certain change of control transactions resulting in continuing stockholders of the Issuer holding less than 50% of the outstanding voting securities of the Issuer, its successor entity or a parent or subsidiary of its successor entity.

Registration Rights Agreement

Pursuant to the terms of the Purchase Agreement, the Issuer and the Purchasers have agreed to enter into the Registration Rights Agreement concurrently with the Closing. Within 30 calendar days after the Closing, the Issuer will be required to file with the SEC a registration statement (the "Initial Registration Statement")

covering the resale by NLV II or its permitted transferees on a continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (such rule, “Rule 415”) of the Shares and the Warrant Shares, subject to certain customary limitations. If the SEC takes the position that the sale of all or some of the Registrable Securities (as defined in the Registration Rights Agreement) is not eligible to be made on a delayed or continuous basis under Rule 415, then the Issuer will be required, in consultation with the holders of Registrable Securities, to attempt to persuade the SEC to permit such sale under Rule 415 and, if unsuccessful in persuading the SEC to permit the sale of any of the Registrable Securities under Rule 415, to amend the Initial Registration Statement to remove any Registrable Securities not permitted to be sold thereunder (the “Cut Back Shares”) and to file an additional registration statement (the “Additional Registration Statement” and, together with the Initial Registration Statement, the “Registration Statements”) covering the Cut Back Shares on the terms set forth in the Registration Rights Agreement. To the extent the staff of the SEC does not permit all of the unregistered Cut Back Shares to be registered on an Additional Registration Statement, the Issuer shall file Additional Registration Statements successively trying to register on each such Additional Registration Statement the maximum number of remaining Cut Back Shares until all the Registrable Securities have been registered with the SEC. The Issuer will agree to use commercially reasonable efforts to cause the Registration Statements to become effective within 60 days after the filing thereof, or, if any Registration Statement is reviewed by the SEC and the SEC provides written comments, within 90 days after the filing thereof. The Issuer will also agree to use commercially reasonable efforts to maintain the effectiveness of the Registration Statements for a period ending on the fifth anniversary of the Closing.

If the Issuer fails to file the Initial Registration Statement within 30 days after the Closing or the SEC fails to declare any of the Registration Statements effective by the applicable 60 or 90-day deadline, then the Issuer shall pay to NLV II liquidated damages of 1% of the sum of (1) the purchase price of the Shares, and (2) the exercise price paid for any Warrant Shares held by NLV II for each 30-day period following any such failure (or pro rata for any portion thereof), in each case subject to an aggregate liquidated damages amount of 8%. In addition, if the Issuer fails to maintain the effectiveness of the applicable Registration Statement after it has been declared effective or the Common Stock is not listed or included for quotation on the NASDAQ Capital Market, in each case for 10 consecutive days or 30 days in a twelve-month period, the Issuer shall pay to NLV II liquidated damages of 1% of the purchase price of the Shares for each 30-day period (or pro rata for any portion thereof) following any such failure, subject to an aggregate liquidated damages amount of 8%.

The foregoing descriptions of the Purchase Agreement, the Warrants, the form of the NLV II Governance Agreement and the form of the Registration Rights Agreement do not purport to be complete and are subject to, and qualified in their entirety by reference to, the full text of the Purchase Agreement, the form of Warrant, the form of Governance Agreement and the form of the Registration Rights Agreement, which are included as Exhibits 10.1, 10.2, 10.3 and 10.4, respectively, and are incorporated herein by reference.

NLV II plans to acquire the Shares and the Warrants for investment purposes. Depending on market conditions, its continuing evaluation of the business and prospects of the Issuer and other factors, NLV II and other Reporting Persons may dispose of or acquire additional shares of the Issuer. Except as set forth above, none of the Reporting Persons has any present plans 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 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 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 which 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; or
- (j) Any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer.

- (a) Following the Closing, and without giving effect to the Issuer's contemplated reverse stock split, NLV II will be the record owner of 18,000,000 shares of Common Stock and warrants to purchase an additional 12,600,000 shares of Common Stock (collectively, the "NLV II Securities"). As the sole general partner of NLV II, NLV Associates may be deemed to own beneficially the NLV II Securities. As the sole general partner of NLV Associates, NLV Management may be deemed to own beneficially the NLV II Securities. As the individual managers of NLV Management, each of the Managing Directors also may be deemed to own beneficially the NLV II Securities.

Each of the Reporting Persons may be deemed to own beneficially 32.5% of the Issuer's Common Stock, which percentage is calculated based upon 26,500,482 shares of Common Stock outstanding as of November 21, 2012, as reported in the Issuer's Definitive Information Statement on Schedule 14C filed with the SEC on November 28, 2012, plus 55,000,000 shares of Common Stock to be issued pursuant to the Purchase Agreement and 12,600,000 shares of Common Stock issuable upon exercise of the Warrants. Each of the Reporting Persons, except NLV II, disclaims beneficial ownership of the NLV II Securities except to the extent of their pecuniary interest therein, if any.
- (b) Regarding the number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote: See line 7 of cover sheets.
 - (ii) shared power to vote or to direct the vote: See line 8 of cover sheets.
 - (iii) sole power to dispose or to direct the disposition: See line 9 of cover sheets.
 - (iv) shared power to dispose or to direct the disposition: See line 10 of cover sheets.
- (c) Except as set forth in Item 4 above, none of the Reporting Persons has effected any transaction in the Common Stock during the last 60 days.

- (d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, shares beneficially owned by any of the Reporting Persons.
- (e) Not Applicable.

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

The disclosure in Item 4 is herein incorporated by reference.

Item 7. Materials to be Filed as Exhibits.

Exhibit 10.1 – Securities Purchase Agreement, dated as of November 4, 2012, by and among MEI Pharma, Inc., New Leaf Ventures II, L.P. and certain other accredited investors identified in Exhibit A thereto (incorporated by reference to Exhibit 10.1 of the Issuer’s Current Report on Form 8-K (File No. 000-50484), filed with the SEC on November 5, 2012).

Exhibit 10.2 – Form of Warrant (incorporated by reference to Exhibit 4.1 of the Issuer’s Current Report on Form 8-K (File No. 000-50484), filed with the SEC on November 5, 2012).

Exhibit 10.3 – Form of Governance Agreement (incorporated by reference to Exhibit 10.2 of the Issuer’s Current Report on Form 8-K (File No. 000-50484), filed with the SEC on November 5, 2012).

Exhibit 10.4 – Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.3 of the Issuer’s Current Report on Form 8-K (File No. 000-50484), filed with the SEC on November 5, 2012).

Exhibit 99.1 – Agreement regarding filing of joint Schedule 13D.

Exhibit 99.2 – Powers of Attorney regarding Schedule 13D filings.

SIGNATURE

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

Date: December 10, 2012

NEW LEAF VENTURES II, L.P.

By: NEW LEAF VENTURE ASSOCIATES II, L.P.
General Partner

By: NEW LEAF VENTURE MANAGEMENT II, L.L.C.
General Partner

By: /s/ Craig L. Slutzkin
Craig L. Slutzkin
Chief Financial Officer

NEW LEAF VENTURE ASSOCIATES II, L.P.

By: NEW LEAF VENTURE MANAGEMENT II, L.L.C.
General Partner

By: /s/ Craig L. Slutzkin
Craig L. Slutzkin
Chief Financial Officer

NEW LEAF VENTURE MANAGEMENT II, L.L.C.

By: /s/ Craig L. Slutzkin
Craig L. Slutzkin
Chief Financial Officer

*
Philippe O. Chambon

*
James Niedel

*

Vijay Lathi

*

Ronald Hunt

*

Srinivas Akkaraju

*

Jeani Delagardelle

/s/ Craig L. Slutzkin
Craig L. Slutzkin
As attorney-in-fact

* This Schedule 13D was executed by Craig L. Slutzkin on behalf of the individuals listed above pursuant to Powers of Attorney, copies of which are attached as Exhibit 99.2.

AGREEMENT

Pursuant to Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, the undersigned hereby agree that only one statement containing the information required by Schedule 13D need be filed with respect to the ownership by each of the undersigned of shares of stock and/or warrants to purchase shares of stock of MEI Pharma, Inc.

EXECUTED this 10th day of December, 2012.

NEW LEAF VENTURES II, L.P.

By: NEW LEAF VENTURE ASSOCIATES II, L.P.
General Partner

By: NEW LEAF VENTURE MANAGEMENT II, L.L.C.
General Partner

By: /s/ Craig L. Slutzkin
Craig L. Slutzkin
Chief Financial Officer

NEW LEAF VENTURE ASSOCIATES II, L.P.

By: NEW LEAF VENTURE MANAGEMENT II, L.L.C.
General Partner

By: /s/ Craig L. Slutzkin
Craig L. Slutzkin
Chief Financial Officer

NEW LEAF VENTURE MANAGEMENT II, L.L.C.

By: /s/ Craig L. Slutzkin
Craig L. Slutzkin
Chief Financial Officer

*

Philippe O. Chambon

*

James Nidel

*

Vijay Lathi

*

Ronald Hunt

*

Srinivas Akkaraju

*

Jeani Delagardelle

/s/ Craig L. Slutzkin
Craig L. Slutzkin
As attorney-in-fact

* This Agreement was executed by Craig L. Slutzkin on behalf of the individuals listed above pursuant to Powers of Attorney, copies of which are attached as Exhibit 99.2.

POWER OF ATTORNEY

KNOWN ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints CRAIG L. SLUTZKIN as his true and lawful attorney-in-fact and agent for him and in his name, place and stead, in any and all capacities, to sign any and all documents relating to any and all Securities and Exchange Commission filings which may be required, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, thereby ratifying and confirming all that said attorney-in-fact may lawfully do or cause to be done by virtue hereof.

This power shall continue in effect until terminated in writing.

By: /s/ Vijay K. Lathi
Vijay K. Lathi

By: /s/ James Niedel
James Niedel

Dated: October 5, 2005

POWER OF ATTORNEY

KNOWN ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints CRAIG L. SLUTZKIN as his/her true and lawful attorney-in-fact and agent for him/her and in his/her name, place and stead, in any and all capacities, to sign any and all documents relating to any and all Securities and Exchange Commission filings which may be required, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he/she might or could do in person, thereby ratifying and confirming all that said attorney-in-fact may lawfully do or cause to be done by virtue hereof.

This power shall continue in effect until terminated in writing.

By: /s/ Philippe O. Chambon
Philippe O. Chambon

By: /s/ Jeani Delagardelle
Jeani Delagardelle

By: /s/ Ronald Hunt
Ronald Hunt

Dated: September 29, 2006

POWER OF ATTORNEY

KNOWN ALL MEN BY THESE PRESENTS, that the undersigned hereby constitutes and appoints CRAIG L. SLUTZKIN as his true and lawful attorney-in-fact and agent for him and in his name, place and stead, in any and all capacities, to sign any and all documents relating to any and all Securities and Exchange Commission filings which may be required, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, thereby ratifying and confirming all that said attorney-in-fact may lawfully do or cause to be done by virtue hereof.

This power shall continue in effect until terminated in writing.

By: /s/ Srinivas Akkaraju
Srinivas Akkaraju

Dated: February 2, 2009