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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

SCHEDULE 13D

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

Medicinova, Inc.

(Name of Issuer)

Common Stock, par value \$0.01 per share
(Title of Class of Securities)

58468P 10 7
(CUSIP Number)

Martin P. Sutter
Essex Woodlands Health Ventures Fund VI, L.P.
10001 Woodlock Forest Drive, Suite 175
The Woodlands, Texas 77380
(281) 364-1555

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

January 28, 2005
(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. 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 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).

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

1	NAMES OF REPORTING PERSONS: Essex Woodlands Health Ventures Fund VI, L.P. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): WC	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): <input type="radio"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: 11,703,704
	8	SHARED VOTING POWER: -0-
	9	SOLE DISPOSITIVE POWER: 11,703,704
	10	SHARED DISPOSITIVE POWER: -0-
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="radio"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): PN	

1	NAMES OF REPORTING PERSONS: Essex Woodlands Health Ventures VI, L.P. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): <input type="radio"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: 11,703,704
	8	SHARED VOTING POWER: -0-
	9	SOLE DISPOSITIVE POWER: 11,703,704
	10	SHARED DISPOSITIVE POWER: -0-
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="radio"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): OO	

1	NAMES OF REPORTING PERSONS: Essex Woodlands Health Ventures VI, L.L.C. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): <input type="radio"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Delaware	
7	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	SOLE VOTING POWER: 11,703,704
8		SHARED VOTING POWER: -0-
9		SOLE DISPOSITIVE POWER: 11,703,704
10		SHARED DISPOSITIVE POWER: -0-
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): <input type="radio"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): OO	

1	NAMES OF REPORTING PERSONS: James L. Currie I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): o	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: -0-
	8	SHARED VOTING POWER: 11,703,704
	9	SOLE DISPOSITIVE POWER: -0-
	10	SHARED DISPOSITIVE POWER: 11,703,704
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): o	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): IN	

1	NAMES OF REPORTING PERSONS: Martin P. Sutter I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): o	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: -0-
	8	SHARED VOTING POWER: 11,703,704
	9	SOLE DISPOSITIVE POWER: -0-
	10	SHARED DISPOSITIVE POWER: 11,703,704
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): o	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): IN	

1	NAMES OF REPORTING PERSONS: Immanuel Thangaraj I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): o	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: -0-
	8	SHARED VOTING POWER: 11,703,704
	9	SOLE DISPOSITIVE POWER: -0-
	10	SHARED DISPOSITIVE POWER: 11,703,704
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): o	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): IN	

1	NAMES OF REPORTING PERSONS: Jeff Himawan, Ph.D. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): o	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: -0-
	8	SHARED VOTING POWER: 11,703,704
	9	SOLE DISPOSITIVE POWER: -0-
	10	SHARED DISPOSITIVE POWER: 11,703,704
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): o	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): IN	

1	NAMES OF REPORTING PERSONS: Mark Pacala I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): o	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: -0-
	8	SHARED VOTING POWER: 11,703,704
	9	SOLE DISPOSITIVE POWER: -0-
	10	SHARED DISPOSITIVE POWER: 11,703,704
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): o	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): IN	

1	NAMES OF REPORTING PERSONS: Petri Vainio, MD, Ph.D. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY):	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>	
3	SEC USE ONLY:	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS): OO	
5	CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e): o	
6	CITIZENSHIP OR PLACE OF ORGANIZATION: United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: -0-
	8	SHARED VOTING POWER: 11,703,704
	9	SOLE DISPOSITIVE POWER: -0-
	10	SHARED DISPOSITIVE POWER: 11,703,704
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON: 11,703,704	
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS): o	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 11.84%	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS): IN	

ORIGINAL REPORT ON SCHEDULE 13D

Item 1. Security and Issuer

This statement on Schedule 13D relates to 11,703,704 shares of common stock, \$0.001 par value per share (the "Common Stock"), of Medicinova, Inc. (the "Company"). The Company's principal executive offices are located at 6455 Nancy Ridge Drive, San Diego, California 92121.

Item 2. Identity and Background

(a) This Schedule 13D is being filed jointly by Essex Woodlands Health Ventures Fund VI, L.P., a Delaware limited partnership (the "Partnership"), Essex Woodlands Health Ventures VI, L.P., a Delaware limited partnership, the general partner of the Partnership (the "GP Partnership"), Essex Woodlands Health Ventures VI, L.L.C., a Delaware limited liability company, the general partner of the GP Partnership (the "General Partner"), James L. Currie, an individual, Martin P. Sutter, an individual, Immanuel Thangaraj, an individual, Jeff Himawan, Ph.D., an individual, Mark Pacala, an individual, and Petri Vainio, MD, Ph.D., an individual (each a "Manager", collectively, the "Managers", and together with the Partnership, the GP Partnership and the General Partner, the "Reporting Persons").

(b) The address of the principal business of each of the Reporting Persons is 10001 Woodloch Forest Drive, Suite 175, The Woodlands, Texas 77380.

(c) The principal business of the Partnership is venture capital investments. The principal business of the GP Partnership is to act as the general partner of the Partnership. The principal business of the General Partner is to act as the general partner of the GP Partnership. The principal business of the Managers is to direct the activities of the General Partner.

(d) None of the Reporting Persons have, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) None of the Reporting Persons have, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such person 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 Manager is a citizen of the United States.

Item 3. Source and Amount of Funds or Other Consideration

Prior to the Company's initial public offering on January 28, 2005, the Partnership acquired certain shares of Series B Preferred Stock and Series C Preferred Stock of the Company. Upon the closing of the initial public offering, each share of Series B Preferred Stock of the Partnership automatically converted into 100 shares of Common Stock of the Company and each share of Series C Preferred Stock automatically converted into one share of Common Stock of the Company. The funds to purchase the securities were obtained from the working capital of the Partnership and not the assets of the General Partner nor the Managers.

Item 4. Purpose of Transaction

The Reporting Persons acquired the securities solely for the purpose of investment. The Reporting Persons may make additional purchases of the Company's securities either in the open market

or in private transactions depending on the Company's business, prospects and financial condition, the market for the Company's securities, general economic conditions, money and stock market conditions and other future developments.

Except as described in this Schedule 13D, none of the Reporting Persons has any present plan or proposal which relates to, or could result in, any of the events referred to in paragraphs (a) through (j), inclusive, of Item 4 of Schedule 13D. However, the Reporting Persons will continue to review the business of the Company and, depending upon one or more of the factors referred to above, may in the future propose that the Company take one or more such actions.

Item 5. Interest in Securities of the Partnership

TOTAL OUTSTANDING SHARES. According to information provided to the Reporting Persons by the Company, the number of shares of the Company's Common Stock outstanding on October 31, 2005 was 98,855,856 shares.

THE PARTNERSHIP. As of the date of filing of this Schedule 13D, the Partnership is the holder of 11,703,704 shares of Common Stock, which represents approximately 11.84% of the Common Stock outstanding, and it has sole voting and investment power with respect to such securities.

THE GP PARTNERSHIP. The GP Partnership of the Partnership may also be deemed to have sole voting and investment power with respect to such securities. The GP Partnership disclaims beneficial ownership of such securities except to the extent of its pecuniary interest therein.

THE GENERAL PARTNER. The General Partner of the GP Partnership may also be deemed to have sole voting and investment power with respect to such securities. The General Partner disclaims beneficial ownership of such securities except to the extent of its pecuniary interest therein.

THE MANAGERS. Under the operating agreement of the General Partner, Messrs. Currie, Sutter, Thangaraj, Himawan, Pacala and Vainio have the power by unanimous consent and through the GP Partnership (i) to cause the Partnership to buy and sell marketable securities of portfolio companies and (ii) to direct the voting of such securities. As a result, Messrs. Currie, Sutter, Thangaraj, Himawan, Pacala and Vainio may also be deemed to have shared dispositive power and voting power with respect to the securities held by the Partnership. In addition, Mr. Himawan is a member of the Company's Board of Directors. Messrs. Currie, Sutter, Thangaraj, Himawan, Pacala and Vainio disclaim beneficial ownership of such securities except to the extent of their respective pecuniary interests therein.

Except for the transactions described in this Schedule 13D, none of the Reporting Persons has effected any transactions in the securities of the Company during the past 60 days.

Item 6. Contracts, Arrangements, Understandings or Relationships with respect to Securities of the Company

See response to Item 3.

Except for the agreements and instruments described in the response to Item 3, 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 person with respect to any securities of the Company, including, but not limited to, transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7. Material to be filed as Exhibits

Exhibit 1: Joint Filing Agreement, dated February 9, 2006.

Signatures

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

Date: February 9, 2006

ESSEX WOODLANDS HEALTH VENTURES FUND VI, L.P.

INDIVIDUALS:

By: Essex Woodlands Health Ventures VI, L.P.

By: Essex Woodlands Health Ventures VI, L.L.C.

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

/s/ James L. Currie

Name: James L. Currie

/s/ Martin P. Sutter

Name: Martin P. Sutter

ESSEX WOODLANDS HEALTH VENTURES VI, L.P.

By: Essex Woodlands Health Ventures VI, L.L.C.

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

/s/ Immanuel Thangaraj

Name: Immanuel Thangaraj

/s/ Jeff Himawan, Ph.D.

Name: Jeff Himawan, Ph.D.

ESSEX WOODLANDS HEALTH VENTURES VI, L.L.C.

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

/s/ Mark Pacala

Name: Mark Pacala

/s/ Petri Vainio, MD, Ph.D.

Name: Petri Vainio, MD, Ph.D.

Exhibit 1
JOINT FILING AGREEMENT

Each of the undersigned agrees that (i) the statement on Schedule 13D relating to the Common Stock of Medicinova, Inc., has been adopted and filed on behalf of each of them, (ii) all future amendments to such statement on Schedule 13D will, unless written notice to the contrary is delivered as described below, be jointly filed on behalf of each of them, and (iii) the provisions of Rule 13d-1(k)(1) under the Securities Exchange Act of 1934 apply to each of them. This agreement may be terminated with respect to the obligations to jointly file future amendments to such statement on Schedule 13D as to any of the undersigned upon such person giving written notice thereof to each of the other persons signature hereto, at the principal office thereof.

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Date: February 9, 2006

ESSEX WOODLANDS HEALTH VENTURES FUND VI, L.P.

INDIVIDUALS:

By: Essex Woodlands Health Ventures VI, L.P.

By: Essex Woodlands Health Ventures VI, L.L.C.

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

/s/ James L. Currie

Name: James L. Currie

/s/ Martin P. Sutter

Name: Martin P. Sutter

ESSEX WOODLANDS HEALTH VENTURES VI, L.P.

By: Essex Woodlands Health Ventures VI, L.L.C.

/s/ Immanuel Thangaraj

Name: Immanuel Thangaraj

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

/s/ Jeff Himawan, Ph.D.

Name: Jeff Himawan, Ph.D.

ESSEX WOODLANDS HEALTH VENTURES VI, L.L.C.

/s/ Martin P. Sutter

Name: Martin P. Sutter

Title: Managing Director

/s/ Mark Pacala

Name: Mark Pacala

/s/ Petri Vainio, MD, Ph.D.

Name: Petri Vainio, MD, Ph.D.