HEMOSENSE INC Form SC 13G February 13, 2006

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13G

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

HEMOSENSE, INC.
(Name of Issuer)
Common Stock
(Title of Class of Securities)
423691104
(CUSIP Number)
December 31, 2005
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- o Rule 13d-1(b)
 o Rule 13d-1(c)

 b Rule 13d-1(d)
- * 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 the disclosures provided in a prior cover page.

The information required in 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.

CUSIP No. 423691104 Page of 12 NAMES OF REPORTING PERSONS: MPM BioVentures II, L.P. 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY): CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): 2 (a) o (b) þ SEC USE ONLY: 3 CITIZENSHIP OR PLACE OF ORGANIZATION: 4 Delaware SOLE VOTING POWER: 5 322,902* NUMBER OF **SHARES** SHARED VOTING POWER: BENEFICIALLY OWNED BY 0 **EACH** SOLE DISPOSITIVE POWER: 7 REPORTING **PERSON** 322,902* WITH: SHARED DISPOSITIVE POWER: 8 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

322,902*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

11

2.9%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

12

PN

* Includes 3,137 shares issuable upon exercise of warrants within 60 days of the date hereof.

CUSIP No. 423691104 Page 3 of 12 NAMES OF REPORTING PERSONS: MPM BioVentures II-QP, L.P. 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY): CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): 2 (a) o (b) þ SEC USE ONLY: 3 CITIZENSHIP OR PLACE OF ORGANIZATION: 4 Delaware SOLE VOTING POWER: 5 2,925,693* NUMBER OF **SHARES** SHARED VOTING POWER: BENEFICIALLY OWNED BY 0 **EACH** SOLE DISPOSITIVE POWER: 7 REPORTING **PERSON** 2,925,693* WITH: SHARED DISPOSITIVE POWER: 8 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

9

2,925,693*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

11

26.3%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

12

PN

* Includes 28,427 shares issuable upon exercise of warrants within 60 days of the date hereof.

CUSIP No. 423691104 Page of 12 NAMES OF REPORTING PERSONS: MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY): CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): 2 (a) o (b) þ SEC USE ONLY: 3 CITIZENSHIP OR PLACE OF ORGANIZATION: 4 Germany SOLE VOTING POWER: 5 1,029,988* NUMBER OF **SHARES** SHARED VOTING POWER: 6 BENEFICIALLY OWNED BY 0 **EACH** SOLE DISPOSITIVE POWER: 7 REPORTING **PERSON** 1,029,988* WITH: SHARED DISPOSITIVE POWER: 8 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

9

1,029,988*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

11

9.3%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

12

PN

* Includes 10,007 shares issuable upon exercise of warrants within 60 days of the date hereof.

Page CUSIP No. 423691104 5 of 12 NAMES OF REPORTING PERSONS: MPM Asset Management Investors 2000B LLC 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY): CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): 2 (a) o (b) þ SEC USE ONLY: 3 CITIZENSHIP OR PLACE OF ORGANIZATION: 4 Delaware SOLE VOTING POWER: 5 67,361* NUMBER OF **SHARES** SHARED VOTING POWER: 6 BENEFICIALLY OWNED BY 0 **EACH** SOLE DISPOSITIVE POWER: 7 REPORTING **PERSON** 67,361* WITH: SHARED DISPOSITIVE POWER: 8 0

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

9

67,361*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

11

0.6%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

12

OO

* Includes 654 shares issuable upon exercise of warrants within 60 days of the date hereof.

CUSIP No. 423691104 Page of 12 NAMES OF REPORTING PERSONS: Ansbert Gadicke 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY): CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): 2 (a) o (b) þ SEC USE ONLY: 3 CITIZENSHIP OR PLACE OF ORGANIZATION: 4 **United States SOLE VOTING POWER:** 5 0 NUMBER OF **SHARES** SHARED VOTING POWER: 6 BENEFICIALLY OWNED BY 4,345,944* **EACH** SOLE DISPOSITIVE POWER: 7 REPORTING **PERSON** WITH: SHARED DISPOSITIVE POWER: 8 4,345,944*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

9

4,345,944*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

11

39.0%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

12

IN

* The shares are held as follows: 319,765 shares by MPM BioVentures II, L.P. (BV II), 2,897,266 shares by MPM BioVentures II-QP, L.P. (BV QP), 1,019,981 shares by MPM BioVentures GmbH & Co. Parallel Beteiligungs KG (BV KG) and 66,707 shares MPM Asset Management Investors 2000B LLC (AM LLC). BV II, BV QP, BV KG and AM LLC are under common control. Also includes the following shares issuable upon exercise of warrants within 60 days December 31, 2005: 28,427 by BV QP, L.P., 3,137 by BV II, 654 by AM LLC and 10,007 by BV KG. MPM Asset Management II LP (AM II LP) and MPM Asset Management II LLC (AM II LLC) are the direct and indirect general partners of BV II, BV QP and BV KG. The Reporting Person is a member of AM II LP, AM II LLC and AM LLC.

CUSIP No. 423691104 Page 7 of 12 NAMES OF REPORTING PERSONS: Luke Evnin 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY): CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS): 2 (a) o (b) þ SEC USE ONLY: 3 CITIZENSHIP OR PLACE OF ORGANIZATION: 4 **United States SOLE VOTING POWER:** 5 0 NUMBER OF **SHARES** SHARED VOTING POWER: BENEFICIALLY OWNED BY 4,345,944* **EACH** SOLE DISPOSITIVE POWER: 7 REPORTING **PERSON** 0 WITH: SHARED DISPOSITIVE POWER: 8 4,345,944*

AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

4,345,944*

CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS):

o

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9):

11

39.0%

TYPE OF REPORTING PERSON (SEE INSTRUCTIONS):

12

IN

* The shares are held as follows: 319,765 shares by MPM BioVentures II, L.P. (BV II), 2,897,266 shares by MPM BioVentures II-QP, L.P. (BV QP), 1,019,981 shares by MPM BioVentures GmbH & Co. Parallel Beteiligungs KG (BV KG) and 66,707 shares MPM Asset Management Investors 2000B LLC (AM LLC). BV II, BV QP, BV KG and AM LLC are under common control. Also includes the following shares issuable upon exercise of warrants within 60 days December 31, 2005: 28,427 by BV QP, L.P., 3,137 by BV II, 654 by AM LLC and 10,007 by BV KG. MPM Asset Management II LP (AM II LP) and MPM Asset Management II LLC (AM II LLC) are the direct and indirect general partners of BV II, BV QP and BV KG. The Reporting Person is a member of AM II LP, AM II LLC and AM LLC.

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Item 1.

(a) Name of Issuer

Hemosense, Inc.

(b) Address of Issuer s Principal Executive Offices

651 River Oaks Parkway

San Jose, California 95134

Item 2.

(a) Name of Person Filing

MPM BioVentures II, LP

MPM BioVentures II-OP, L.P.

MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG

MPM Asset Management Investors 2000B LLC

Ansbert Gadicke

Luke Evnin

(b) Address of Principal Business Office or, if none, Residence

c/o MPM Capital L.P.

The John Hancock Tower

200 Clarendon Street, 54th Floor

Boston, MA 02116

(c) Citizenship

All entities were organized in Delaware, except MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG which was organized in Germany. The individuals are United States citizens.

(d) Title of Class of Securities

Common Stock

(e) CUSIP Number

423691104

Item 3. If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable

Item 4. Ownership (a) Amount Beneficially Owned:	Page	9	of	12
MPM BioVentures II, LP MPM BioVentures II-QP, L.P. MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG MPM Asset Management Investors 2000B LLC Ansbert Gadicke Luke Evnin Percent of Class:			2,92 1,02 6 4,34	2,902 5,693 9,988 7,361 5,944* 5,944*
MPM BioVentures II, LP MPM BioVentures II-QP, L.P. MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG MPM Asset Management Investors 2000B LLC Ansbert Gadicke Luke Evnin (b) Number of shares as to which the person has: (i) Sole power to vote or to direct the vote				2.9% 26.3% 9.3% 0.6% 39.0% 39.0%
MPM BioVentures II, LP MPM BioVentures II-QP, L.P. MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG MPM Asset Management Investors 2000B LLC Ansbert Gadicke Luke Evnin (ii) Shared power to vote or to direct the vote			2,9 1,0	22,902 25,693 29,988 67,361 0
MPM BioVentures II, LP MPM BioVentures II-QP, L.P. MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG MPM Asset Management Investors 2000B LLC Ansbert Gadicke Luke Evnin (iii) Sole power to dispose or to direct the disposition of				0 0 0 0 45,944* 45,944*
MPM BioVentures II, LP MPM BioVentures II-QP, L.P. MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG MPM Asset Management Investors 2000B LLC Ansbert Gadicke Luke Evnin			2,9 1,0	22,902 25,693 29,988 67,361 0

	Page	10	of	12
(iv) Shared power to dispose or to direct the disposition of				
MPM BioVentures II, LP				0
MPM BioVentures II-QP, L.P.				0
MPM BioVentures GmbH & Co. Parallel-Beteiligungs KG				0
MPM Asset Management Investors 2000B LLC				0
Ansbert Gadicke			4,	345,944*
Luke Evnin			4.	345,944*

^{*} The shares are held as follows: 319,765 shares by MPM BioVentures II, L.P. (BV II), 2,897,266 shares by MPM BioVentures II-QP, L.P. (BV QP), 1,019,981 shares by MPM BioVentures GmbH & Co. Parallel Beteiligungs KG (BV KG) and 66,707 shares MPM Asset Management Investors 2000B LLC (AM LLC). BV II, BV QP, BV KG and AM LLC are under common control. Also includes the following shares issuable upon exercise of warrants within 60 days December 31, 2005: 28,427 by BV QP, L.P., 3,137 by BV II, 654 by AM LLC and 10,007 by BV KG. MPM Asset Management II LP (AM II LP) and MPM Asset Management II LLC (AM II LLC) are the direct and indirect general partners of BV II, BV QP and BV KG. The Reporting Person is a member of AM II LP, AM II LLC and AM LLC.

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following o.

Item 6. Ownership of More than Five Percent on Behalf of Another Person

Not Applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.

Not Applicable

Item 8. Identification and Classification of Members of the Group

Not Applicable

Item 9. Notice of Dissolution of a Group

Not Applicable

Item 10. Certification

Not Applicable

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SIGNATURE

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

Dated: February 9, 2006

MPM BIOVENTURES II, L.P.

By: MPM Asset Management II, L.P., its General

Partner

By: MPM Asset Management II LLC,

its General Partner

By: \s\ Luke Evnin

Name: Luke B. Evnin

Title: Manager

MPM BIOVENTURES GMBH & CO.

PARALLEL-BETEILIGUNGS KG

By: MPM Asset Management II LP, in its capacity as the Special Limited Partner

By: MPM Asset Management II LLC, its

General Partner

By: \s\ Luke Evnin

Name: Luke B. Evnin

Title: Manager

By: \s\ Ansbert Gadicke

Name: Ansbert Gadicke

MPM BIOVENTURES II-QP, L.P.

By: MPM Asset Management II, L.P., its General

Partner

By: MPM Asset Management II LLC,

its General Partner

By: \s\ Luke Evnin

Name: Luke B. Evnin

Title: Manager

MPM ASSET MANAGEMENT INVESTORS

2000B LLC

By:

By: \s\ Luke Evnin

Name: Luke B. Evnin

Title: Manager

\s\ Luke Evnin

Name: Luke B. Evnin

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<u>EXHIBIT A</u> JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of a statement on Schedule 13G (including amendments thereto) with respect to the Common Stock of Hemosense, Inc. and further agree that this agreement be included as an exhibit to such filing. Each party to the agreement expressly authorizes each other party to file on its behalf any and all amendments to such statement. Each party to this agreement agrees that this joint filing agreement may be signed in counterparts.

In evidence whereof, the undersigned have caused this Agreement to be executed on their behalf this 9th day of February, 2005.

MPM BIOVENTURES II. L.P.

By: MPM Asset Management II, L.P., its General

Partner

By: MPM Asset Management II LLC,

its General Partner

By: \s\ Luke Evnin

Name: Luke B. Evnin Title: Manager

MPM BIOVENTURES GMBH & CO. PARALLEL-BETEILIGUNGS KG

By: MPM Asset Management II LP, in its capacity as the Special Limited Partner

By: MPM Asset Management II LLC, its

General Partner

By: \s\ Luke Evnin

Name: Luke B. Evnin Title: Manager

By: \s\ Ansbert Gadicke

Name: Ansbert Gadicke

MPM BIOVENTURES II-QP, L.P.

By: MPM Asset Management II, L.P., its General

Partner

By: MPM Asset Management II LLC,

its General Partner

By: \s\ Luke Evnin

Name: Luke B. Evnin Title: Manager

MPM ASSET MANAGEMENT INVESTORS

2000B LLC

By: \s\ Luke Evnin

Name: Luke B. Evnin Title: Manager

By: \s\ Luke Evnin

Name: Luke B. Evnin