

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

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934
(Amendment No. 1)

MediciNova, Inc.

Name of Issuer

Common Stock, par value \$0.001

(Title of Class of Securities)

58468P206

(CUSIP Number)

December 31, 2010

(Date of Event Which Requires Filing of this
Statement)

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

Rule 13d-1(b)

Rule 13d-1(c)

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 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:

Southpaw Asset Management LP

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

NUMBER OF SHARES
BENEFICIALLY OWNED
BY EACH REPORTING
PERSON WITH

956,294

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

956,294

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

956,294

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

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

7.1%

12 TYPE OF REPORTING PERSON:

1 NAMES OF REPORTING PERSONS:

Southpaw Holdings LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

956,294

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

956,294

NUMBER OF SHARES
BENEFICIALLY OWNED
BY EACH REPORTING
PERSON WITH

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

956,294

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

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

7.1%

12 TYPE OF REPORTING PERSON:

OO

1 NAMES OF REPORTING PERSONS:

Southpaw Credit Opportunity Master Fund LP

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

873,149

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

873,149

NUMBER OF SHARES
BENEFICIALLY OWNED
BY EACH REPORTING
PERSON WITH

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

873,149

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

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

6.6%

12 TYPE OF REPORTING PERSON:

PN

1 NAMES OF REPORTING PERSONS:

Kevin Wyman

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

NUMBER OF SHARES
BENEFICIALLY OWNED
BY EACH REPORTING
PERSON WITH

956,294

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

956,294

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

956,294

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

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

7.1%

12 TYPE OF REPORTING PERSON:

IN

1 NAMES OF REPORTING PERSONS:

Howard Golden

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

0

6 SHARED VOTING POWER

NUMBER OF SHARES
BENEFICIALLY OWNED
BY EACH REPORTING
PERSON WITH

956,294

7 SOLE DISPOSITIVE POWER

0

8 SHARED DISPOSITIVE POWER

956,294

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:

956,294

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

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

7.1%

12 TYPE OF REPORTING PERSON:

IN

ITEM NAME OF ISSUER:

1(a)

MediciNova, Inc. (the "Issuer")

ITEM ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:

1(b)

4350 La Jolla Village Drive, Suite 950
San Diego, California 92122

ITEM 2(a) NAME OF PERSON FILING:

This statement is filed on behalf of the following persons (collectively, the "Reporting Persons"):

- (i) Southpaw Asset Management LP ("Southpaw Management")
- (ii) Southpaw Credit Opportunity Master Fund LP
- (iii) Southpaw Holdings LLC ("Southpaw Holdings")
- (iv) Kevin Wyman
- (v) Howard Golden

This statement relates to securities held for the account of (i) Southpaw Credit Opportunity Master Fund LP, a Cayman Islands limited partnership (the "Fund"), which owns \$5,937,412 in principal amount of the Floating Rate Secured Convertible Notes due 2011 of the Issuer ("Convertible Notes"), (ii) a separate managed account managed by Southpaw Management (the "Managed Account 1"), which owns \$417,512 in principal amount of Convertible Notes, and (iii) another separate managed account managed by Southpaw Management (the "Managed Account 2"; and together with the Managed Account 1, the "Managed Accounts"), which owns \$147,877 in principal amount of Convertible Notes. Southpaw Management is the investment manager of the Fund and the Managed Accounts, and, in such capacities, may be deemed to beneficially own the Convertible Notes reported herein which are deemed beneficially owned by the Fund and the Managed Accounts. Southpaw Holdings serves as the general partner of Southpaw Management, and, in such capacity, may be deemed to beneficially own the Convertible Notes reported herein which may be deemed beneficially owned by Southpaw Management. Mr. Wyman and Mr. Golden are principals of Southpaw Holdings and managers of Southpaw Management, and, in such capacities, may be deemed to beneficially own the Convertible Notes reported herein which may be deemed beneficially owned by Southpaw Management.

ITEM 2(b) ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

2 Greenwich Office Park
Greenwich, CT 06831

ITEM 2(c) CITIZENSHIP:

- (i) Southpaw Asset Management LP is a limited partnership organized under the laws of Delaware.
- (ii) Southpaw Credit Opportunity Master Fund LP is a limited partnership organized under the laws of the Cayman Islands.
- (iii) Southpaw Holdings LLC is a limited liability company organized under the laws of Delaware.
- (iv) Kevin Wyman is an individual having citizenship in the United States.
- (v) Howard Golden is an individual having citizenship in the United States.

ITEM 2(d) TITLE OF CLASS OF SECURITIES: Common Stock

ITEM 2(e) CUSIP NUMBER: 58468P206

ITEM 3 IF THIS STATEMENT IS FILED PURSUANT TO §§ 240.13d-1(b) OR 240.13d-2(b) OR (c), CHECK WHETHER THE FILING PERSON IS:

Not applicable.

ITEM 4 OWNERSHIP:

In connection with the merger of Avigen, Inc. ("Avigen") with a subsidiary of the Issuer as reported in the Issuer's current report on Form 8-K filed on December 22, 2009 (the "December 22, 2009 Form 8-K"), the Reporting Persons received a certain amount of Convertible Notes in December 2009 as discussed in the Schedule 13G filed on December 28, 2009 which this Amendment No. 1 to Schedule 13G amends and supplements. In September 2010, following the release of amounts from an escrow account pursuant to the Escrow Agreement (as defined in the December 22, 2009 Form 8-K), the Reporting Persons received additional Convertible Notes.

As of December 31, 2010, the Fund owns \$5,937,412 in principal amount of the Convertible Notes; Managed Account 1 owns \$417,512 in principal amount of Convertible Notes; and Managed Account 2 owns \$147,877 in principal amount of Convertible Notes. Southpaw Management is the investment manager of the Fund and the Managed Accounts, and, in such capacities, may be deemed to beneficially own the Convertible Notes reported herein which are deemed beneficially owned by the Fund and the Managed Accounts. Southpaw Holdings serves as the general partner of Southpaw Management, and, in such capacity, may be deemed to beneficially own the Convertible Notes reported herein which may be deemed beneficially owned by Southpaw Management. Mr. Wym an and Mr. Golden are principals of Southpaw Holdings and managers of

Southpaw Management, and, in such capacities, may be deemed to beneficially own the Convertible Notes reported herein which may be deemed beneficially owned by Southpaw Management.

Note that references to percentage ownerships of common stock in this Amendment No. 1 to Schedule 13G are based upon (i) the 12,436,381 shares of common stock outstanding as reported in the Issuer's quarterly report on Form 10-Q for the quarter ended September 30, 2010 filed on November 8, 2010, and (ii) the conversion rate of 1 share of common stock per \$6.80 principal amount of Convertible Notes as reported in the December 22, 2009 Form 8-K.

- (i) For Southpaw Asset Management LP:
 - (a) Amount beneficially owned: 956,294
 - (b) Percent of class: 7.1%
 - (c) Number of shares as to which the person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 956,294
 - (iii) Sole power to dispose or direct the disposition of: 0
 - (iv) Shared power to dispose or direct the disposition of: 956,294
- (ii) For Southpaw Holdings LLC:
 - (a) Amount beneficially owned: 956,294
 - (b) Percent of class: 7.1%
 - (c) Number of shares as to which the person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 956,294
 - (iii) Sole power to dispose or direct the disposition of: 0
 - (iv) Shared power to dispose or direct the disposition of: 956,294
- (iii) For Southpaw Credit Opportunity Master Fund LP:
 - (a) Amount beneficially owned: 873,149
 - (b) Percent of class: 6.6%
 - (c) Number of shares as to which the person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 873,149
 - (iii) Sole power to dispose or direct the disposition of: 0
 - (iv) Shared power to dispose or direct the disposition of: 873,149
- (iv) For Kevin Wyman:
 - (a) Amount beneficially owned: 956,294
 - (b) Percent of class: 7.1%
 - (c) Number of shares as to which the person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 956,294
 - (iii) Sole power to dispose or direct the disposition of: 0
 - (iv) Shared power to dispose or direct the disposition of: 956,294
- (v) For Howard Golden:
 - (a) Amount beneficially owned: 956,294

(b) Percent of class: 7.1%

(c) Number of shares as to which the person has:

(i) Sole power to vote or direct the vote: 0

(ii) Shared power to vote or direct the vote: 956,294

(iii) Sole power to dispose or direct the disposition of: 0

(iv) Shared power to dispose or direct the disposition of: 956,294

ITEM 5 OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

Not Applicable.

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 GROUP.

Not Applicable.

ITEM 10 CERTIFICATIONS.

By signing below each of the Reporting Persons certifies that, to the best of such person's knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

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.

January 18, 2010

Southpaw Credit Opportunity Master Fund
LP

By: Southpaw GP LLC,
its general partner

By: /s/ Kevin Wyman
Name: Kevin Wyman
Title: Managing Member

Southpaw Asset Management LP

By: Southpaw Holdings LLC,
its general partner

By: /s/ Kevin Wyman
Name: Kevin Wyman
Title: Managing Member

Southpaw Holdings, LLC

By: /s/ Kevin Wyman
Name: Kevin Wyman
Title: Managing Member

/s/ Kevin Wyman
Kevin Wyman

/s/ Howard Golden
Howard Golden

EXHIBIT INDEX

Exhibit Number Exhibit

1. Joint Filing Agreement, dated January 18, 2010, by and among the Reporting Persons.

EXHIBIT 1 - JOINT FILING AGREEMENT

The undersigned hereby agree that Amendment No. 1 to the Schedule 13G with respect to the shares of common stock of MediciNova, Inc., dated as of January 18, 2010, is, and any amendments thereto (including amendments on Schedule 13D) signed by each of the undersigned shall be, filed on behalf of each of the undersigned pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934.

Date: January 18, 2010

Southpaw Credit Opportunity Master Fund
LP

By: Southpaw GP LLC,
its general partner

By: /s/ Kevin Wyman
Name: Kevin Wyman
Title: Managing Member

Southpaw Asset Management LP

By: Southpaw Holdings LLC,
its general partner

By: /s/ Kevin Wyman
Name: Kevin Wyman
Title: Managing Member

Southpaw Holdings, LLC

By: /s/ Kevin Wyman
Name: Kevin Wyman
Title: Managing Member

/s/ Kevin Wyman
Kevin Wyman

/s/ Howard Golden
Howard Golden