

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

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. )\*

DISCOVERY LABORATORIES, INC.  
(Name of Issuer)

COMMON STOCK  
(Title of Class of Securities)

254668106  
(CUSIP Number)

April 30, 2007  
(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 ("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).

CUSIP No. 254668106

1. NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS

HEARTLAND ADVISORS, INC.

#39-1078128

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) [ ]  
(b) [ ]

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

WISCONSIN, U.S.A.

-----  
NUMBER OF 5. SOLE VOTING POWER  
SHARES BENEFICIALLY

OWNED BY None  
EACH

REPORTING 6. SHARED VOTING POWER  
PERSON

WITH 6,124,900

7. SOLE DISPOSITIVE POWER

None

8. SHARED DISPOSITIVE POWER

6,151,900

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,151,900

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES \_\_\_\_\_

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

8.7%

12. TYPE OF REPORTING PERSON

IA

CUSIP No. 254668106

1. NAME OF REPORTING PERSONS

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS

WILLIAM J. NASGOVITZ

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a) [ ]  
(b) [ ]

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

U.S.A.

5. SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

None

6. SHARED VOTING POWER

6,124,900

7. SOLE DISPOSITIVE POWER

None

8. SHARED DISPOSITIVE POWER

6,151,900

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

6,151,900

10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES \_\_\_\_\_

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

8.7%

12. TYPE OF REPORTING PERSON

IN

Item 1.

(a) Name of Issuer: Discovery Laboratories, Inc.

(b) Address of Issuer's Principal Executive Offices:

2600 KELLY ROAD, SUITE 100  
WARRINGTON, PA 18976

Item 2.

(a) Name of Person Filing: (1) Heartland Advisors, Inc.

(2) William J. Nasgovitz

(b) Address of Principal Business Office:

(1) 789 North Water Street (2) 789 North Water Street  
Milwaukee, WI 53202 Milwaukee, WI 53202

(c) Citizenship: Heartland Advisors is a Wisconsin corporation.  
William J. Nasgovitz - U.S.A

(d) Title of Class of Securities: Common Stock

(e) CUSIP Number: 254668106

Item 3. The persons filing this Schedule 13G are Heartland Advisors, Inc., an investment adviser registered with the SEC, and William J. Nasgovitz, President and principal shareholder of Heartland Advisors, Inc. Mr. Nasgovitz joins in this filing pursuant to SEC staff positions authorizing certain individuals in similar situations to join in a filing with a controlled entity eligible to file on Schedule 13G. The reporting persons do not admit that they constitute a group.

Item 4. Ownership.

(a) Amount beneficially owned:

6,151,900 shares may be deemed beneficially owned within the meaning of Rule 13d-3 of the Securities Exchange Act of 1934 by (1) Heartland Advisors, Inc. by virtue of its investment discretion and voting authority granted by certain clients, which may be revoked at any time; and (2) William J. Nasgovitz, as a result of his ownership interest in Heartland Advisors, Inc. Heartland Advisors, Inc. and Mr. Nasgovitz each specifically disclaim beneficial ownership of any shares reported on the Schedule.

(b) Percent of Class: 8.7%

(c) For information on voting and dispositive power with respect to the above listed shares, see Items 5-9 of the Cover Pages.

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: [ ]

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

The clients of Heartland Advisors, Inc., a registered investment adviser, including an investment company registered under the Investment Company Act of 1940 and other managed accounts, have the right to receive or the power to direct the receipt of dividends and proceeds from the sale of shares included on this Schedule. The Heartland Value Fund, a series of the Heartland Group, Inc., a registered investment company, owns 5,500,000 shares or 7.8% of the class of securities reported herein. Any remaining shares disclosed in this filing are owned by various other accounts managed by Heartland Advisors, Inc. on a discretionary basis. To the best of Heartland Advisors' knowledge, none of the other accounts own more than 5% of the outstanding stock.

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

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. Certification.

By signing below, the undersigned certify that, to the best of their knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and 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.

DATE: May 10, 2007

WILLIAM J. NASGOVITZ

HEARTLAND ADVISORS, INC.

By: /s/ PAUL T. BESTE    By: /s/ PAUL T. BESTE  
Paul T. Beste    Paul T. Beste  
As Attorney in Fact for    Chief Operating Officer  
William J. Nasgovitz

EXHIBIT INDEX

Exhibit 1            Joint Filing Agreement

EXHIBIT 1

Joint Filing Agreement

The undersigned persons agree and consent to the joint filing on their behalf of this Schedule 13G in connection with their beneficial ownership of Discovery Laboratories, Inc. at April 30, 2007.

WILLIAM J. NASGOVITZ

By: /s/ PAUL T. BESTE  
Paul T. Beste  
As Attorney in Fact for William J. Nasgovitz

HEARTLAND ADVISORS, INC.

By: /s/ PAUL T. BESTE  
Paul T. Beste  
Chief Operating Officer