UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

August 6, 2007

Date of Report (date of earliest event reported)

HEMOSENSE, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction

001-32541 (Commission File Number)

77-0452938 (I.R.S. Employer

of incorporation or organization)

651 River Oaks Parkway

Identification Number)

San Jose, California 95134

(Address of principal executive offices)

(408) 719-1393

(Registrant s telephone number, including area code)

N/A

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- " Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- x Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement.

On August 6, 2007, HemoSense, Inc., a Delaware corporation (HemoSense), Inverness Medical Innovations, Inc., a Delaware corporation (Inverness), and Spartan Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of Inverness (Merger Sub), entered into an Agreement and Plan of Reorganization (the Merger Agreement), pursuant to which HemoSense and Inverness will combine their businesses through a merger of HemoSense and Merger Sub (the Merger).

The completion of the Merger is subject to various closing conditions, including obtaining the approval of HemoSense shareholders and receiving antitrust approvals (including under the Hart-Scott-Rodino Antitrust Improvements Act). The Merger is intended to qualify as a reorganization for federal income tax purposes.

At the effective time of the Merger (the Effective Time), by virtue of the Merger and without any action on the part of the holder of any capital stock of HemoSense, each share of common stock of HemoSense issued and outstanding immediately prior to the Effective Time will be converted into the right to receive 0.274192 (the Exchange Ratio) of a share of common stock of Inverness (each full share, an Inverness Share).

In the Merger, each option to purchase shares of HemoSense common stock granted under stock option plans of HemoSense that is outstanding as of immediately prior to the Effective Time, whether vested or unvested, shall be converted into a right to acquire Inverness Shares on the same terms and conditions as were applicable to such option prior to the Effective Time, provided that the number of Inverness Shares receivable and the exercise price of the option shall be adjusted to reflect the Exchange Ratio. Warrants outstanding as of the Effective Time will be denominated in Inverness Shares, with applicable adjustments to reflect the Exchange Ratio.

If the Merger Agreement is terminated under certain circumstances specified in the Merger Agreement, HemoSense will be required to pay Inverness a termination fee of \$5.25 million.

The Boards of Directors of HemoSense and Inverness have approved the Merger and the Merger Agreement.

Concurrently with the entry into the Merger Agreement, Inverness entered into voting agreements (Voting Agreements) with the directors, executive officers and certain shareholders of HemoSense under which they have agreed to vote approximately 33% of the outstanding shares of common stock of HemoSense in favor of the approval of the Merger and the adoption of the Merger Agreement. In addition to the directors and executive officers of HemoSense, Vanguard V, L.P. and four entities affiliated with MPM Asset Management, LLC executed Voting Agreements. Affiliates of each of these entities serve as directors of HemoSense.

The foregoing description of the Merger Agreement is qualified in its entirety by reference to the full text of the Merger Agreement, which is attached to this Current Report on Form 8-K as Exhibit 2.1 and incorporated herein by reference. The Merger Agreement has been attached to provide investors with information regarding its terms. It is not intended to provide any other factual information about HemoSense or Inverness. In particular, the assertions embodied in the representations and warranties contained in the Merger Agreement are qualified by information in confidential disclosure schedules provided by HemoSense and Inverness to each other in connection with the signing of the Merger Agreement. These disclosure schedules contain information that modifies, qualifies and creates exceptions to the representations and warranties set forth in the Merger Agreement. Moreover, certain representations and warranties in the Merger Agreement were used for the purpose of allocating risk between HemoSense and Inverness rather than establishing matters as facts. Accordingly, you should not rely on the representations and warranties in the Merger Agreement as characterizations of the actual state of facts about HemoSense or Inverness.

Item 8.01 Other Events.

On August 6, 2007, Inverness and HemoSense issued a press release announcing the execution of the Merger Agreement. A copy of the press release is furnished hereto as Exhibit 99.1 and incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

2.1 Agreement and Plan of Reorganization dated as of August 6, 2007, by and among Inverness Medical Innovations, Inc.,

Spartan Merger Sub, Inc. and HemoSense, Inc.

99.1 Press release dated August 6, 2007.

Forward-Looking Statements

This Current Report on Form 8-K contains forward-looking statements within the meaning of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, and is subject to the safe harbors created therein. These statements include, but are not limited to, those regarding the prospects and timing associated with the consummation of the Merger and the tax treatment of the Merger for federal income tax purposes. These statements are subject to risks and uncertainties that could cause actual results and events to differ materially from those expressed in the forward-looking statements. These risks and uncertainties include, among others, the risk that the Merger does not close, including the risk that required shareholder and regulatory approvals for the Merger may not be obtained; the risk that the Internal Revenue Service may determine that the Merger does not qualify as a reorganization for federal income tax purposes; diversion of management s attention away from other business concerns; the risks associated with the development, generally, of the combined company s overall strategic objectives; the ability of the combined company to build additional value in its business; the existence of unanticipated technical, commercial or other setbacks related to the combined company s products and services; and the other risks set forth in Inverness and HemoSense s most recent Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q filed with the Securities and Exchange Commission. The combined company may not successfully integrate the operations of Inverness and HemoSense in a timely manner, or at all, and the combined company may not realize the anticipated benefits or synergies of the Merger. HemoSense undertakes no obligation to update any forward-looking statements to reflect new information, events, or circumstances occurring after the date of this Current Report on Form 8-K.

Additional Information and Where To Find It

Inverness plans to file with the SEC a Registration Statement on Form S-4 in connection with the transaction and HemoSense plans to file with the SEC and mail to its shareholders a Proxy Statement/Prospectus in connection with the transaction. The Registration Statement and the Proxy Statement/Prospectus will contain important information about Inverness, HemoSense, the transaction and related matters. Investors and security holders are urged to read the Registration Statement and the Proxy Statement/Prospectus carefully when they are available. Investors and security holders will be able to obtain free copies of the Registration Statement and the Proxy Statement/Prospectus and other documents filed with the SEC by Inverness and HemoSense through the web site maintained by the SEC at www.sec.gov. In addition, investors and security holders will be able to obtain free copies of the Registration Statement and the Proxy Statement/Prospectus from Inverness by contacting Shareholder Relations at (781) 647-3900 or jon.russell@invmed.com or from HemoSense by contacting Don Markley or Brandi Floberg at (310) 691-7100 or bfloberg@lhai.com.

Inverness and its directors and executive officers may be deemed to be participants in the solicitation of proxies from the shareholders of HemoSense in connection with the transaction described herein. Information regarding the special interests of these directors and executive officers in the transaction described herein will be included in the Proxy Statement/Prospectus described above. Additional information regarding these directors and executive officers is also included in Inverness s proxy statement for its 2007 Annual Meeting of Stockholders, which was filed with the SEC on or about April 9, 2007. This document is available free of charge at the SEC s web site at www.sec.gov and from Inverness by contacting Inverness at Shareholder Relations at (781) 647-3900 or jon.russell@invmed.com.

HemoSense and its directors and executive officers also may be deemed to be participants in the solicitation of proxies from the shareholders of HemoSense in connection with the transaction described herein. Information regarding the special interests of these directors and executive officers in the transaction described herein will be included in the Proxy Statement/Prospectus described above. Additional information regarding these directors and executive officers is also included in HemoSense s proxy statement for its 2007 Annual Meeting of Shareholders, which was filed with the SEC on or about January 29, 2007. This document is available free of charge at the SEC s web site at www.sec.gov and from HemoSense by contacting Don Markley or Brandi Floberg at (310) 691-7100 or bfloberg@lhai.com .

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

HEMOSENSE, INC.

Date: August 7, 2007 /s/ James Merselis

By:

James Merselis President and Chief Executive Officer