	UNITED STATES	
SECURITI	ES AND EXCHANGE COM	IMISSION
	Washington, D.C. 20549	
	FORM 8-K	
	CURRENT REPORT	
Pursuant to S	Section 13 or 15(d) of the Securities Exchang	e Act of 1934
Date	of Report (Date of earliest event reported): May 18, 2	2005
	Novoste Corporation	
	(Exact name of registrant as specified in its charter)	
Florida other jurisdiction	0-20727 (Commission File Number)	59-2787476 (IRS Employer
corporation)		Identification No.)

(State or

of in

4350 International Blvd. Norcross, GA (Address of principal executive offices)

30093 (Zip Code)

Registrant s telephone number, including area code: (770) 717-0904

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)
- 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.

a. Executive Termination Agreements

On May 18, 2005, Novoste Corporation (Novoste or the Company) and its executive officers entered into amendments (the Termination Agreement Amendments) to those certain Amended and Restated Termination Agreements between Novoste and its executive officers previously filed by Novoste with the Securities and Exchange Commission as Exhibits 99.1 and 99.2 to the Current Report on Form 8-K of the Company filed on May 20, 2003. The Termination Agreement Amendments provide that in the case of a Change in Control (as described in the Amended and Restated Termination Agreements) of Novoste involving ONI Medical Systems, Inc. or certain other parties, but only in such cases, the severance payment payable to such executive officers currently equal to three times annual salary and bonus shall be reduced as follows:

(A) to 1.75 times annualized salary (as calculated pursuant to the terms of the Amended and Restated Termination Agreements and the Termination Agreement Amendments) for executive officers other than Alfred J. Novak, the president and chief executive officer of Novoste; and

(B) to two times salary and performance bonus (as calculated pursuant to the terms of the Amended and Restated Termination Agreements and the Termination Agreement Amendments) for Alfred J. Novak, the president and chief executive officer of Novoste.

The above description of the Termination Agreement Amendments does not purport to be a complete statement of the parties rights and obligations under those agreements. The above description is qualified in its entirety by reference to the forms of the Termination Agreements Amendments, copies of which are attached to this Current Report on Form 8-K as Exhibits 10.1 and 10.2 and are incorporated herein by reference.

b. Execution of Indemnification Agreements

On May 18, 2005, each of the directors and executive officers of the Company entered into an Indemnification Agreement (the Indemnification Agreement) in the form of Exhibit 10.3 attached hereto. The Indemnification Agreement establishes indemnification rights that are not exclusive of, and are in addition to, the rights set forth in the Company s Amended and Restated Articles of Incorporation, as amended, and Bylaws.

Each Indemnification Agreement provides that the Company shall indemnify the applicable officer or director made party to the Indemnification Agreement (each, an Indemnitee) to the fullest extent permitted by applicable law as currently in effect (or as such law shall be amended in the future, provided that such future law expands, and does not limit, an Indemnitee s rights as set forth in the Indemnification Agreement). Specifically, the Company, except in the limited circumstances described below, must indemnify an Indemnitee in the event that he or she is a party to or is involved or becomes involved in any manner (including as a witness), or is threatened to be made so involved, in any proceeding by reason of the fact that he or she is or was a director, officer, employee or agent of the Company, against all losses (including legal expenses) actually and reasonably incurred in connection with such proceeding.

The Company will not indemnify or advance expenses to an Indemnitee to the extent that (i) a final court decision finds that such indemnification or advancement of expenses is unlawful or (ii) a judgment or other final adjudication establishes that an Indemnitee s actions, or

omissions to act, were material to the cause of action adjudicated and constitute (A) a violation of criminal law, (B) a transaction from which an Indemnitee derived an improper personal benefit, (C) a circumstance under which a director is liable for authorizing an unlawful distribution under the Florida Business Corporations Act, or (D) willful misconduct or a conscious disregard for the best interests of the Company in a shareholder derivative suit.

The above description of the Indemnification Agreement does not purport to be a complete statement of the rights and obligations of the parties under the Indemnification Agreement. The above description is qualified in its entirety by reference to the form of the Indemnification Agreement, a copy of which is attached to this Current Report on Form 8-K as Exhibit 10.3 and is incorporated herein by reference.

c. Amendment to Rights Plan

On May 18, 2005, in connection with the Company s entering into a definitive merger agreement with ONI Medical Systems, Inc. (the Merger Agreement), the Board of Directors adopted Amendment No. 1 (the Amendment) to the Company s Amended and Restated Rights Agreement dated as of July 29, 1999 between the Company and American Stock Transfer & Trust Company, as the rights agent (the Rights Agreement). The Amendment amends various provisions of the Rights Agreement to provide, among other things, that, notwithstanding anything in the Rights Agreement that might otherwise be deemed to the contrary:

- (i) neither ONI Medical Systems, Inc. nor any of its affiliates or associates shall be deemed to be an Acquiring Person under the Rights Agreement,
- (ii) no Distribution Date under the Rights Agreement shall be deemed to have occurred, and
- (iii) no Share Acquisition Date under the Rights Agreement shall be deemed to have occurred,

solely by reason of the approval, execution, delivery, announcement or consummation of the Merger (as defined in the Merger Agreement) and any of the transactions contemplated by the Merger Agreement.

In addition, the Rights Agreement has been amended to provide that Galen Partners IV, LP, Galen Partners International IV, LP, Galen Employee Fund IV, LP and Claudius IV, LLC, together with their affiliates and associates shall not be deemed an Acquiring Person under the Rights Agreement as a result of the approval, execution or consummation of the merger with ONI Medical Systems, Inc. Rather, such persons shall be deemed a Qualified Exempt Person under the Rights Agreement and shall remain a Qualified Exempt Person until such person acquires beneficial ownership of an additional 2% of the Company s common shares then outstanding in excess of the amount of the common shares such Qualified Exempt Person owned as of the Effective Time (as defined in the Merger Agreement) of the merger with ONI Medical Systems, Inc.

The above description of the Amendment does not purport to be a complete description of the Amendment. The above description is qualified in its entirety by reference to the Amendment, a copy of which is attached to this Current Report on Form 8-K as Exhibit 10.4, and is incorporated herein by reference.

* * *

Item 9.01. Financial Statements and Exhibits.

- (c) Exhibits
 - 10.1 Form of Amendment to the Amended and Restated Termination Agreements for Executive Officers other than Alfred J. Novak
 - 10.2 Form of Amendment to the Amended and Restated Termination Agreement with Alfred J. Novak

- 10.3 Form of Indemnification Agreement
- Amendment No. 1, dated May 18, 2005, to the Amended and Restated Rights Agreement, dated as of July 29, 1999, between Novoste Corporation and American Stock Transfer & Trust Company, as the rights agent.

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 hereunto duly authorized.

NOVOSTE CORPORATION

By: /s/ Daniel G. Hall

Daniel G. Hall Vice President, Secretary and General Counsel

Date: May 24, 2005

EXHIBIT INDEX

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