

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934
(Amendment No. 4)*

TRIPATH IMAGING, INC.

(Name of Issuer)

Common Stock (par value \$0.01 per share)

(Title of Class of Securities)

896942109

(CUSIP Number)

Jeffrey S. Sherman, Esq.
Becton, Dickinson and Company
1 Becton Drive,
Franklin Lakes, New Jersey 07417
(201) 847-6800

Copy to:

Mario A. Ponce, Esq.
Simpson Thacher & Bartlett LLP
425 Lexington Avenue
New York, New York 10017
(212) 455-2000

(Name, Address and Telephone Number of Person Authorized to Receive Notices
and Communications)

September 8, 2006

(Date of Event which Requires Filing of this Statement)

If a filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of ss.ss.240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. [X]

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See ss.240.13d-7 for other parties to whom copies are to be sent.

* 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 disclosures provided in a prior cover page.

The information required on 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 ("Exchange 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. 896942109

1 NAME OF REPORTING PERSONS

Becton, Dickinson and Company

I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

22-0760120

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4	SOURCE OF FUNDS*	
	WC	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e)	<input type="checkbox"/>
6	CITIZENSHIP OR PLACE OF ORGANIZATION	
	New Jersey	
	7	SOLE VOTING POWER
NUMBER OF	2,500,000	
SHARES		
BENEFICIALLY	8	SHARED VOTING POWER
OWNED BY	0	
EACH	9	SOLE DISPOSITIVE POWER
REPORTING	2,500,000	
PERSON	10	SHARED DISPOSITIVE POWER
WITH	0	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	2,500,000	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	<input type="checkbox"/>
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	6.5%	
14	TYPE OF REPORTING PERSON	
	CO	

ITEM 1. SECURITY AND ISSUER.

This Amendment No. 4 amends and supplements the statement on Schedule 13D filed on August 14, 2006 by Becton, Dickinson and Company ("BD") relating to the common stock, \$0.01 par value per share (the "Common Stock"), of TriPath Imaging, Inc., a Delaware corporation (the "Issuer") as amended by Amendment No. 1 filed by BD on August 16, 2006, Amendment No. 2 filed by BD on August 25, 2006 and Amendment No. 3 filed by BD on September 1, 2006. The principal executive offices of the Issuer are located at 780 Plantation Drive, Burlington, North Carolina 27215.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

Item 3 is hereby amended and supplemented as follows:

The total consideration to be paid by BD in connection with the Merger described below is estimated to be approximately \$350 million, to be provided from working capital.

ITEM 4. PURPOSE OF THE TRANSACTION.

Item 4 is hereby amended and supplemented as follows:

On September 8, 2006, BD, the Issuer and Timpani Acquisition Corp., a wholly owned subsidiary of BD, entered into an Agreement and Plan of Merger (the "Merger Agreement") pursuant to which Timpani Acquisition Corp. will be merged with and into the Issuer, with the Issuer continuing after the merger as the surviving corporation and as a wholly owned subsidiary of BD (the "Merger"). Pursuant to the Merger Agreement, at the effective time of the Merger, each outstanding share of Common Stock (other than shares owned by BD, shares held in the treasury of the Issuer and shares held by any stockholders who properly exercise appraisal rights under Delaware law) will be cancelled and converted into the right to receive \$9.25 in cash, without interest. Also, at the effective time of the Merger, each outstanding option to purchase shares of Common Stock and stock-settled stock appreciation right ("SAR"), whether or not then exercisable or vested, will be cancelled in consideration for a cash payment equal to the excess, if any, of (i) \$9.25 over (ii) the per share exercise price of such option or SAR, as applicable, multiplied by the total number of shares of Common Stock subject to such option or SAR. In the event the exercise price of any such option or SAR is equal to or greater than \$9.25, the option or SAR will be cancelled without payment. Warrants with respect to the Common Stock will be assumed by BD, and, if subsequently exercised, will entitle their holders to a per share amount equal to the excess of the merger consideration they would be entitled to were the warrants exercised immediately prior to the effective time of the Merger over the exercise price of such warrants.

The Merger is currently expected to close during the fourth quarter of calendar 2006. Completion of the transaction is subject to the approval of the Issuer's stockholders, the expiration or termination of the Hart-Scott-Rodino waiting period and other customary closing conditions. The Merger Agreement contains certain termination rights for the Issuer and BD, and provides that the Issuer would be required to pay BD a termination fee of \$12,250,000 in certain circumstances in connection with the termination of the Merger Agreement.

The foregoing description of the Merger Agreement and the transactions contemplated thereby do not purport to be complete and are subject to, and qualified in their entirety by reference to, the full text of the Merger Agreement, which is included as Exhibit 7.2 and is incorporated by reference to this Item 4.

The purpose of the Merger is to acquire all of the outstanding shares of Common Stock. If the Merger is consummated, the Common Stock will be delisted from the Nasdaq National Market and will

2

cease to be registered under the Securities Exchange Act of 1934. It is further contemplated that, following completion of the Merger, the composition of the Issuer's Board of Directors would be changed in a manner to be determined at a later date.

ITEM 6. CONTRACTS, ARRANGEMENTS OR UNDERSTANDINGS WITH RESPECT TO SECURITIES OF THE ISSUER.

The responses to Item 4 of this Amendment No. 4 and Exhibit 7.2 are hereby incorporated by reference in their entirety into this Item 6.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

Exhibit 7.2 Agreement and Plan of Merger dated as of September 8, 2006 (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by TriPath Imaging, Inc. on September 8, 2006).

3

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: September 8, 2006

BECTON, DICKINSON AND COMPANY

By: /s/ Dean Paranicas

Name: Dean Paranicas

Title: Vice President, Corporate
Secretary and Public Policy