

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934
(Amendment No.2)*

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)

August 25, 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 PERSON Becton, Dickinson and Company
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON 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 IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 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		
WITH	10	SHARED DISPOSITIVE POWER
		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. 2 amends 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, of TriPath Imaging Inc., a Delaware corporation (the "Issuer") as amended by Amendment No. 1 filed by BD on August 16, 2006. The principal executive offices of the Issuer are located at 780 Plantation Drive, Burlington, North Carolina 27215.

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

Item 6 is hereby amended and supplemented as follows:

On August 16, 2006, BD and the Issuer executed an exclusivity agreement (the "Exclusivity Agreement") pursuant to which BD and the Issuer agreed to work in good faith with each other to negotiate a business combination transaction involving BD and the Issuer on an exclusive basis through 11:59 p.m. (New York City time) on August 25, 2006, or such later date as BD and the Issuer may agree in writing (the "Termination Date").

In light of the ongoing negotiations regarding a possible business combination transaction involving BD and the Issuer, on August 25, 2006, BD and the Issuer executed an amendment to the Exclusivity Agreement pursuant to which the Termination Date has been revised and extended to 11:59 p.m. (New York City time) on September 1, 2006. In all other respects the Exclusivity Agreement remains in full force and effect. This description of the amendment to the Exclusivity Agreement is qualified in its entirety by reference to the full text of the amendment to the Exclusivity Agreement, which is filed herewith as Exhibit 7.01 and is incorporated by reference into this Item 6.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

Exhibit 7.01 Amendment to the Exclusivity Agreement

2

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: August 25, 2006

BECTON, DICKINSON AND COMPANY

By: /s/ Jeffrey S. Sherman

Name: Jeffrey S. Sherman
Title: Senior Vice President and
General Counsel

3

Amendment to the Exclusivity Agreement

Becton, Dickinson and Company
1 Becton Drive
Franklin Lakes, New Jersey 07417

August 25, 2006

TriPath Imaging, Inc.
780 Plantation Drive,
Burlington, NC 27215

Attention: Paul R. Sohmer, M.D.
Chief Executive Officer

Ladies and Gentlemen:

Reference is made to the letter agreement, dated August 16, 2006 (the "Original Agreement") between Becton, Dickinson and Company ("BD") and TriPath Imaging, Inc. (the "Company"). In light of the ongoing negotiations regarding a possible business combination transaction involving BD and the Company (the "Transaction"), BD and the Company hereby agree that the Termination Date, as defined in the Original Agreement, shall be revised and extended to 11:59 p.m. (New York City time) on September 1, 2006. The Original Agreement shall remain in full force and effect except for such revision and extension of the Termination Date.

If the foregoing is acceptable and agreed to by you, please sign on the line provided below to signify such acceptance and agreement. This letter agreement may be executed in counterparts and shall be governed by the internal laws of the State of Delaware.

Sincerely,

Becton, Dickinson and Company

By: /s/ Jeffrey S. Sherman

Name: Jeffrey S. Sherman
Title: Senior Vice President and
General Counsel

Accepted and agreed as of
the date first written above:

TriPath Imaging, Inc.

By: /s/ Paul R. Sohmer

Name: Paul R. Sohmer, M.D.
Title: Chairman, President and
Chief Executive Officer