

KISSINGER PETER  
Form SC 13D/A  
January 29, 2010  
UNITED STATES

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934

(Amendment No. 4)\*

Bioanalytical Systems, Inc.  
(Name of Issuer)

Common Shares  
(Title of Class of Securities)

09058M 10 3  
(CUSIP Number)

Peter T. Kissinger, Ph.D.  
111 Lorene Place  
West Lafayette, IN 47906-8620

Copy to:  
James A. Aschleman  
Baker & Daniels LLP  
600 E. 96th Street, Suite 600  
Indianapolis, IN 46240

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

January 28, 2010  
(Date of Event which Requires Filing of this Statement)

If the 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 §§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 §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 (“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).

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CUSIP No. 09058M 10 3

1. Name of Reporting Person.  
Peter T. Kissinger, Ph.D.
2. Check the Appropriate Box if a Member of a Group (See Instructions)
  - (a)  x
  - (b)  ..
3. SEC Use Only
4. Source of Funds (See Instructions): PF (see Item 3)
5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)\*\*
6. Citizenship or Place of Organization: United States

Number of Shares Beneficially Owned by Each Reporting Person With	7.	Sole Voting Power	427,547
	8.	Shared Voting Power	848,220 (1)
	9.	Sole Dispositive Power	427,547
	10.	Shared Dispositive Power	848,220 (1)

11. Aggregate Amount Beneficially Owned by Each Reporting Person: 1,275,767 (1)
12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)\*\*
13. Percent of Class Represented by Amount in Row (11): 26.0% (1)(2)
14. Type of Reporting Person (See Instructions)  
IN

(1) Dr. Kissinger shares voting and dispositive power over these shares with his spouse. Includes 1,354 shares indirectly held by Ms. Kissinger as custodian for the benefit of their children.

(2) Based on 4,915,318 of the Company's Common Shares which were outstanding as of January 12, 2010.

CUSIP No. 09058M 10 3

1. Name of Reporting Person.  
Candice B. Kissinger
  2. Check the Appropriate Box if a Member of a Group (See Instructions)
    - (a)  x
    - (b)  ..
  3. SEC Use Only
  4. Source of Funds (See Instructions): PF (see Item 3)
  5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)\*\*
  6. Citizenship or Place of Organization: United States
- |  |     |                          |               |
|--|-----|--------------------------|---------------|
| Number of Shares                                 | 7.  | Sole Voting Power        | 252,310 (1)   |
| Beneficially Owned by Each Reporting Person With | 8.  | Shared Voting Power      | 1,023,457 (2) |
|  | 9.  | Sole Dispositive Power   | 252,310 (1)   |
|  | 10. | Shared Dispositive Power | 1,023,457 (2) |
11. Aggregate Amount Beneficially Owned by Each Reporting Person: 1,275,767 (1)(2)
  12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)\*\*
  13. Percent of Class Represented by Amount in Row (11): 26.0% (1)(2)(3)
  14. Type of Reporting Person (See Instructions)  
IN

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(1) Includes 1,354 shares indirectly held by Ms. Kissinger as custodian for the benefit of their children.  
 (2) Ms. Kissinger shares voting and dispositive power over these shares with her spouse.  
 (3) Based on 4,915,318 of the Company's Common Shares which were outstanding as of January 12, 2010.

Explanatory Note

This statement constitutes Amendment No. 4 to the Schedule 13D filed by Peter T. Kissinger, Ph.D. and Candice B. Kissinger (collectively, the "Kissingers") on April 6, 2009, as amended by Amendment No. 1 filed on June 5, 2009, Amendment No. 2 filed on July 29, 2009 and Amendment No. 3 filed on December 18, 2009 (as amended, the "Schedule 13D"). Except as specifically set forth herein, the Schedule 13D remains unmodified.

Item 4 is hereby amended to add the following:

Item 4. Purpose of Transaction

On July 29, 2009, the Kissingers delivered a letter to Bioanalytical Systems, Inc. (the "Company") demanding that the Company call a special meeting of shareholders (a "Special Meeting") to remove all of the directors of the Company other than Larry S. Boulet and also providing written notice of the Kissingers' intent to nominate certain director candidates at the Special Meeting. Because of recent changes in the composition of the Board of Directors and the proposed changes in management recently announced by the Company, on January 28, 2010 the Kissingers provided written notice to the Company (the "Notice") that they were withdrawing their request for a Special Meeting.

A copy of the Notice is filed herewith, attached hereto as Exhibit 99.6 and incorporated herein by reference. Any descriptions herein of the Notice are qualified in their entirety by reference to the Notice.

Item 7 is hereby amended to add the following exhibit:

Item 7. Material to Be Filed as Exhibits

Exhibit 99.6 – Notice from Peter T. Kissinger, Ph.D. and Candice B. Kissinger to Bioanalytical Systems, Inc., dated January 28, 2010, withdrawing their request for a Special Meeting of Shareholders

SIGNATURES

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: January 28, 2010

By: /s/ Peter T. Kissinger

Peter T. Kissinger, Ph.D.

By: /s/ Candice B. Kissinger

Candice B. Kissinger

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Exhibit 99.6

Notice from Peter T. Kissinger, Ph.D. and Candice B. Kissinger to Bioanalytical Systems, Inc., withdrawing their request for a Special Meeting of Shareholders

PETER T. KISSINGER, PH.D. AND CANDICE B. KISSINGER  
111 Lorene Place  
West Lafayette, Indiana 47906-8620

January 28, 2010

Bioanalytical Systems, Inc.  
2701 Kent Avenue  
West Lafayette, IN 47906  
Attention: Corporate Secretary

Re: Withdrawal of Request for a Special Meeting of Shareholders

Ladies and Gentlemen:

On July 29, 2009, we delivered a letter to Bioanalytical Systems, Inc. (the "Company") demanding that the Company call a special meeting of shareholders (a "Special Meeting") to remove all of the directors of the Company other than Larry S. Boulet and also providing written notice of our intent to nominate certain director candidates at the Special Meeting. Because of recent changes in the composition of the Board of Directors and the proposed changes in management announced by the Company earlier this week, we are hereby withdrawing our request for a Special Meeting.

Sincerely,

/s/ Peter T. Kissinger

Peter T. Kissinger, Ph.D.

/s/ Candice B. Kissinger

Candice B. Kissinger

