UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1 TO

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

BIOSANTE PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

58-2301143 (I.R.S. Employer Identification Number)

111 Barclay Boulevard Lincolnshire, Illinois 60069 (847) 478-0500

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Phillip B. Donenberg Chief Financial Officer, Treasurer and Secretary BioSante Pharmaceuticals, Inc. 111 Barclay Boulevard Lincolnshire, Illinois 60069 (847) 478-0500

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Amy E. Culbert, Esq. Oppenheimer Wolff & Donnelly LLP 45 South Seventh Street, Suite 3300 Minneapolis, Minnesota 55402 (612) 607-7287

Approximate date of commencement of proposed sale to the public: Not applicable. This post-effective amendment deregisters those securities that remain unissued or unsold hereunder as of the effective date hereof.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or reinvestment plans, check the following box: x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering, o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer £ Ac

Accelerated filer £

Non-accelerated filer £ (Do not check if a smaller reporting company)

Smaller reporting company S

This Post-Effective Amendment to the Registration Statement on Form S-3 shall hereafter become effective in accordance with the provisions of Section 8(c) of the Securities Act of 1933, as amended.

DEREGISTRATION OF SECURITIES

On June 2, 2004, BioSante Pharmaceuticals, Inc. filed with the Securities and Exchange Commission a registration statement on Form S-3, as amended (Registration No. 333-116110), registering the resale of 3,483,996 shares of common stock, par value \$0.001 per share by certain selling stockholders. BioSante's contractual obligation to maintain the effectiveness of this registration statement expired on August 13, 2009. Pursuant to the undertaking contained in the registration statement, BioSante is filing this Post-Effective Amendment No. 1 to remove from registration all registered but unsold shares covered by the registration statement.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Lincolnshire, State of Illinois, on May 14, 2010.

BIOSANTE PHARMACEUTICALS, INC.

By /s/ Stephen M. Simes

Stephen M. Simes Vice Chairman, President and Chief Executive Officer

By /s/ Phillip B. Donenberg Phillip B. Donenberg Chief Financial Officer, Treasurer and Secretary

Pursuant to the requirements of the Securities Act of 1933, this amendment has been signed by the following persons in the capacities indicated, on the dates indicated.

Name and Signature	Title	Date
/s/ Stephen M. Simes Stephen M. Simes	Vice Chairman, President and Chief Executive Officer (Principal Executive Officer)	May 14, 2010
/s/ Phillip B. Donenberg Phillip B. Donenberg	Chief Financial Officer, Treasurer and Secretary (Principal Financial and Accounting Officer)	May 14, 2010
* Louis W. Sullivan, M.D.	Chairman of the Board	May 14, 2010
* Fred Holubow	Director	May 14, 2010
/S/ Peter Kjaer Peter Kjaer	Director	May 14, 2010
* Ross Mangano	Director	May 14, 2010
/S/ John T. Potts, Jr., M.D. John T. Potts, Jr., M.D.	Director	May 14, 2010
* Edward C. Rosenow, III, M.D.	Director	May 14, 2010
/S/ Stephen A. Sherwin, M.D. Stephen A. Sherwin, M.D.	Director	May 14, 2010
* By: /s/ Stephen M. Simes	Attorney-in-Fact	May 14, 2010

Stephen M. Simes

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