

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

Post-Effective Amendment No. 1 to

Form S-4

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)

2386
(Primary Standard Industrial
Classification Code Number)

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)

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

Copies to:

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Approximate date of commencement of proposed sale to the public: The shares of common stock registered under this registration statement were to be issued upon consummation of the merger of ANIP Acquisition Company d/b/a ANI Pharmaceuticals, Inc., a Delaware corporation, with and into BioSante Pharmaceuticals, Inc., a Delaware corporation, as described in the agreement and plan of merger dated as of October 3, 2012, as amended. Due to the inability to satisfy all required conditions to closing the merger, the merger was not consummated and the parties terminated the merger agreement on April 12, 2013. Accordingly, BioSante has not, and will not, issue any shares of its common stock registered under this registration statement.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) 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.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) 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.

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

Accelerated filer
Smaller reporting company

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer)

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer)

DEREGISTRATION OF SECURITIES

On December 11, 2012, BioSante Pharmaceuticals, Inc. filed a registration statement on Form S-4, as amended (File No. 333-185391), with the Securities and Exchange Commission with respect to 43,642,714 shares of common stock, par value \$0.0001 per share, of BioSante. The registration statement was declared effective by the Securities and Exchange Commission on January 22, 2013. As described on the cover page to this Post-Effective Amendment No. 1 to the registration statement, the shares of BioSante common stock were to be issued upon consummation of the merger of ANIP Acquisition Company d/b/a ANI Pharmaceuticals, Inc. with and into BioSante, as described in the agreement and plan of merger dated as of October 3, 2012, as amended. As previously disclosed, due to the inability to satisfy all required conditions to closing of the merger, the merger was not consummated, and the parties terminated the merger agreement on April 12, 2013. As a result, the offering under this registration statement was terminated, and BioSante has not, and will not, issue any of the shares of BioSante common stock under this registration statement. In accordance with an undertaking made by BioSante in the registration statement, BioSante is filing this Post-Effective Amendment No. 1 to the registration statement to deregister all of the 43,642,714 shares of BioSante common stock previously registered.

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SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this Post-Effective Amendment No. 1 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Lincolnshire, State of Illinois on April 26, 2013.

BIOSANTE PHARMACEUTICALS, INC.

By /s/ Stephen M. Simes
Stephen M. Simes
Vice Chairman, President and Chief Executive Officer
(principal executive officer and duly authorized person)

Note: Pursuant to Rule 478 of the Securities Act of 1933, as amended, no other person is required to sign this Post-Effective Amendment No. 1 to the registration statement.

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