

SUPPLEMENT

(To Prospectus Supplement dated March 25, 2013 and Prospectus dated July 27, 2011)

PHARMATHENE, INC.

AMENDMENT NO. 1

Dated May 23, 2014

TO

PROSPECTUS SUPPLEMENT

Dated March 25, 2013

AND

PROSPECTUS

Dated July 27, 2011

Amendment No. 1 to Controlled Equity OfferingSM Sales Agreement

On May 23, 2014, PharmAthene, Inc. (the "Company") entered into Amendment No. 1 (the "Amendment") to the Controlled Equity OfferingSM Sales Agreement (the "Agreement") with Cantor Fitzgerald & Co., as sales agent ("Cantor"), pursuant to which the Company may offer and sell, from time to time, through Cantor additional shares of common stock, par value \$0.0001 per share, of the Company (the "Common Stock"), having an aggregate offering price of up to \$15.0 million. These shares would be in addition to the shares of Common Stock having an aggregate offering price of up to \$15.0 million under the initial Agreement, of which approximately \$4.4 million is still available as of the date hereof for sale by the Company through July 26, 2014 under the prospectus supplement, dated March 25, 2013 (collectively, the "ATM Program") pursuant to the Company's Registration Statement on Form S-3 (File No. 333-175394), the base prospectus filed as part of such Registration Statement, and the prospectus supplement included therein. The Amendment reflects a continuation, and an increase by up to \$15.0 million, of the existing ATM Program described in the prospectus supplement dated March 25, 2013. The prospectus supplement, dated March 25, 2013, relating to the first \$15.0 million of shares of Common Stock pursuant to the Agreement, as amended, will remain available for the sale of Common Stock by the Company until the earlier of (i) the sale of all shares of Common Stock thereunder or (ii) July 26, 2014. Other than as set forth above, all terms and provisions of the Agreement shall continue in full force and effect.
