

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>MPM BIOVENTURES III LLC</u> _____ (Last) (First) (Middle) <u>C/O MPM ASSET MANAGEMENT</u> <u>200 CLARENDON ST., 54TH FLOOR</u> _____ (Street) <u>BOSTON MA 02116</u> _____ (City) (State) (Zip)			2. Issuer Name and Ticker or Trading Symbol <u>PHARMATHENE, INC [PIP]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)		
			3. Date of Earliest Transaction (Month/Day/Year) <u>07/28/2009</u>					
			4. If Amendment, Date of Original Filed (Month/Day/Year)			6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
8% Convertible Note	\$10	07/28/2009		J ⁽¹⁾			\$4,709,553.61 ⁽²⁾	⁽³⁾	08/03/2009	Common Stock	470,953	⁽⁴⁾	\$0	I	See Footnote ⁽²⁾
10% Convertible Note	\$2,5417	07/28/2009		A			\$5,468,315.02 ⁽⁵⁾	⁽⁶⁾	07/28/2011	Common Stock	2,151,466	⁽⁵⁾	\$5,468,315.02	I	See Footnote ⁽⁵⁾
Warrants to Purchase Common Stock (Right to Buy)	\$2.5	07/28/2009		A			729,108 ⁽⁵⁾		01/28/2010 01/28/2015	Common Stock	729,108	\$0	729,108	I	See Footnote ⁽⁵⁾

1. Name and Address of Reporting Person*
MPM BIOVENTURES III LLC

 (Last) (First) (Middle)
C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

 (Street)
BOSTON MA 02116

 (City) (State) (Zip)

1. Name and Address of Reporting Person*
MPM BIOVENTURES III PARALLEL FUND, LP

 (Last) (First) (Middle)
C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

 (Street)
BOSTON MA 02116

 (City) (State) (Zip)

1. Name and Address of Reporting Person*
MPM BIOVENTURES III GMBH & CO. Beteiligungs KG

 (Last) (First) (Middle)
C/O MPM ASSET MANAGEMENT
200 CLARENDON ST., 54TH FLOOR

 (Street)
BOSTON MA 02116

 (City) (State) (Zip)

(City)	(State)	(Zip)
1. Name and Address of Reporting Person*		
MPM BIOVENTURES III LP		
(Last)	(First)	(Middle)
C/O MPM ASSET MANAGEMENT 200 CLARENDON ST., 54TH FLOOR		
(Street)		
BOSTON	MA	02116
(City)	(State)	(Zip)

(City)	(State)	(Zip)
1. Name and Address of Reporting Person*		
MPM BIOVENTURES III GP LP		
(Last)	(First)	(Middle)
C/O MPM ASSET MANAGEMENT 200 CLARENDON ST., 54TH FLOOR		
(Street)		
BOSTON	MA	02116
(City)	(State)	(Zip)

(City)	(State)	(Zip)
1. Name and Address of Reporting Person*		
MPM BIOVENTURES III QP LP		
(Last)	(First)	(Middle)
C/O MPM ASSET MANAGEMENT 200 CLARENDON ST., 54TH FLOOR		
(Street)		
BOSTON	MA	02116
(City)	(State)	(Zip)

(City)	(State)	(Zip)
1. Name and Address of Reporting Person*		
MPM Asset Management Investors 2004 BVIII LLC		
(Last)	(First)	(Middle)
C/O MPM ASSET MANAGEMENT 200 CLARENDON ST., 54TH FLOOR		
(Street)		
BOSTON	MA	02116
(City)	(State)	(Zip)

Explanation of Responses:

- The dispositions of these Notes to the Issuer were in connection with the acquisitions of the new Notes and Warrants described in Footnote 5 below.
- These Notes were received in the Merger of PAI Acquisition Corp., a wholly-owned subsidiary of HealthCare Acquisition Corp. (now known as PharmAthene, Inc.) into PharmAthene, Inc. and were held as follows: \$3,905,976.55 by MPM BioVentures III-QP, L.P. ("BV III QP"), \$262,651.82 by MPM BioVentures III, L.P. ("BV III"), \$92,858.30 by MPM Asset Management Investors 2004 BVIII LLC ("AM 2004"), \$117,974.13 by MPM BioVentures III Parallel Fund, L.P. ("BV Parallel") and \$330,092.81 by MPM BioVentures III GmbH & Co. Beteiligungs KG ("BV KG"). MPM BioVentures III GP, L.P. ("MPM III GP") and MPM BioVentures III LLC ("MPM III LLC") are the direct and indirect general partners of BV III QP, BV III and BV Parallel and BV KG. Luke Evnin, Ansbert Gadlicke, Nicholas Galakatos, Dennis Henner, Nicholas Simon III, Michael Steinmetz and Kurt Wheeler are the members of MPM III LLC and AM 2004. Each member of the group disclaims beneficial ownership of the securities except to the extent of its pecuniary interest therein.
- Immediately convertible into shares of Common Stock of the Issuer at the rate of \$10.00 per share.
- These Notes were received in the Merger of PAI Acquisition Corp., a wholly-owned subsidiary of HealthCare Acquisition Corp. (now known as PharmAthene, Inc.) into PharmAthene, Inc.
- These Notes and Warrants were received pursuant to a Note and Warrant Purchase Agreement dated as of July 24, 2009, as amended on July 26, 2009 and July 28, 2009, by and among the Issuer and certain noteholders, pursuant to which the 8% Senior Unsecured Convertible Notes (the "Original Notes") reported above were exchanged for new Notes in the principal amount as follows: \$4,535,272.77 by BV III QP, \$304,967.95 by BV III, \$107,818.80 by AM 2004, \$136,981.07 by BV Parallel and \$383,274.43 by BV KG, representing the principal amount of the Original Notes plus accrued interest (the "New Notes") and the Warrants reported herein. The terms of the New Notes include (i) an increase in the interest rate to 10% per annum; (ii) a reduction in the conversion price of the Original Notes from \$10.00 per share to \$2.541667 per share; and (iii) the issuance of Warrants to purchase shares of Common Stock of the Issuer at a purchase price of \$2.50 per share as follows: 604,703 shares by BV III QP, 40,662 shares by BV III, 14,376 shares by AM 2004, 18,264 shares by BV Parallel and 51,103 shares by BV KG.
- Immediately convertible into shares of Common Stock of the Issuer at the rate of \$2.541667 per share.

Remarks:

See Form 4 for Luke Evnin filed simultaneously herewith for additional members of this joint filing.

[/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC](#) [07/30/2009](#)

[/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP, the general partner of MPM BioVentures III Parallel Fund, LP](#) [07/30/2009](#)

[/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP, in its capacity as the Managing Limited Partner of MPM BioVentures III GmbH & Co. Beteiligungs KG](#) [07/30/2009](#)

[/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM](#)

BioVentures III GP, LP, the general partner of MPM BioVentures III, LP
/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP 07/30/2009
/s/ Luke Evnin, Series A Member of MPM BioVentures III LLC, the general partner of MPM BioVentures III GP, LP, the general partner of MPM BioVentures III QP, LP 07/30/2009
/s/ Luke Evnin, manager of MPM Asset Management Investors 2004 BVIII LLC 07/30/2009

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.