FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

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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* CAVANAUGH JAMES H						2. Issuer Name and Ticker or Trading Symbol PHARMATHENE, INC [PIP]								Relationship neck all appli X Direct	cable) or	g Pers	10% O	vner
(Last) (First) (Middle) C/O HEALTHCARE VENTURES LLC						3. Date of Earliest Transaction (Month/Day/Year) 06/23/2010								Office below)	(give title		Other (below)	specify
44 NASSAU STREET					4. 11	4. If Amendment, Date of Original Filed (Month/Day/Year)								6. Individual or Joint/Group Filing (Check Applicable Line)				
(Street) PRINCETON NJ			08542										Form	Form filed by More than One Reporting				
(City)	City) (State) (Zip)		(Zip)											Perso	1			
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) 2. Transac Date (Month/Date)						Execution Date,			Code (Instr. 5)				ed (A) or tr. 3, 4 an	Benefici	es Form ally (D) o following (I) (Ir		: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
					Code				V	Amount	(A) or (D)		Transac	Transaction(s) (Instr. 3 and 4)			(111501.4)	
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 Day if any (Month/Day/	ate, Tr	ransaction Code (Instr.		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)	Beneficial Ownership (Instr. 4)
				c	ode	v	(A)	(D)	Date Exercisable		xpiration ate	Title	Amount or Number of Shares					
Option (Right to Buy)	\$1.6	06/23/2010			A		20,000		06/23/2010	0	6/23/2020	Common Stock	20,000	\$0.00	20,000)	D	

Explanation of Responses:

Remarks:

/s/Jeffrey Steinberg, Attorney-

in-Fact for James H.

06/23/2010

<u>Cavanaugh</u>

** 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.