

Santabarbara Pedro  
 Form 3  
 December 13, 2010

**FORM 3 UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

OMB APPROVAL

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 Expires: January 31, 2005  
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**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934,  
 Section 17(a) of the Public Utility Holding Company Act of 1935 or Section  
 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person * Â Santabarbara Pedro (Last) (First) (Middle)  C/O INFINITY PHARMACEUTICALS, INC., Â 780 MEMORIAL DRIVE (Street)  CAMBRIDGE, Â MA Â 02139 (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 12/10/2010	3. Issuer Name and Ticker or Trading Symbol INFINITY PHARMACEUTICALS, INC. [INFI]	4. Relationship of Reporting Person(s) to Issuer  (Check all applicable) <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer <input type="checkbox"/> Other (give title below) (specify below) Chief Medical Officer	5. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
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**Table I - Non-Derivative Securities Beneficially Owned**

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

**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 control number.**

**Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)	3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative	5. Ownership Form of Derivative Security:	6. Nature of Indirect Beneficial Ownership (Instr. 5)
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## Edgar Filing: Santabarbara Pedro - Form 3

	Date Exercisable	Expiration Date	Title	Amount or Number of Shares	Security	Direct (D) or Indirect (I) (Instr. 5)
Stock Option (Right to Buy)	11/04/2020	11/04/2020	Common Stock	160,000	\$ 6.5	D

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Santabarbara Pedro C/O INFINITY PHARMACEUTICALS, INC. 780 MEMORIAL DRIVE CAMBRIDGE, MA 02139			Chief Medical Officer	

## Signatures

/s/ Pedro  
Santabarbara

12/10/2010

\*\*Signature of  
Reporting Person

Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, *see* Instruction 5(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).
- (1) The option vests as to one quarter of the shares on November 1, 2011 and as to the remaining shares in 36 equal monthly installments thereafter.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.