

OMB APPROVAL	
OMB Number:	3235-0104
Estimated average burden hours per response:	0.5

**INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES**

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>Baker Brothers Life Sciences Capital (GP), LLC</u> <hr/> (Last) (First) (Middle) 667 MADISON AVENUE <hr/> (Street) NEW YORK NY 10021 <hr/> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 03/24/2006	3. Issuer Name and Ticker or Trading Symbol <u>IDERA PHARMACEUTICALS, INC. [ IDP ]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 03/29/2006
6. Individual or Joint/Group Filing (Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person			

**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)
Common Stock <sup>(1)</sup>	4,595,732 <sup>(3)</sup>	I	See Footnote <sup>(2)</sup>

**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 Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Warrant	09/26/2006	09/26/2011	Common Stock	3,446,799	0.65	I	See Footnote <sup>(3)</sup>

1. Name and Address of Reporting Person* <u>Baker Brothers Life Sciences Capital (GP), LLC</u> <hr/> (Last) (First) (Middle) 667 MADISON AVENUE <hr/> (Street) NEW YORK NY 10021 <hr/> (City) (State) (Zip)		
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1. Name and Address of Reporting Person* <u>BAKER JULIAN</u> <hr/> (Last) (First) (Middle) 667 MADISON AVENUE <hr/> (Street) NEW YORK NY 10021 <hr/> (City) (State) (Zip)		
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1. Name and Address of Reporting Person \*

[BAKER FELIX](#)

(Last) (First) (Middle)

[667 MADISON AVENUE](#)

(Street)

[NEW YORK NY 10021](#)

(City) (State) (Zip)

**Explanation of Responses:**

1. In addition to Baker Brothers Life Sciences Capital (GP), LLC, this Form 3 is being filed jointly by Julian C. Baker and Felix J. Baker, each of whom has the same business address as Baker Brothers Life Sciences Capital (GP), LLC and may be deemed to have a pecuniary interest in securities owned by it. Because of certain relationships with other security holders of the Issuer, the Reporting Persons are filing solely for informational purposes as if they were a member of a group of such shareholders. (Continued in footnote 2.)

2. However, the Reporting Persons disclaim that they and any other person or persons, in fact constitute a "group" for purposes of Section 13(d)(3) of the Securities Exchange Act of 1934, as amended, or Rule 13d-5 thereunder or that they are the beneficial owners of securities owned by any such other persons, and each of them disclaims beneficial ownership of securities reported herein except to the extent of their pecuniary interest, if any, therein.

3. Represents securities owned directly by Baker Brothers Life Sciences, L.P., a limited partnership of which the sole general partner is Baker Brothers Life Sciences, L.P., a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital (GP), LLC. Felix J. Baker and Julian C. Baker are the controlling members of Baker Brothers Life Sciences Capital (GP), LLC.

[/s/ Julian C. Baker, as  
Managing Member of Baker  
Brothers Life Sciences Capital  
\(GP\), LLC](#) [08/17/2006](#)

[/s/ Julian C. Baker](#) [08/17/2006](#)

[/s/ Felix J. Baker](#) [08/17/2006](#)

\*\* 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 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).

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.**