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SCHEDULE 13G

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

Under the Securities Exchange Act of 1934  
(Amendment No.)\*

**Idera Pharmaceuticals, Inc.**

(Name of Issuer)

**Common Stock, par value \$0.001 per share**

(Title of Class of Securities)

**45168K405**

(CUSIP Number)

**Not Applicable**

(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

Rule 13d-1(b)

Rule 13d-1(c)

Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act, but shall be subject to all other provisions of the Act (however, see the Notes).

1	<b>NAMES OF REPORTING PERSONS</b> Baker Bros. Advisors LP		
2	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)</b> (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3	<b>SEC USE ONLY</b>		
4	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> Delaware		
<b>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</b>	5	<b>SOLE VOTING POWER</b> 4,663,577 (1)	
	6	<b>SHARED VOTING POWER</b> -0-	
	7	<b>SOLE DISPOSITIVE POWER</b> 4,663,577 (1)	
	8	<b>SHARED DISPOSITIVE POWER</b> -0-	
9	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 4,663,577 (1)		
10	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)</b> <input type="checkbox"/>		
11	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9</b> 16.1% (1)(2)		
12	<b>TYPE OF REPORTING PERSON (See Instructions)</b> IA, PN		

- (1) Includes 27,031 shares of the common stock of Idera Pharmaceuticals, Inc. (the "Issuer") underlying options directly held by Julian C. Baker, a managing member of the Baker Bros. Advisors (GP) LLC ("Adviser GP") and 27,760 shares of the common stock of the Issuer underlying options directly held by Dr. Kelvin M. Neu, a full-time employee of Baker Bros. Advisors LP (the "Adviser").
- (2) Based on 28,843,528 shares of the Issuer's common stock outstanding as of July 31, 2019 as reported in the Issuer's in the Issuer's 10-Q filed with the Security and Exchange Commission ("SEC") on August 8, 2019.

1	<b>NAMES OF REPORTING PERSONS</b> Baker Bros. Advisors (GP) LLC		
2	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)</b> (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3	<b>SEC USE ONLY</b>		
4	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> Delaware		
<b>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</b>	5	<b>SOLE VOTING POWER</b> 4,663,577 (1)	
	6	<b>SHARED VOTING POWER</b> -0-	
	7	<b>SOLE DISPOSITIVE POWER</b> 4,663,577 (1)	
	8	<b>SHARED DISPOSITIVE POWER</b> -0-	
9	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 4,663,577 (1)		
10	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)</b> <input type="checkbox"/>		
11	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9</b> 16.1% (1)(2)		
12	<b>TYPE OF REPORTING PERSON (See Instructions)</b> HC,OO		

- (1) Includes 27,031 shares of the common stock of the Issuer underlying options directly held by Julian C. Baker, a managing member of the Adviser GP and 27,760 shares of the common stock of the Issuer underlying options directly held by Dr. Kelvin M. Neu, a full-time employee of the Adviser.
- (2) Based on 28,843,528 shares of the Issuer's common stock outstanding as of July 31, 2019 as reported in the Issuer's in the Issuer's 10-Q filed with the SEC on August 8, 2019.

1	<b>NAMES OF REPORTING PERSONS</b> Felix J. Baker		
2	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)</b> (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3	<b>SEC USE ONLY</b>		
4	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> United States		
<b>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</b>	5	<b>SOLE VOTING POWER</b> 4,696,102 (1)	
	6	<b>SHARED VOTING POWER</b> -0-	
	7	<b>SOLE DISPOSITIVE POWER</b> 4,696,102 (1)	
	8	<b>SHARED DISPOSITIVE POWER</b> -0-	
9	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 4,696,102 (1)		
10	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)</b> <input type="checkbox"/>		
11	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9</b> 16.3% (1)(2)		
12	<b>TYPE OF REPORTING PERSON (See Instructions)</b> IN, HC		

- (1) Includes 27,031 shares of the common stock of the Issuer underlying options directly held by Julian C. Baker, a managing member of the Adviser GP and 27,760 shares of the common stock of the Issuer underlying options directly held by Dr. Kelvin M. Neu, a full-time employee of the Adviser.
- (2) Based on 28,843,528 shares of the Issuer's common stock outstanding as of July 31, 2019 as reported in the Issuer's in the Issuer's 10-Q filed with the SEC on August 8, 2019.

1	<b>NAMES OF REPORTING PERSONS</b> Julian C. Baker		
2	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions)</b> (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3	<b>SEC USE ONLY</b>		
4	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> United States		
<b>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</b>	5	<b>SOLE VOTING POWER</b> 4,696,102 (1)	
	6	<b>SHARED VOTING POWER</b> -0-	
	7	<b>SOLE DISPOSITIVE POWER</b> 4,696,102 (1)	
	8	<b>SHARED DISPOSITIVE POWER</b> -0-	
9	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON</b> 4,696,102 (1)		
10	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (See Instructions)</b> <input type="checkbox"/>		
11	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9</b> 16.3% (1)(2)		
12	<b>TYPE OF REPORTING PERSON (See Instructions)</b> IN, HC		

- (1) Includes 27,031 shares of the common stock of the Issuer underlying options directly held by Julian C. Baker, a managing member of the Adviser GP and 27,760 shares of the common stock of the Issuer underlying options directly held by Dr. Kelvin M. Neu, a full-time employee of the Adviser.
- (2) Based on 28,843,528 shares of the Issuer's common stock outstanding as of July 31, 2019 as reported in the Issuer's in the Issuer's 10-Q filed with the SEC on August 8, 2019.

1.	<b>NAMES OF REPORTING PERSONS</b> FBB3 LLC		
2.	<b>CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*</b> (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3.	<b>SEC USE ONLY</b>		
4.	<b>SOURCE OF FUNDS (See Instructions)</b> OO		
5.	<b>CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) or 2(e)</b> <input type="checkbox"/>		
6.	<b>CITIZENSHIP OR PLACE OF ORGANIZATION</b> Delaware		
<b>NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH</b>	7.	<b>SOLE VOTING POWER:</b> 10,596	
	8.	<b>SHARED VOTING POWER:</b> 0	
	9.	<b>SOLE DISPOSITIVE POWER:</b> 10,596	
	10.	<b>SHARED DISPOSITIVE POWER:</b> 0	
11.	<b>AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON:</b> 10,596		
12.	<b>CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (See Instructions)</b> <input type="checkbox"/>		
13.	<b>PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)</b> 0.04% (1)		
14.	<b>TYPE OF REPORTING PERSON (See Instructions)</b> OO		

(1) Based on 28,843,528 shares of the Issuer's common stock outstanding as of July 31, 2019 as reported in the Issuer's in the Issuer's 10-Q filed with the SEC on August 8, 2019.

**Schedule 13G**

Baker Bros. Advisors LP (the “Adviser”), Baker Bros. Advisors (GP) LLC (the “Adviser GP”), Julian C. Baker and Felix J. Baker have previously filed reports on Schedule 13D. As of the date hereof, the Adviser, the Adviser GP, Julian C. Baker and Felix J. Baker along with FBB3 LLC (“FBB3”, and together with the Adviser, the Adviser GP, Julian C. Baker and Felix J. Baker, the “Reporting Persons”) hold securities of Idera Pharmaceuticals, Inc. (the “Issuer”) in the ordinary course of business without the purpose of or with the effect of changing or influencing the control of the Issuer and do not hold such securities in connection with or as a participant in any transaction having that purpose or effect.

The Reporting Persons’ previous filings on Schedule 13D should not be deemed an admission that the Reporting Persons previously held securities of the Issuer otherwise than in the ordinary course of business without the purpose of or with the effect of changing or influencing the control of the Issuer or that the Reporting Persons previously held such securities in connection with or as a participant in any transaction having that purpose or effect.

**Item 1(a) Name of Issuer:**

Idera Pharmaceuticals, Inc.

**Item 1(b) Address of Issuer’s Principal Executive Offices:**

505 Eagleview Blvd., Suite 212  
Exton, Pennsylvania 19341

**Item 2(a) Name of Person Filing:**

This Schedule 13G is being filed jointly by the Reporting Persons.

**Item 2(b) Address of Principal Business Office or, if None, Residence:**

The business address of each of the Reporting Persons is:  
c/o Baker Bros. Advisors LP  
860 Washington Street, 3<sup>rd</sup> Floor  
New York, NY 10014  
(212) 339-5690

**Item 2(c) Citizenship:**

The Adviser is a limited partnership organized under the laws of the State of Delaware. The Adviser GP is a limited liability company organized under the laws of the State of Delaware. The citizenship of each of Julian C. Baker and Felix J. Baker is the United States of America. FBB3 is a limited liability company organized under the laws of the state of Delaware.

**Item 2(d) Title of Class of Securities:**

Common Stock, par value \$0.001 per share (“Common Stock”)

**Item 2(e) CUSIP Number:**

**45168K405**

**Item 3. If this statement is filed pursuant to §§240.13d-1(b) or (c), check whether the person filing is a:**

- (a)  Broker or dealer registered under Section 15 of the Exchange Act.
- (b)  Bank as defined in section 3(a)(6) of the Exchange Act.
- (c)  Insurance company as defined in section 3(a)(19) of the Exchange Act.
- (d)  Investment company registered under section 8 of the Investment Company Act of 1940.
- (e)  An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
- (f)  An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
- (g)  A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
- (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (i)  A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940.
- (j)  Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

**Item 4. Ownership.**

Items 5 through 9 and 11 of each of the cover pages to this Schedule 13G are incorporated herein reference. Set forth below is the aggregate number of shares of Common Stock directly held by each of 667, L.P. (“667”) and Baker Brothers Life Sciences, L.P. (“Life Sciences”, and together with 667, the “Funds”), which may be deemed to be indirectly beneficially owned by the Reporting Persons, as well as shares of Common Stock that may be acquired upon exercise of certain warrants to purchase shares of Common Stock at an exercise price of \$0.08 per share that expire on May 7, 2020 (“May 2020 Warrants”), certain warrants to purchase shares of Common Stock at an exercise price of \$0.08 per share that expire on September 30, 2020 (“September 2020 Warrants”) and certain warrants to purchase shares of Common Stock at an exercise price of \$0.08 per share that expire on February 10, 2021 (“2021 Warrants”, and together with the May 2020 Warrants, and September 2020 Warrants, the “Prefunded Warrants”) by the Funds, subject to the limitation on exercise described below. The information set forth below is based upon 28,843,528 shares of Common Stock outstanding as of July 31, 2019, as reported on the Issuer’s Form 10-Q filed with the SEC on August 8, 2019. Such percentage figures are calculated in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.



Name	Number of Shares of Common Stock we own or have to right to acquire within 60 days	Percent of Class Outstanding
667, L.P.	317,791	1.1%
Baker Brothers Life Sciences, L.P.	4,258,065	14.8%
<b>Total</b>	<b>4,575,856</b>	<b>15.9%</b>

The Prefunded Warrants are only exercisable to the extent that after giving effect to such exercise the holders thereof and their affiliates would beneficially own, for purposes of Rule 13d-3 under the Securities Exchange Act of 1934, as amended, no more than 4.999% of the outstanding shares of Common Stock of the Issuer (“Beneficial Ownership Limitation”). As a result of this restriction, the number of shares that may be issued upon exercise of the Warrants by the above holders may change depending upon changes in the outstanding shares of Common Stock. For the Prefunded Warrants by written notice to the Issuer, the Funds may from time to time waive the Beneficial Ownership Limitation applicable to that Fund in order to change the Beneficial Ownership Limitation. Any such waiver will not be effective until the 61st day after such notice is delivered to the Issuer. As the result of any such waiver the Beneficial Ownership Limitation cannot exceed 19.99%.

On June 6, 2019, 14159 and 667 made pro rata distributions to its partners for no consideration in the amount of 59,267 shares of Common Stock and 178,967 shares of Common Stock, respectively. Julian. C Baker and Felix J. Baker each received 21,929 shares of Common Stock. Certain of the non-reporting person investors receiving a total of 10,596 shares of Common Stock in the distribution contributed their interests to FBB3 in exchange for membership interests of FBB3.

On June 6, 2019, 14159 made pro rata distributions to its partners for no consideration in the amount of 42,724 May 2020 Warrants, 11,337 September 2020 Warrants and 6,009 February 2021 Warrants. Julian. C Baker and Felix J. Baker each received 6,256 May 2020 Warrants, 1,660 September 2020 Warrants and 880 February 2021 Warrants. Certain of the non-reporting person investors receiving a total of 2,925 May 2020 Warrants, 776 September 2020 Warrants and 411 February 2021 Warrants in the distribution contributed their interests to FBB3 in exchange for membership interests of FBB3.

Dr. Kelvin M. Neu, a full-time employee of the Adviser and Julian C. Baker a managing member of the Adviser GP hold 27,760 and 27,031 vested options to purchase shares of Common Stock (“Stock Options”), respectively, and 23,684 and 9,246 shares of Common Stock, respectively, from their previous service on the Board of Directors of the Issuer (the “Board”).

The policy of the Funds and the Adviser does not permit managing members of the Adviser GP or full-time employees of the Adviser to receive compensation for serving as a director of the Issuer and the Funds are instead entitled to the pecuniary interest in the Stock Options or Common Stock received as director compensation. Julian C. Baker and Dr. Neu have no voting or dispositive power and no pecuniary interest in the Stock Options and Common Stock received as compensation for their previous service on the Board. Other than through their control of the Adviser, Felix J. Baker and Julian C. Baker have neither voting nor dispositive power and have no direct pecuniary interest in the Stock Options or Common Stock received as directors compensation held by Julian C. Baker and Dr. Neu.

The Adviser has voting and investment power over the Stock Options and Common Stock received as director compensation held by Julian C. Baker and Dr. Neu.

The Adviser GP is the sole general partner of the Adviser. Pursuant to the management agreements, as amended, among the Adviser, Life Sciences and 667 and their respective general partners, the Funds respective general partners relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held by the Funds, and thus the Adviser has complete and unlimited discretion and authority with respect to the Funds' investments and voting power over investments. The Adviser GP, Felix J. Baker and Julian C. Baker as managing members of the Adviser GP, and the Adviser may be deemed to be beneficial owners of securities of the Issuer directly held by the Funds.

Julian C. Baker and Felix J. Baker are also the sole managers of FBB3 and by policy they do not transact in or vote the securities of the Issuer held by FBB3.

**Item 5. Ownership of Five Percent or Less of a Class.**

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following . N/A

**Item 6. Ownership of More than Five Percent on Behalf of Another Person.**

N/A

**Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.**

The information in Item 4 is incorporated herein by reference.

**Item 8. Identification and Classification of Members of the Group.**

N/A

**Item 9. Notice of Dissolution of Group.**

N/A

**Item 10. Certification.**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

**SIGNATURE**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 6, 2019

**BAKER BROS. ADVISORS LP**

By: Baker Bros. Advisors (GP) LLC, its general partner

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

**BAKER BROS. ADVISORS (GP) LLC**

By: /s/ Scott L. Lessing

Name: Scott L. Lessing

Title: President

/s/ Julian C. Baker

Julian C. Baker

/s/ Felix J. Baker

Felix J. Baker

FBB3 LLC

/s/ Julian C. Baker

Julian C. Baker

**JOINING FILING AGREEMENT**

In accordance with Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree that this Statement on Schedule 13G relating to the Common Stock of Idera Pharmaceuticals, Inc. is being filed with the Securities and Exchange Commission on behalf of each of them.

September 6, 2019

**BAKER BROS. ADVISORS LP**

By: Baker Bros. Advisors (GP) LLC, its general partner

By: /s/ Scott L. Lessing

\_\_\_\_\_  
Name: Scott L. Lessing

Title: President

**BAKER BROS. ADVISORS (GP) LLC**

By: /s/ Scott L. Lessing

\_\_\_\_\_  
Name: Scott L. Lessing

Title: President

/s/ Julian C. Baker

\_\_\_\_\_  
Julian C. Baker

/s/ Felix J. Baker

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Felix J. Baker

FBB3 LLC

/s/ Julian C. Baker

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Julian C. Baker

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