

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

SCHEDULE 13G/A  
(Amendment No. 5)

Under the Securities Exchange Act of 1934

**Threshold Pharmaceuticals, Inc.**

(Name of Issuer)

**COMMON STOCK**

(Title of Class of Securities)

**885807 20 6**

(CUSIP Number)

**October 5, 2009**

(Date of Event Which Requires Filing of this Statement)

Check 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 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 ("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).

(Continued on following pages)

CUSIP No. 885807 20 6

|    |   |
|----|---|
| 1  | Name of Reporting Person<br>S.S OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON<br>Three Arch Partners III, L.P. ("TAP III")   |
| 2  | Check the Appropriate Box if a Member of a Group<br>(a) <input checked="" type="checkbox"/><br>(b) <input type="checkbox"/> |
| 3  | SEC Use Only  |
| 4  | Citizenship or Place of Organization<br>Delaware  |
| 5  | Sole Voting Power<br>3,079,649*   |
| 6  | Shared Voting Power<br>See response to row 5  |
| 7  | Sole Dispositive Power<br>3,079,649*  |
| 8  | Shared Dispositive Power<br>See response to row 7   |
| 9  | Aggregate Amount Beneficially Owned by Each Reporting Person<br>3,079,649*  |
| 10 | Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares <input type="checkbox"/>                               |

11 Percent of Class Represented by Amount in Row 9  
9.07%\*\*

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12 Type of Reporting Person  
PN

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\* Includes warrants to purchase 769,627 shares of common stock that is exercisable within 60 days of October 5, 2009.

\*\* Approximately 9.07% of the shares of Common Stock outstanding as of October 5, 2009, assuming 33,944,682 shares outstanding, representing (i) 15,222,605 shares outstanding as of July 31, 2009 as reported in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, (ii) 18,324,599 shares of common stock issued pursuant to the Purchase Agreement (as defined below), and (ii) the assumed exercise of 769,627 shares subject to warrants exercisable within 60 days of October 5, 2009.

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1 Name of Reporting Person  
S.S OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Three Arch Associates III, L.P. ("TAA III")

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2 Check the Appropriate Box if a Member of a Group

(a)

(b)

---

3 SEC Use Only

---

4 Citizenship or Place of Organization  
Delaware

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5 Sole Voting Power  
165,563\*

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Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person With

6 Shared Voting Power  
See response to row 5

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7 Sole Dispositive Power  
165,563\*

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8 Shared Dispositive Power  
See response to row 7

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9 Aggregate Amount Beneficially Owned by Each Reporting Person  
165,563\*

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10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

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11 Percent of Class Represented by Amount in Row 9  
0.49%\*\*

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12 Type of Reporting Person  
PN

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\* Includes warrants to purchase 41,376 shares of common stock that is exercisable within 60 days of October 5, 2009

\*\* Approximately 0.49% of the shares of Common Stock outstanding as of October 5, 2009, assuming 33,568,573 shares outstanding, representing (i) 15,222,605 shares outstanding as of July 31, 2009 as reported in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, (ii) 18,324,599 shares of common stock issued pursuant to the Purchase Agreement (as defined below), and (ii) the assumed exercise of 41,376 shares subject to warrants exercisable within 60 days of October 5, 2009.

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|   |     |   |
|---|-----|---|
| 1   |     | Name of Reporting Person<br>S.S OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON<br>Three Arch Management III, L.L.C. ("TAM III") |
| <hr/>   |     |   |
| 2   |     | Check the Appropriate Box if a Member of a Group  |
|   | (a) | <input checked="" type="checkbox"/>   |
|   | (b) | <input type="checkbox"/>  |
| <hr/>   |     |   |
| 3   |     | SEC Use Only  |
| <hr/>   |     |   |
| 4   |     | Citizenship or Place of Organization<br>Delaware  |
| <hr/>   |     |   |
|   | 5   | Sole Voting Power<br>3,245,212*   |
| <hr/>   |     |   |
| Number of<br>Shares<br>Beneficially<br>Owned by<br>Each<br>Reporting<br>Person With | 6   | Shared Voting Power<br>See response to row 5  |
| <hr/>   |     |   |
|   | 7   | Sole Dispositive Power<br>3,245,212*  |
| <hr/>   |     |   |
|   | 8   | Shared Dispositive Power<br>See response to row 7   |
| <hr/>   |     |   |
| 9   |     | Aggregate Amount Beneficially Owned by Each Reporting Person<br>3,245,212*  |
| <hr/>   |     |   |
| 10  |     | Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares <input type="checkbox"/>                                 |
| <hr/>   |     |   |
| 11  |     | Percent of Class Represented by Amount in Row 9<br>9.55%**  |
| <hr/>   |     |   |
| 12  |     | Type of Reporting Person<br>OO  |
| <hr/>   |     |   |

\* Includes warrants to purchase 811,003 shares of common stock that is exercisable within 60 days of October 5, 2009

\*\* Approximately 9.55% of the shares of Common Stock outstanding as of October 5, 2009, assuming 33,966,051 shares outstanding, representing (i) 15,222,605 shares outstanding as of July 31, 2009 as reported in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, (ii) 18,324,599 shares of common stock issued pursuant to the Purchase Agreement (as defined below), and (ii) the assumed exercise of 811,003 shares subject to warrants exercisable within 60 days of October 5, 2009.

|       |     |   |
|-------|-----|---|
| 1     |     | Name of Reporting Person<br>S.S OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON<br>Mark A. Wan |
| <hr/> |     |   |
| 2     |     | Check the Appropriate Box if a Member of a Group  |
|       | (a) | <input checked="" type="checkbox"/>   |
|       | (b) | <input type="checkbox"/>  |
| <hr/> |     |   |
| 3     |     | SEC Use Only  |
| <hr/> |     |   |

|   |   |  |
|---|---|--|
| 4   | Citizenship or Place of Organization<br>USA   |  |
|   | 5   | Sole Voting Power<br>3,245,212*  |
| Number of<br>Shares<br>Beneficially<br>Owned by<br>Each<br>Reporting<br>Person With | 6   | Shared Voting Power<br>See response to row 5                               |
|   | 7   | Sole Dispositive Power<br>3,245,212*                                       |
|   | 8   | Shared Dispositive Power<br>See response to row 7                          |
|   | 9   | Aggregate Amount Beneficially Owned by Each Reporting Person<br>3,245,212* |
| 10  | Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares <input type="checkbox"/> |  |
| 11  | Percent of Class Represented by Amount in Row 9<br>9.55%**                                    |  |
| 12  | Type of Reporting Person<br>IN  |  |

\* Includes warrants to purchase 811,003 shares of common stock that are exercisable within 60 days of October 5, 2009.

\*\* Approximately 9.55% of the shares of Common Stock outstanding as of October 5, 2009, assuming 33,966,051 shares outstanding, representing (i) 15,222,605 shares outstanding as of July 31, 2009 as reported in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, (ii) 18,324,599 shares of common stock issued pursuant to the Purchase Agreement (as defined below), and (ii) the assumed exercise of 811,003 shares subject to warrants exercisable within 60 days of October 5, 2009.

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|   |   |                                       |
|---|---|---------------------------------------|
| 1   | Name of Reporting Person<br>S.S OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON<br>Wilfred E. Jaeger |                                       |
| 2   | Check the Appropriate Box if a Member of a Group  |                                       |
|   | (a)   | <input checked="" type="checkbox"/>   |
|   | (b)   | <input type="checkbox"/>              |
| 3   | SEC Use Only  |                                       |
| 4   | Citizenship or Place of Organization<br>Canada  |                                       |
|   | 5   | Sole Voting Power<br>3,266,877*       |
| Number of<br>Shares<br>Beneficially<br>Owned by<br>Each<br>Reporting<br>Person With | 6   | Shared Voting Power<br>3,245,212      |
|   | 7   | Sole Dispositive Power<br>3,266,877*  |
|   | 8   | Shared Dispositive Power<br>3,245,212 |

9 Aggregate Amount Beneficially Owned by Each Reporting Person  
3,266,877

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10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

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11 Percent of Class Represented by Amount in Row 9  
9.61%\*\*

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12 Type of Reporting Person  
IN

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\* Includes 21,665 shares of common stock subject to options exercisable within 60 days of October 5, 2009.

\*\* Approximately 9.61% of the shares of Common Stock outstanding as of October 5, 2009, assuming 33,987,716 shares outstanding, representing (i) 15,222,605 shares outstanding as of July 31, 2009 as reported in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, (ii) 18,324,599 shares of common stock issued pursuant to the Purchase Agreement (as defined below), (iii) the assumed exercise of 811,003 shares subject to warrants exercisable within 60 days of October 5, 2009 and (iv) the assumed exercise of 21,665 shares of common stock pursuant to an option grant to Wilfred E. Jaeger.

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1 Name of Reporting Person  
S.S OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON  
Barclay Nicholson

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2 Check the Appropriate Box if a Member of a Group  
(a)   
(b)

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3 SEC Use Only

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4 Citizenship or Place of Organization  
USA

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|   |   |   |
|---|---|---|
|   | 5 | Sole Voting Power<br>3,245,212*                   |
| Number of<br>Shares<br>Beneficially<br>Owned by<br>Each<br>Reporting<br>Person With | 6 | Shared Voting Power<br>See response to row 5      |
|   | 7 | Sole Dispositive Power<br>3,245,212*              |
|   | 8 | Shared Dispositive Power<br>See response to row 7 |

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9 Aggregate Amount Beneficially Owned by Each Reporting Person  
3,245,212\*

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10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

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11 Percent of Class Represented by Amount in Row 9  
9.55%\*\*

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12 Type of Reporting Person  
IN

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\* Includes warrants to purchase 811,003 shares of common stock that are exercisable within 60 days of October 5, 2009.

\*\* Approximately 9.55% of the shares of Common Stock outstanding as of October 5, 2009, assuming 33,966,051 shares outstanding, representing (i) 15,222,605 shares outstanding as of July 31, 2009 as reported in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, (ii) 18,324,599 shares of common stock issued pursuant to the Purchase Agreement (as defined below), and (ii) the assumed exercise of 811,003 shares subject to warrants exercisable within 60 days of October 5, 2009.

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**Item 1.**

- (a) Name of Issuer:  
Threshold Pharmaceuticals, Inc. (the "Issuer")
- 
- (b) Address of Issuer's Principal Executive Offices:  
1300 Seaport Boulevard, Redwood City, CA 94063
- 

**Item 2.**

- (a) Name of Person Filing:  
Three Arch Partners III, L.P. ("TAP III"), Three Arch Associates III, L.P. ("TAA III"), Three Arch Management III, L.L.C. ("TAM III"), Mark A. Wan ("Wan"), Wilfred E. Jaeger ("Jaeger"), and Barclay Nicholson ("Nicholson"). The foregoing entities and individuals are collectively referred to as the "Reporting Persons." Wan, Jaeger, and Nicholson are the sole managing members of TAM III, the sole general partner of TAP III and TAA III and may be deemed to have sole power to vote the shares reported. TAA III invests alongside TAP III in all investments made by TAP III.
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- (b) Address of Principal Business Office:  
3200 Alpine Road, Portola Valley, CA 94028
- 
- (c) Citizenship:  
See Row 4 of each cover page
- 
- (d) Title of Class of Securities:  
Common Stock, \$0.001 par value per share
- 
- (e) CUSIP Number:  
885807 20 6
- 

**Item 3. If this statement is filed pursuant to Rules 240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:**

Not applicable.

**Item 4. Ownership**

The following information with respect to the ownership of the Common Stock of the Issuer by the person filing this statement is provided as of December 31, 2008:

- (a) Amount beneficially owned:  
See Row 9 of each cover page
- 
- (b) Percent of class:  
See Row 11 of each cover page. The approximate percentages of common stock reported as beneficially owned by the Reporting Persons is based (a) on 15,222,605 shares of common stock outstanding as of July 31, 2009 as reported in the Issuer's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2009, (b) the assumed exercise of shares subject to options or warrants exercisable within 60 days of October 5, 2009 and (c) the shares of common stock issued pursuant to the close of the securities purchase agreement (the "Purchase Agreement") by and among the Issuer, TAP III and TAA III on September 29, 2009, as disclosed on the Form 8-K filed by the Issuer on October 6, 2009.
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- (c) Number of shares as to which such person has:
- 
- (i) Sole power to vote or to direct the vote:  
See Row 5 of each cover page
- 
- (ii) Shared power to vote or to direct the vote:  
See Row 6 of each cover page
- 
- (iii) Sole power to dispose or to direct the disposition of:  
See Row 7 of each cover page
-

- 
- (iv) Shared power to dispose or to direct the disposition of:  
See Row 8 of each cover page
- 

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

Not applicable.

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

Under certain circumstances set forth in the limited partnership agreements of TAP III and TAA III and the limited liability company agreement of TAM III, the general and limited partners of each such entity may be deemed to have the right to receive dividends from, or the proceeds from, the sale of shares of the issuer owned by each such entity of which they are a partner.

**Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company**

Not applicable.

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

Not applicable.

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

Not applicable.

**Item 10. Certification**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above 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.

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**SIGNATURE**

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

Date: October 8, 2009

THREE ARCH PARTNERS III, L.P.  
By: Three Arch Management III, L.L.C.

By: /s/ Barclay Nicholson  
Barclay Nicholson  
Managing Member

THREE ARCH ASSOCIATES III, L.P.  
By: Three Arch Management III, L.L.C.

By: /s/ Barclay Nicholson  
Barclay Nicholson  
Managing Member

THREE ARCH MANAGEMENT III, L.L.C.

By: /s/ Barclay Nicholson  
Barclay Nicholson  
Managing Member

MARK A. WAN

By: /s/ Barclay Nicholson  
Barclay Nicholson  
Authorized Signature

WILFRED E. JAEGER

By: /s/ Barclay Nicholson  
Barclay Nicholson  
Authorized Signature

BARCLAY NICHOLSON

By: /s/ Barclay Nicholson  
Barclay Nicholson

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This Schedule 13G was executed pursuant to a Statement Appointing Designated Filer and Authorized Signatories. Note that copies of the applicable Statement Appointing Designated Filer and Authorized Signatories are already on file with the appropriate agencies.