

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

SCHEDULE 13G

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

Aimmune Therapeutics, Inc.
(Name of Issuer)

Common Stock, par value \$0.0001 per share
(Title of Class of Securities)

00900T107
(CUSIP Number)

December 31, 2015
(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 ("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. NAMES OF REPORTING PERSONS		
Longitude Capital Partners II, LLC		
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)		(a) <input type="checkbox"/> (b) <input type="checkbox"/>
3. SEC USE ONLY		
4. CITIZENSHIP OR PLACE OF ORGANIZATION		
Delaware		
	5. SOLE VOTING POWER	
	0	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6. SHARED VOTING POWER	
	7,434,630 (1)	
	7. SOLE DISPOSITIVE POWER	
	0	
	8. SHARED DISPOSITIVE POWER	
	7,434,630 (1)	
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON		
7,434,630 (1)		
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)		<input type="checkbox"/>
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)		
17.6% (2)		
12. TYPE OF REPORTING PERSON (see instructions)		
OO		
(1) Consists of (i) 3,873,530 shares of Common Stock issued upon conversion of Series A convertible preferred stock of the Issuer in connection with its initial public offering, (ii) 3,248,600 shares of Common Stock issued upon conversion of Series B convertible preferred stock of the Issuer in connection with its initial public offering, and (iii) 312,500 shares of Common Stock acquired in the Issuer's initial public offering. All such shares are held of record by LVPII (as defined below).		
(2) Based on 42,249,431 shares of Common Stock outstanding as of October 31, 2015, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed by the Issuer with the Securities and Exchange Commission on November 4, 2015.		

1. NAMES OF REPORTING PERSONS	
Longitude Venture Partners II, L.P.	
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	
	(a) <input type="checkbox"/>
	(b) <input type="checkbox"/>
3. SEC USE ONLY	
4. CITIZENSHIP OR PLACE OF ORGANIZATION	
Delaware	
	5. SOLE VOTING POWER
	0
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6. SHARED VOTING POWER
	7,434,630 (1)
	7. SOLE DISPOSITIVE POWER
	0
	8. SHARED DISPOSITIVE POWER
	7,434,630 (1)
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
7,434,630 (1)	
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)	
<input type="checkbox"/>	
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
17.6% (2)	
12. TYPE OF REPORTING PERSON (see instructions)	
PN	

- (1) Consists of (i) 3,873,530 shares of Common Stock issued upon conversion of Series A convertible preferred stock of the Issuer in connection with its initial public offering, (ii) 3,248,600 shares of Common Stock issued upon conversion of Series B convertible preferred stock of the Issuer in connection with its initial public offering, and (iii) 312,500 shares of Common Stock acquired in the Issuer's initial public offering.
- (2) Based on 42,249,431 shares of Common Stock outstanding as of October 31, 2015, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed by the Issuer with the Securities and Exchange Commission on November 4, 2015.

1. NAMES OF REPORTING PERSONS	
Juliet Tammenoms Bakker	
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	
	(a) <input type="checkbox"/>
	(b) <input type="checkbox"/>
3. SEC USE ONLY	
4. CITIZENSHIP OR PLACE OF ORGANIZATION	
United States of America	
5. SOLE VOTING POWER	
0	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6. SHARED VOTING POWER
	7,552,900 (1)
	7. SOLE DISPOSITIVE POWER
	0
	8. SHARED DISPOSITIVE POWER
	7,552,900 (1)
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
7,552,900 (1)	
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)	
<input type="checkbox"/>	
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
17.8% (2)	
12. TYPE OF REPORTING PERSON (see instructions)	
IN	

- (1) Consists of (i) 118,270 shares of Common Stock subject to stock option awards that have been granted to Mr. Enright in his capacity as a director of the Issuer and are exercisable within 60 days after December 31, 2015, (ii) 3,873,530 shares of Common Stock issued upon conversion of Series A convertible preferred stock of the Issuer in connection with its initial public offering, (iii) 3,248,600 shares of Common Stock issued upon conversion of Series B convertible preferred stock of the Issuer in connection with its initial public offering, and (iv) 312,500 shares of Common Stock acquired in the Issuer's initial public offering. All of the shares described in clauses (ii), (iii) and (iv) are held of record by LVP II (as defined below).
- (2) Based on 42,367,701 shares of Common Stock, calculated as follows: (i) 118,270 shares of Common Stock subject to stock option awards that have been granted to Mr. Enright in his capacity as a director of the Issuer and are exercisable within 60 days after December 31, 2015, and (ii) 42,249,431 shares of Common Stock outstanding as of October 31, 2015, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed by the Issuer with the Securities and Exchange Commission on November 4, 2015.

1. NAMES OF REPORTING PERSONS	
Patrick G. Enright	
2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions)	
	(a) <input type="checkbox"/>
	(b) <input type="checkbox"/>
3. SEC USE ONLY	
4. CITIZENSHIP OR PLACE OF ORGANIZATION	
United States of America	
5. SOLE VOTING POWER	
0	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	6. SHARED VOTING POWER
	7,552,900 (1)
	7. SOLE DISPOSITIVE POWER
	0
	8. SHARED DISPOSITIVE POWER
	7,552,900 (1)
9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
7,552,900 (1)	
10. CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (see instructions)	
<input type="checkbox"/>	
11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)	
17.8% (2)	
12. TYPE OF REPORTING PERSON (see instructions)	
IN	

- (1) Consists of (i) 118,270 shares of Common Stock subject to stock option awards that have been granted to Mr. Enright in his capacity as a director of the Issuer and are exercisable within 60 days after December 31, 2015, (ii) 3,873,530 shares of Common Stock issued upon conversion of Series A convertible preferred stock of the Issuer in connection with its initial public offering, (iii) 3,248,600 shares of Common Stock issued upon conversion of Series B convertible preferred stock of the Issuer in connection with its initial public offering, and (iv) 312,500 shares of Common Stock acquired in the Issuer's initial public offering. All of the shares described in clauses (ii), (iii) and (iv) are held of record by LVPPII (as defined below).
- (2) Based on 42,367,701 shares of Common Stock, calculated as follows: (i) 118,270 shares of Common Stock subject to stock option awards that have been granted to Mr. Enright in his capacity as a director of the Issuer and are exercisable within 60 days after December 31, 2015, and (ii) 42,249,431 shares of Common Stock outstanding as of October 31, 2015, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed by the Issuer with the Securities and Exchange Commission on November 4, 2015.

Item 1(a). Name of Issuer:
Aimmune Therapeutics, Inc.

Item 1(b). Address of Issuer's Principal Executive Offices:
8000 Marina Boulevard, Suite 300
Brisbane, California 94005

Item 2(a). Name of Person Filing:

This Schedule 13G (the "Statement") is being jointly filed by the following reporting persons (each a "Reporting Person" and collectively the "Reporting Persons"): Longitude Venture Partners II, L.P. ("LVPII"); LVPII's general partner, Longitude Capital Partners II, LLC ("LCPII"); and LCPII's managing members, Ms. Juliet Tammenoms Bakker and Mr. Patrick G. Enright.

The Reporting Persons have entered into a Joint Filing Agreement, dated January 29, 2016, a copy of which is filed as Exhibit A to this Statement, pursuant to which the Reporting Persons have agreed to file this Statement and all amendments thereto jointly in accordance with the provisions of Rule 13d-1(k)(1) under the Act.

Item 2(b). Address of Principal Business Office, or if None, Residence:
The address of the principal business office of each Reporting Person is 800 El Camino Real, Suite 220, Menlo Park, California 94025.

Item 2(c). Citizenship:
LCPII is a limited liability company organized under the laws of the State of Delaware. LVPII is a limited partnership organized under the laws of the State of Delaware. Ms. Bakker and Mr. Enright are citizens of the United States of America.

Item 2(d). Title of Class of Securities:
Common Stock, par value \$0.0001 per share (the "Common Stock").

Item 2(e). CUSIP Number:
00900T107.

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:
Not applicable.

Item 4. Ownership.

- (a) Amount beneficially owned:
See Row 9 of the cover page for each Reporting Person.*
- (b) Percent of class:
See Row 11 of the cover page for each Reporting Person.**
- (c) Number of shares as to which the person has:
 - (i) Sole power to vote or to direct the vote
See Row 5 of the cover page for each Reporting Person.*
 - (ii) Shares power to vote or to direct the vote
See Row 6 of the cover page for each Reporting Person.*

- (iii) Sole power to dispose or to direct the disposition of
See Row 7 of the cover page for each Reporting Person.*
- (iv) Shared power to dispose or to direct the disposition of
See Row 8 of the cover page for each Reporting Person.*

* Each of the Reporting Persons disclaims beneficial ownership as to such securities, except to the extent of his, her or its pecuniary interest therein.

** The percentage of Common Stock reported as beneficially owned by each Reporting Person is based on 42,249,431 shares of Common Stock outstanding as of October 31, 2015, as reported by the Issuer in its Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, filed by the Issuer with the Securities and Exchange Commission on November 4, 2015

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.

The response to Item 2(a) of this Statement is incorporated herein by reference.

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

The response to Item 2(a) of this Statement is incorporated herein by reference.

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

Not applicable.

Item 9. Notice of Dissolution of the Group.

Not applicable.

Item 10. Certifications.

Not applicable.

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.

Dated: January 29, 2016

LONGITUDE VENTURE PARTNERS II, L.P.

By: LONGITUDE CAPITAL PARTNERS II, LLC

Its: General Partner

By: /s/ Patrick G. Enright

Patrick G. Enright, Managing Member

LONGITUDE CAPITAL PARTNERS II, LLC

By: /s/ Patrick G. Enright

Patrick G. Enright, Managing Member

By: /s/ Patrick G. Enright

Patrick G. Enright

By: /s/ Juliet Tammenoms Bakker

Juliet Tammenoms Bakker

EXHIBIT INDEX

Exhibit 99.1: Joint Filing Agreement, dated January 29, 2016, pursuant to Rule 13d-1(k)(1).

JOINT FILING AGREEMENT

The undersigned hereby agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned, and any amendments thereto executed by the undersigned shall be filed on behalf of each of the undersigned without the necessity of filing any additional joint filing agreement. The undersigned acknowledge that each is responsible for the timely filing of such statement on Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning him, her or it contained therein, but shall not be responsible for the completeness or accuracy of the information concerning the others of the undersigned, except to the extent that it knows or has reason to believe that such information is inaccurate or incomplete. This Joint Filing Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Joint Filing Agreement as of January 29, 2016.

LONGITUDE VENTURE PARTNERS II, L.P.

By: LONGITUDE CAPITAL PARTNERS II, LLC
Its: General Partner

By: /s/ Patrick G. Enright
Patrick G. Enright, Managing Member

LONGITUDE CAPITAL PARTNERS II, LLC

By: /s/ Patrick G. Enright
Patrick G. Enright, Managing Member

By: /s/ Patrick G. Enright
Patrick G. Enright

By: /s/ Juliet Tammenoms Bakker
Juliet Tammenoms Bakker
