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

SCHEDULE 13G
(Amendment No. 5)

UNDER THE SECURITIES EXCHANGE ACT OF 1934

APPLIED THERAPEUTICS, INC.

(Name of Issuer)

COMMON STOCK, \$0.0001 PAR VALUE PER SHARE

(Title of Class of Securities)

03828A101

(CUSIP Number)

December 31, 2023

(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 the disclosures provided in a prior cover page.

The information required in 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.	Name of Reporting Persons
	Alexandria Real Estate Equities, Inc.
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
	(a) <input type="checkbox"/>
	(b) <input checked="" type="checkbox"/>
3.	SEC USE ONLY
4.	Citizenship or Place of Organization
	Maryland
	5. Sole Voting Power
	0
	6. Shared Voting Power
	12,394,054 (1)
	7. Sole Dispositive Power
	0
	8. Shared Dispositive Power
	12,859,054 (2)
9.	Aggregate Amount Beneficially Owned by Each Reporting Person
	12,859,054 (2)
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)
	15.4% (3)
12.	Type of Reporting Person (See Instructions)
	CO

- (1) Consists of: (i) 5,690,077 shares of the Issuer's common stock held by Alexandria Venture Investments, LLC ("AVI"); (ii) 1,500,000 shares of the Issuer's common stock issuable upon exercise of pre-funded warrants ("Pre-Funded Warrants") held directly by AVI that are currently exercisable; (iii) 2,950,000 shares of the Issuer's common stock issuable upon exercise of common stock warrants (the "Common Stock Warrants" and, collectively with the Pre-Funded Warrants, the "Warrants") held directly by AVI that are currently exercisable; (iv) 203,977 shares of the Issuer's common stock held directly by Alexandria Equities No. 7, LLC ("AE7"); and (v) 2,050,000 shares of the Issuer's common stock issuable upon exercise of Common Stock Warrants held directly by AE7 that are currently exercisable. Each of AVI and AE7 are indirect, wholly-owned subsidiaries of Alexandria Real Estate Equities, Inc. ("ARE") and, accordingly, ARE may be deemed to share voting and dispositive power with AVI and AE7 with respect to the shares reported herein.
- (2) Consists of: (i) 6,155,077 shares of the Issuer's common stock held by AVI; (ii) 1,500,000 shares of the Issuer's common stock issuable upon exercise of Pre-Funded Warrants held directly by AVI that are currently exercisable; (iii) 2,950,000 shares of the Issuer's common stock issuable upon exercise of Common Stock Warrants held directly by AVI that are currently exercisable; (iv) 203,977 shares of the Issuer's common stock held directly by AE7; and (v) 2,050,000 shares of the Issuer's common stock issuable upon exercise of Common Stock Warrants held directly by AE7 that are currently exercisable. Each of AVI and AE7 are indirect, wholly-owned subsidiaries of ARE and, accordingly, ARE may be deemed to share voting and dispositive power with AVI and AE7 with respect to the shares reported herein.
- (3) This percentage is calculated based upon 77,229,207 outstanding shares of the Issuer's common stock as of November 8, 2023, as set forth in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2023, as adjusted in accordance with Rule 13d-3 promulgated under the Securities Exchange Act, as amended.

1.	Name of Reporting Persons
	Alexandria Venture Investments, LLC
2.	Check the Appropriate Box if a Member of a Group (See Instructions)
	(a) <input type="checkbox"/>
	(b) <input checked="" type="checkbox"/>
3.	SEC USE ONLY
4.	Citizenship or Place of Organization
	Delaware
	5. Sole Voting Power
	0
	6. Shared Voting Power
	10,140,077 (1)
	7. Sole Dispositive Power
	0
	8. Shared Dispositive Power
	10,605,077 (2)
9.	Aggregate Amount Beneficially Owned by Each Reporting Person
	10,605,077 (2)
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)
	13.0% (3)
12.	Type of Reporting Person (See Instructions)
	OO

- (1) Consists of: (i) 5,690,077 shares of the Issuer's common stock held by AVI; (ii) 1,500,000 shares of the Issuer's common stock issuable upon exercise of Pre-Funded Warrants held directly by AVI that are currently exercisable; and (iii) 2,950,000 shares of the Issuer's common stock issuable upon exercise of Common Stock Warrants held directly by AVI that are currently exercisable.
- (2) Consists of: (i) 6,155,077 shares of the Issuer's common stock held by AVI; (ii) 1,500,000 shares of the Issuer's common stock issuable upon exercise of Pre-Funded Warrants held directly by AVI that are currently exercisable; and (iii) 2,950,000 shares of the Issuer's common stock issuable upon exercise of Common Stock Warrants held directly by AVI that are currently exercisable.
- (3) This percentage is calculated based upon 77,229,207 outstanding shares of the Issuer's common stock as of November 8, 2023, as set forth in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2023, as adjusted in accordance with Rule 13d-3 promulgated under the Securities Exchange Act, as amended.

1.	Name of Reporting Persons	
	Alexandria Equities No. 7, LLC	
2.	Check the Appropriate Box if a Member of a Group (See Instructions)	
	(a) <input type="checkbox"/>	
	(b) <input checked="" type="checkbox"/>	
3.	SEC USE ONLY	
4.	Citizenship or Place of Organization	
	Delaware	
	5.	Sole Voting Power
		0
	6.	Shared Voting Power
		2,253,977 (1)
	7.	Sole Dispositive Power
		0
	8.	Shared Dispositive Power
		2,253,977 (1)
9.	Aggregate Amount Beneficially Owned by Each Reporting Person	
	2,253,977 (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)	
	2.8% (2)	
12.	Type of Reporting Person (See Instructions)	
	OO	

(1) Consists of: (i) 203,977 shares of the Issuer's common stock held directly by AE7 and (ii) 2,050,000 shares of the Issuer's common stock issuable upon exercise of Common Stock Warrants held directly by AE7 that are currently exercisable.

(2) This percentage is calculated based upon 77,229,207 outstanding shares of the Issuer's common stock as of November 8, 2023, as set forth in the Issuer's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 9, 2023, as adjusted in accordance with Rule 13d-3 promulgated under the Securities Exchange Act, as amended.

Item 1(a) Name of Issuer

Applied Therapeutics, Inc.

Item 1(b) Address of Issuer's Principal Executive Offices

545 5th Avenue, Suite 1400
New York, New York 10017

Item 2(a) Name of Person Filing

This Statement on Schedule 13G has been filed on behalf of the following persons (each, a "Reporting Person" and collectively, the "Reporting Persons"):

- (1) Alexandria Real Estate Equities, Inc.
- (2) Alexandria Venture Investments, LLC
- (3) Alexandria Equities No. 7, LLC

Item 2(b) Address of Principal Business Office or, if none, Residence

The address of each of the Reporting Persons is:

26 North Euclid Avenue
Pasadena, California 91101

Item 2(c) Citizenship

- (1) Alexandria Real Estate Equities, Inc. is incorporated in the State of Maryland
- (2) Alexandria Venture Investments, LLC is organized in the State of Delaware
- (3) Alexandria Equities No. 7, LLC is organized in the State of Delaware

Item 2(d) Title of Class of Securities

Common stock, \$0.0001 par value per share

Item 2(e) CUSIP Number

03828A101

Item 3

Not applicable.

Item 4 Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1

(a) Amount beneficially owned: See Row 9 of pages 2, 3, and 4

(b) Percent of class: See Row 11 of pages 2, 3, and 4

(c) Number of shares as to which the person has:

- (i) Sole power to vote or to direct the vote: See Row 5 of pages 2, 3, and 4
 - (ii) Shared power to vote or to direct the vote: See Row 6 of pages 2, 3, and 4
 - (iii) Sole power to dispose or to direct the disposition of: See Row 7 of pages 2, 3, and 4
 - (iv) Shared power to dispose or to direct the disposition of: See Row 8 of pages 2, 3, and 4
-

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.

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

Not applicable.

Item 7 Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company

Each of Alexandria Venture Investments, LLC and Alexandria Equities No. 7, LLC is the wholly owned subsidiary of Alexandria Real Estate Equities, Inc., which has the exclusive power to vote and dispose of shares directly owned by these subsidiaries.

Item 8 Identification and Classification of Members of the Group

The Reporting Persons are filing this Schedule 13G jointly, but not as members of a group, and each expressly disclaims membership in a group.

Item 9 Notice of Dissolution of 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, other than activities solely in connection with a nomination under § 240.14a-11.

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: February 14, 2024

ALEXANDRIA REAL ESTATE EQUITIES, INC.

By: /s/ Marc E. Binda

Name: Marc E. Binda

Title: Chief Financial Officer and Treasurer

ALEXANDRIA EQUITIES NO. 7, LLC

By: ARE-Special Services, LLC, a Delaware limited liability company,
managing member

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P., a Delaware
limited partnership, managing member

By: ARE-QRS CORP., a Maryland corporation, general partner

By: Alexandria Real Estate Equities, Inc., a Maryland
corporation, sole shareholder

By: /s/ Marc E. Binda

Name: Marc E. Binda

Title: Chief Financial Officer and Treasurer

ALEXANDRIA VENTURE INVESTMENTS, LLC

By: Alexandria Real Estate Equities, Inc., a Maryland corporation, managing
member

By: /s/ Marc E. Binda

Name: Marc E. Binda

Title: Chief Financial Officer and Treasurer

EXHIBITS

A: Joint Filing Agreement

EXHIBIT A

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the undersigned agree to the joint filing on behalf of each of them of a statement on Schedule 13G (including amendments thereto) with respect to the Common Stock of Applied Therapeutics Inc. and further agree that this agreement be included as an exhibit to such filing. Each party to the agreement expressly authorizes each other party to file on its behalf any and all amendments to such statement. Each party to this agreement agrees that this joint filing agreement may be signed in counterparts.

In evidence whereof, the undersigned have caused this Agreement to be executed on their behalf this 14th day of February, 2024.

ALEXANDRIA REAL ESTATE EQUITIES, INC.

By: /s/ Marc E. Binda

Name: Marc E. Binda

Title: Chief Financial Officer and Treasurer

ALEXANDRIA EQUITIES NO. 7, LLC

By: ARE-Special Services, LLC, a Delaware limited liability company, managing member

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P., a Delaware limited partnership, managing member

By: ARE-QRS CORP., a Maryland corporation, general partner

By: Alexandria Real Estate Equities, Inc., a Maryland corporation, sole shareholder

By: /s/ Marc E. Binda

Name: Marc E. Binda

Title: Chief Financial Officer and Treasurer

ALEXANDRIA VENTURE INVESTMENTS, LLC

By: Alexandria Real Estate Equities, Inc., a Maryland corporation, managing member

By: /s/ Marc E. Binda

Name: Marc E. Binda

Title: Chief Financial Officer and Treasurer
