## FORM 4 UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden

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nstruction 1(b).	Filed pursuant to Section 16(a) of the Securities Exc
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1. Name and Address of Reporting Person*  BAKER BROS. ADVISORS LP				<u>A</u>	2. Issuer Name <b>and</b> Ticker or Trading Symbol ACADIA PHARMACEUTICALS INC ACAD							5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  X Director X 10% Owner					
I				3. Date of Earliest Transaction (Month/Day/Year) 08/10/2016							Officer (give title Other (specify below) below)						
(Street) NEW YORK NY 10065  (City) (State) (Zip)				4. If Amendment, Date of Original Filed (Month/Day/Year)							6. Individual or Joint/Group Filing (Check Applicable Line)  Form filed by One Reporting Person  X Form filed by More than One Reporting Person						
(=:9)			le I - Non-Deri	vativ	/e Sec	uritie	s Acc	uired	d. Di	sposed	of. or	Benefi	cially Own	ed be			
1. Title of Security (Instr. 3)  2. Transaction Date (Month/Day/Yea			ar) if	2A. Deemed Execution Date,		3. Transaction Code (Instr.		4. Securities Acq Disposed Of (D)		cquired	(A) or	5. Amount of Securities Beneficially Owned Following		6. Ownershi Form: Direc (D) or Indire (I) (Instr. 4)	t Benefi	7. Nature of Indirect Beneficial Ownership (Instr. 4)	
							Code	v	Amo		(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)				
Common	Stock												452,540		Ι	See F	ootnotes <sup>(1)</sup>
Common Stock 08/10/2016			5			P		13	33,153	A	\$33	3,029,953		I	I See Footnotes <sup>(2)</sup> (3)(5)(6)		
Common Stock 08/10/2016			5			P		1,1	69,877	A	\$33	22,337,27		I See Fo		ootnotes <sup>(2)</sup>	
		Ta	able II - Deriva (e.g., p							osed of converti							
1. Title of Derivative Security (Instr. 3)	1. Title of 2. 3. Transaction Date Execution Date, Security or Exercise (Month/Day/Year) if any Cod		Trans	ransaction of Derivat Securit Acquir (A) or Dispos of (D)		Expirative (Mont ecurities cquired a) or isposed (D) nstr. 3, 4		e Exercisable and titon Date h/Day/Year)		Amo Seci Und Deri	tle and ount of urities erlying vative urity (Instr. 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)		Ownership Form: E	Beneficial Ownership (Instr. 4)	
				Code	e V	(A)		Date Exercis	sable	Expiration Date	n Title	Amour or Number of Shares	er				
1. Name and Address of Reporting Person*  BAKER BROS. ADVISORS LP																	
(Last) (First) (Middle) 667 MADISON AVENUE, 21ST FLOOR																	
(Street)																	

1. Name and Address of Reporting Person*							
BAKER BROS, ADVISORS LP							
-							
(Last)	(First)	(Middle)					
667 MADISON AVENUE, 21ST FLOOR							
(Street)							
NEW YORK	NY	10065					
-							
(City)	(State)	(Zip)					
1. Name and Addres	s of Reporting Pers	on*					
Baker Brother							
(Last)	(First)	(Middle)					
667 MADISION AVENUE, 21ST FLOOR							
(Street)							
NEW YORK	NY	10065					
,							
(City)	(State)	(Zip)					
Name and Address of Reporting Person*							
Baker Bros. Advisors (GP) LLC							

(Last)	(First) VENUE, 21ST FLOO	(Middle)						
	VLIVOL, 2101 1 LOC							
(Street) NEW YORK	NY	New York						
(City)	(State)	(Zip)						
1. Name and Address o  BAKER FELIX								
(Last) 667 MADISON AV	(First) ENUE, 21ST FLOO	(Middle)						
(Street) NEW YORK	NY	10065						
(City)	(State)	(Zip)						
1. Name and Address o								
(Last) 667 MADISON AV	(First) ENUE, 21ST FLOO	(Middle)						
(Street) NEW YORK	NY	10065						
(City)	(State)	(Zip)						
1. Name and Address of Reporting Person* $\underline{667, L.P.}$								
(Last) 667 MADISION A	(First) VENUE, 21ST FLOO	(Middle)						
(Street) NEW YORK	NY	10065						
(City)	(State)	(Zip)						
1. Name and Address of Reporting Person* $\underline{14159, L.P.}$								
(Last) 667 MADISION A	(First) VENUE, 21ST FLOO	(Middle)						
(Street) NEW YORK	NY	10065						
(City)	(State)	(Zip)						

## **Explanation of Responses:**

- 1. As a result of their ownership interest in 14159 Capital (GP), LLC, Felix J. Baker and Julian C. Baker may be deemed to have an indirect pecuniary interest in 452,540 shares of Common Stock of the Issuer beneficially owned by 14159, L.P. ("14159"), a limited partnership of which the sole general partner is 14159 Capital, L.P., a limited partnership of which the sole general partner is 14159 Capital, L.P.'s right to receive an allocation of a portion of the profits from 14159.
- 2. On August 10, 2016, 667, L.P. ("667") and Baker Brothers Life Sciences, L.P. ("Life Sciences", and together with 667 and 14159 the "Funds") purchased 133,153 and 1,169,877 shares of the Common Stock, respectively of ACADIA Pharmaceuticals, Inc. (the "Issuer"), pursuant to an underwritten public offering.
- 3. After giving effect to the transactions reported herein and as a result of their ownership interest in Baker Biotech Capital (GP), LLC, Julian C. Baker and Felix J. Baker each may be deemed to have an indirect pecuniary interest in the Issuer's shares of Common Stock reported in column 5 of Table I directly held by 667, a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general partner is Baker Biotech Capital, L.P., a limited partnership of which the sole general p
- 4. After giving effect to the transactions reported herein and as a result of their ownership interest in Baker Brothers Life Sciences Capital (GP), LLC, Julian C. Baker and Felix J. Baker each may be deemed to have an indirect pecuniary interest in the Issuer's shares of Common Stock reported in column 5 of Table I directly held by Life Sciences, a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital, L.P., a limited partnership of which the sole general partner is Baker Brothers Life Sciences Capital (GP), LLC, due to Baker Brothers Life Sciences Capital, L.P. is right to receive an allocation of a portion of the profits from Life Sciences.
- 5. Baker Bros. Advisors LP (the "Adviser") serves as the Investment Adviser to the Funds. In connection with the services provided by the Adviser, the Adviser receives an asset-based management fee that does not confer any pecuniary interest in the securities held by the Funds. Baker Bros. Advisors (GP) LLC (the "Adviser GP") is the Adviser's sole general partner. Julian C. Baker and Felix J. Baker are principals of the Adviser has complete and unlimited discretion and authority with respect to the investment and voting power of the securities held by the Funds. The general partners of the Funds have relinquished to the Adviser all discretion and authority with respect to the investment and voting power of the securities held by the Funds. Pursuant to agreements between Julian C. Baker, Dr. Biggar and the Adviser, the Adviser has investment and dispositive power over the Stock Options and any shares received as a result of the exercise of options. (Continued in footnote 6)
- 6. Julian C. Baker, Felix J. Baker, the Adviser GP and the Adviser disclaim beneficial ownership of the securities held directly by the Funds except to the extent of their pecuniary interest therein, and this report shall not be deemed an admission that any of Julian C. Baker, Felix J. Baker, the Adviser GP or the Adviser is a beneficial owner of such securities for purposes of Section 16 or any other purpose.

## Remarks

Julian C. Baker, a principal and Dr. Stephen R. Biggar, an employee of Baker Bros. Advisors LP are directors of ACADIA Pharmaceuticals, Inc. (the "Issuer"). For purposes of Section 16 of the Securities Exchange Act of 1934, as amended, the reporting persons are deemed directors by deputization by virtue of their representation on the Board of Directors of the Issuer.

08/12/2016

Mgmt. Co. and Inv. Adviser to **BAKER BROTHERS LIFE** SCIENCES, L.P., pursuant to authority granted by Baker Brothers Life Sciences Capital, L.P., GP to Baker Brothers Life Sciences, L.P Name:Scott L. Lessing, Title: President /s/ By: Baker Bros. Advisors (GP) LLC, Name: Scott L. Lessing, 08/12/2016 Title: President /s/ Scott L. Baker Bros. Advisors LP: Title: President /s/ Scott L. 08/12/2016 **Lessing** /s/ Felix J. Baker 08/12/2016 /s/ Julian C. Baker 08/12/2016 Baker Bros. Advisors LP, Mgmt. Co. and Inv. Adviser to 667, L.P., pursuant to authority granted by Baker Biotech 08/12/2016

Capital, L.P., GP to 667, L.P.
Name: Scott L. Lessing, Title:
President /s/ Scott L. Lessing

Baker Bros. Advisors LP, Mgmt. Co. and Inv. Adviser to

14159, L.P., pursuant to

authority granted by 14159 08/12/2016

Capital, L.P., GP to 14159, L.P. Name: Scott L. Lessing, Title: President /s/ Scott L. Lessing

\*\* Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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.

<sup>\*</sup> If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

<sup>\*\*</sup> Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).