FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden 0.5 hours per response:

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person*  Thompson Elizabeth H.Z.						2. Issuer Name and Ticker or Trading Symbol ACADIA PHARMACEUTICALS INC ACAD ]							f Reporting Pable)	erson(s) to Issa 10% Ov Other (s	vner		
(Last) C/O ACA	(Last) (First) (Middle) C/O ACADIA PHARMACEUTICALS INC.					3. Date of Earliest Transaction (Month/Day/Year) 08/12/2024							Officer (give title Other (specify below)  EVP, Head of Research & Dev				
12830 EL CAMINO REAL, SUITE 400					4. If Amendment, Date of Original Filed (Month/Day/Year)						Line)	6. Individual or Joint/Group Filing (Check Applicable Line)					
(Street) SAN DIEGO CA 92130		92130								Į.	Form filed by One Reporting Person  Form filed by More than One Reporting  Person						
(City) (State) (Zip)			_   F	Rule 10b5-1(c) Transaction Indication													
						Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.											
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																	
1. Title of Security (Instr. 3)  2. Transa Date (Month/D				•	Execution Date			, Transaction Disposed Code (Instr.		ities Acquired (A) or d Of (D) (Instr. 3, 4 and 5		5. Amount of Securities Beneficially Owned Following Reported		orm: Direct 0) or Indirect ) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
						Code	Amount	(A) or (D)	r Price	Transacti (Instr. 3 a							
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																	
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s)	Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)		
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		(Instr. 4)	(5)			
Stock Option (Right to Buy)	\$15.29	08/12/2024		A		324,582		(1)	08/11/2034	Common Stock	324,582	\$0	324,582	D			
Restricted Stock Units	(2)	08/12/2024		A		64,544		(3)	(3)	Common Stock	64,544	\$0	64,544	D			

## **Explanation of Responses:**

- 1. 25% of the shares subject to the Stock Option will vest and become exercisable on July 29, 2025. The remaining shares vest and become exercisable in 36 equal monthly installments thereafter.
- 2. Each restricted stock unit represents a contingent right to receive one share of Issuer's common stock
- 3. 50% of the restricted stock units vest on July 29, 2026 and 25% vest on each of July 29, 2027 and July 29, 2028.

/s/ Jennifer J. Rhodes, Attorney- 08/13/2024

in-Fact

\*\* Signature of Reporting Person

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

- $^{\star}$  If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

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.