FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

1. Name and Address of Reporting Person [*] Bonita David P		Issuer Name and T relude Therap				(Ch	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director X 10% Owner						
(Last) (First) (Middl		Date of Earliest Tra 5/22/2023	ansaction	(Mor	th/Day/Year)		Director Officer (give ti below)	tle Otl	% Owner ner (specify ow)				
C/O PRELUDE THERAPEUTICS INC 200 POWER MILL ROAD	• 4.	If Amendment, Dat	e of Orig	inal F	iled (Month/Da	Line	6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person						
(Street) WILMINGTON DE 1980	3							Form filed by Person	More than One	Reporting			
(City) (State) (Zip)		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. tive Securities Acquired, Disposed of, or Beneficially Owned											
1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date,	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) of Disposed Of (D) (Instr. 3, 4 5)		l (A) or	5. Amount of Securities Beneficially Owned Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)				
			Code V		Amount	(A) or (D)	Price	Reported Transaction(s) (Instr. 3 and 4)					
Common Stock	05/22/2023		Р		869,565 ⁽¹⁾	A	\$5.75	10,119,756	I	See footnotes ⁽² (4)			
Common Stock								526,300	I	See footnotes ⁽³			

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)		9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. 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			

Explanation of Responses:

1. These shares of the Issuer's common stock were purchased from the Issuer in an underwritten public offering.

2. These securities are held of record by OrbiMed Private Investments VI, LP ("OPI VI"). OrbiMed Capital GP VI LLC ("GP VI") is the general partner of OPI VI and OrbiMed Advisors LLC ("OrbiMed Advisors") is the managing member of GP VI. The Reporting Person is a member of OrbiMed Advisors. By virtue of such relationships, OrbiMed Advisors and GP VI may be deemed to have voting power and investment power over the securities held by OPI VI and, as a result, may be deemed to have beneficial ownership over such securities. OrbiMed Advisors exercises voting and investment power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the securities held by OPI VI. 3. These securities are held of record by OrbiMed Partners Master Fund Limited ("OPM"). OrbiMed Capital LLC ("OrbiMed Capital") is the investment advisor to OPM. OrbiMed Capital is a relying advisor of OrbiMed Advisors. OrbiMed Advisors and OrbiMed Capital exercise voting and investment power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and W. Carter Neild, each of whom disclaims beneficial ownership of the shares held by OPM".

4. Each of the Reporting Person, OrbiMed Advisors, GP VI, and OrbiMed Capital disclaims beneficial ownership of the securities reported herein for purposes of Rule 16a-1(a) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), except to the extent of his or its pecuniary interest therein, if any. This report shall not be deemed an admission that any such person or entity is a beneficial owner of such securities for the purpose of Section 16 of the Exchange Act, or for any other purpose.

<u>/s/ David P. Bonita</u>

05/24/2023

** Signature of Reporting Person Date

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

* 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.

OMB APPROVAL

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