

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

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

1. Name and Address of Reporting Person* <u>ARCH Venture Partners X, LLC</u>			2. Issuer Name and Ticker or Trading Symbol <u>Prime Medicine, Inc. [PRME]</u>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) <input type="checkbox"/> Other (specify below) <input type="checkbox"/>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) 10/24/2022			6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person <input checked="" type="checkbox"/>		
8755 WEST HIGGINS ROAD, SUITE 1025			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street) CHICAGO IL 60631								
(City) (State) (Zip)								

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	10/24/2022		C		5,728,297	A	(1)	5,728,297	I	By ARCH Venture Fund X, L.P. ⁽²⁾⁽³⁾
Common Stock	10/24/2022		C		5,728,297	A	(1)	5,728,297	I	By ARCH Venture Fund X Overage, L.P. ⁽³⁾⁽⁴⁾
Common Stock	10/24/2022		P		400,000	A	\$17	6,128,297	I	By ARCH Venture Fund X, L.P. ⁽²⁾⁽³⁾⁽⁵⁾
Common Stock	10/24/2022		P		400,000	A	\$17	6,128,297	I	By ARCH Venture Fund X Overage, L.P. ⁽²⁾⁽³⁾⁽⁶⁾

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) (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				
Series A Convertible Preferred Stock	(1)	10/24/2022		C		16,666,667	(1)	(1)	Common Stock	5,361,122	\$0	0	I	By ARCH Venture Fund X, L.P. ⁽²⁾⁽³⁾	
Series A Convertible Preferred Stock	(1)	10/24/2022		C		16,666,664	(1)	(1)	Common Stock	5,361,122	\$0	0	I	By ARCH Venture Fund X Overage, L.P. ⁽³⁾⁽⁴⁾	
Series B Convertible Preferred Stock	(1)	10/24/2022		C		1,141,474	(1)	(1)	Common Stock	367,175	\$0	0	I	By ARCH Venture Fund X, L.P. ⁽²⁾⁽³⁾	
Series B Convertible Preferred Stock	(5)	10/24/2022		C		1,141,474	(5)	(5)	Common Stock	367,175	\$0	0	I	By ARCH Venture Fund X Overage, L.P. ⁽³⁾⁽⁴⁾	

1. Name and Address of Reporting Person* <u>ARCH Venture Partners X, LLC</u>		
(Last)	(First)	(Middle)

8755 WEST HIGGINS ROAD, SUITE 1025

(Street)

CHICAGO IL 60631

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[ARCH Venture Partners X, L.P.](#)

(Last)

(First)

(Middle)

8755 WEST HIGGINS ROAD, SUITE 1025

(Street)

CHICAGO IL 60631

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[ARCH Venture Partners X Overage, L.P.](#)

(Last)

(First)

(Middle)

8755 WEST HIGGINS ROAD, SUITE 1025

(Street)

CHICAGO IL 60631

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[ARCH Venture Fund X, L.P.](#)

(Last)

(First)

(Middle)

8755 WEST HIGGINS ROAD, SUITE 1025

(Street)

CHICAGO IL 60631

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[ARCH Venture Fund X Overage, L.P.](#)

(Last)

(First)

(Middle)

8755 WEST HIGGINS ROAD, SUITE 1025

(Street)

CHICAGO IL 60631

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[CRANDELL KEITH](#)

(Last)

(First)

(Middle)

8755 WEST HIGGINS ROAD, SUITE 1025

(Street)

CHICAGO IL 60631

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[Burow Kristina](#)

(Last)

(First)

(Middle)

8755 WEST HIGGINS ROAD, SUITE 1025

(Street)

CHICAGO IL 60631

(City)

(State)

(Zip)

1. Name and Address of Reporting Person*

[GILLIS STEVEN](#)

(Last)	(First)	(Middle)
8755 WEST HIGGINS ROAD, SUITE 1025		
<hr/>		
(Street)		
CHICAGO	IL	60631
<hr/>		
(City)	(State)	(Zip)

Explanation of Responses:

1. The shares of Series A Convertible Preferred Stock and Series B Convertible Preferred Stock (together, the "Preferred Stock") were convertible into Common Stock on a one-for-3.10880 basis at any time at the option of the holder, and automatically converted into the number of shares shown in Column 7 immediately prior to the closing of the Issuer's initial public offering on October 24, 2022. The Preferred Stock had no expiration date.
2. Represents shares held directly by ARCH Venture Fund X, L.P. ("ARCH X"). ARCH Venture Partners X, L.P. ("AVP X LP") is the sole general partner of ARCH X.
3. ARCH Venture Partners X, LLC ("AVP X LLC") is the sole general partner of each of AVP X LP and AVP X Overage LP. Keith Crandell, Kristina Burow and Steven Gillis are members of the investment committee of AVP X LLC (the "AVP X Committee Members"). AVP X LP and AVP X Overage LP may be deemed to beneficially own the shares held by ARCH X and ARCH X Overage, respectively, AVP X LLC may be deemed to beneficially own the shares held by ARCH X and ARCH X Overage, and each of the AVP X Committee Members may be deemed to share the power to direct the disposition and vote of the shares held by ARCH X and ARCH X Overage. AVP X LP, AVP X Overage LP, AVP X LLC, and the AVP X Committee Members each disclaim beneficial ownership except to the extent of any pecuniary interest therein, and this report shall not be deemed an admission that such shares are beneficially owned by them for Section 16 or any other purpose.
4. Represents shares held directly by ARCH Venture Fund X Overage, L.P. ("ARCH X Overage"). ARCH Venture Partners X Overage, L.P. ("AVP X Overage LP") is the sole general partner of ARCH X Overage.
5. Reflects shares purchased by ARCH X in the Issuer's initial public offering.
6. Reflects shares purchased by ARCH X Overage in the Issuer's initial public offering.

Remarks:

/s/ ARCH Venture Fund X, L.P.,
By: ARCH Venture Partners X,
L.P., its General Partner, By:
ARCH Venture Partners X, LLC, 10/26/2022
its General Partner, By: Mark
McDonnell, attorney-in-fact

/s/ ARCH Venture Fund X
Overage, L.P., By: ARCH
Venture Partners X Overage,
L.P., its General Partner, By: 10/26/2022
ARCH Venture Partners X, LLC,
its General Partner, By: Mark
McDonnell, attorney-in-fact

/s/ ARCH Venture Partners X,
L.P., By: ARCH Venture
Partners X, LLC, its General 10/26/2022
Partner, By: Mark McDonnell,
attorney-in-fact

/s/ ARCH Venture Partners X
Overage, L.P., By: ARCH
Venture Partners X, LLC, its 10/26/2022
General Partner, By: Mark
McDonnell, attorney-in-fact

/s/ ARCH Venture Partners X,
LLC, By: Mark McDonnell, 10/26/2022
attorney-in-fact

/s/ Keith Crandell, By: Mark 10/26/2022
McDonnell, attorney-in-fact

/s/ Kristina Burow, By: Mark 10/26/2022
McDonnell, attorney-in-fact

/s/ Steven Gillis, By: Mark 10/26/2022
McDonnell, attorney-in-fact

** 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.