

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

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

OMB APPROVAL	
OMB Number:	3235-0104
Estimated average burden hours per response:	0.5

1. Name and Address of Reporting Person* <u>ARCH Venture Partners X, LLC</u>			2. Date of Event Requiring Statement (Month/Day/Year) 10/19/2022		3. Issuer Name and Ticker or Trading Symbol <u>Prime Medicine, Inc. [PRME]</u>	
(Last)	(First)	(Middle)	4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) _____ Other (specify below) _____			5. If Amendment, Date of Original Filed (Month/Day/Year)
8755 WEST HIGGINS ROAD, SUITE 1025						6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person
(Street)	(City)	(State)	(Zip)			
CHICAGO	IL	60631				

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series A Convertible Preferred Stock	(0)	(0)	Common Stock	5,361,122	(0)	I	By ARCH Venture Fund X, L.P. ⁽²⁾⁽³⁾
Series A Convertible Preferred Stock	(0)	(0)	Common Stock	5,361,122	(0)	I	By ARCH Venture Fund X Overage, L.P. ⁽²⁾⁽⁴⁾
Series B Convertible Preferred Stock	(0)	(0)	Common Stock	367,175	(0)	I	By ARCH Venture Fund X, L.P. ⁽²⁾⁽³⁾
Series B Convertible Preferred Stock	(0)	(0)	Common Stock	367,175	(0)	I	By ARCH Venture Fund X Overage, L.P. ⁽²⁾⁽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)	(City)	(State)
CHICAGO	IL	60631
(City)	(State)	(Zip)

1. Name and Address of Reporting Person* <u>ARCH Venture Partners X, L.P.</u>		
(Last)	(First)	(Middle)
8755 WEST HIGGINS ROAD, SUITE 1025		
(Street)	(City)	(State)
CHICAGO	IL	60631
(City)	(State)	(Zip)

1. Name and Address of Reporting Person* <u>ARCH Venture Partners X Overage, L.P.</u>		
(Last)	(First)	(Middle)
8755 WEST HIGGINS ROAD, SUITE 1025		
(Street)	(City)	(State)
CHICAGO	IL	60631
(City)	(State)	(Zip)

1. Name and Address of Reporting Person* <u>ARCH Venture Fund X, L.P.</u>		
(Last)	(First)	(Middle)
8755 WEST HIGGINS ROAD, SUITE 1025		
(Street)	(City)	(State)
CHICAGO	IL	60631
(City)	(State)	(Zip)

1. Name and Address of Reporting Person* <u>ARCH Venture Fund X Overage, L.P.</u>		
(Last)	(First)	(Middle)
8755 WEST HIGGINS ROAD, SUITE 1025		
(Street)	(City)	(State)
CHICAGO	IL	60631
(City)	(State)	(Zip)

(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		
(Street)		
CHICAGO	IL	60631
(City)	(State)	(Zip)

Explanation of Responses:

- The shares of Series A Convertible Preferred Stock and Series B Convertible Preferred Stock (together, the "Preferred Stock") are convertible into Common Stock on a one-for-3.10880 basis at any time at the option of the holder, and will automatically convert into the number of shares shown in Column 3 immediately prior to the closing of the Issuer's initial public offering. The Preferred Stock has no expiration date.
- 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.
- 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.
- 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.

Remarks:

Exhibit 24 Power of Attorney. Exhibit 24.1 Power of Attorney

[/s/ ARCH Venture Fund X, L.P., By: ARCH Venture Partners X, L.P., its General Partner, By: ARCH Venture Partners X, LLC, its General Partner, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

[/s/ ARCH Venture Fund X Overage, L.P., By: ARCH Venture Partners X Overage, L.P., its General Partner, By: ARCH Venture Partners X, LLC, its General Partner, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

[/s/ ARCH Venture Partners X, L.P., By: ARCH Venture Partners X, LLC, its General Partner, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

[/s/ ARCH Venture Partners X Overage, L.P., By: ARCH Venture Partners X, LLC, its General Partner, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

[/s/ ARCH Venture Partners X, LLC, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

[/s/ Keith Crandell, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

[/s/ Kristina Burow, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

[/s/ Steven Gillis, By: Mark McDonnell, attorney-in-fact](#) [10/19/2022](#)

** 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 5 (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.

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mark McDonnell his true and law
IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 29th day of January, 2021.

ARCH VENTURE FUND X, L.P.

By: ARCH Venture Partners X, L.P.
its General Partner

By: ARCH Venture Partners X, LLC.
its General Partner

By: /s/ Keith Crandell

Managing Director

ARCH VENTURE PARTNERS X, L.P.

By: ARCH Venture Partners X, LLC
its General Partner

By: /s/ Keith Crandell

Managing Director

ARCH VENTURE PARTNERS X, LLC

By: /s/ Keith Crandell

Managing Director

/s/ Keith Crandell

Keith Crandell

/s/Robert Nelsen

Robert Nelsen

/s/Kristina Burow

Kristina Burow

/s/Steven Gillis

Steven Gillis

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IN WITNESS WHEREOF, this Power of Attorney has been signed as of the 29th day of January, 2021.

ARCH VENTURE FUND X OVERAGE, L.P.

By: ARCH Venture Partners X Overage, L.P.
its General Partner

By: ARCH Venture Partners X, LLC.
its General Partner

By: /s/ Keith Crandell

Managing Director

ARCH VENTURE PARTNERS X OVERAGE, L.P.

By: ARCH Venture Partners X, LLC
its General Partner

By: /s/ Keith Crandell

Managing Director

ARCH VENTURE PARTNERS X, LLC

By: /s/ Keith Crandell

Managing Director

/s/ Keith Crandell

Keith Crandell

/s/Robert Nelsen

Robert Nelsen

/s/Kristina Burow

Kristina Burow

/s/Steven Gillis

Steven Gillis