

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL	
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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

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan for the purchase or sale of equity securities of the issuer that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

1. Name and Address of Reporting Person* <u>NELSEN ROBERT</u> (Last) (First) (Middle) <u>8755 W. HIGGINS ROAD, SUITE 1025</u> (Street) <u>CHICAGO IL 60631</u> (City) (State) (Zip)	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) <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>08/01/2025</u>	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

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								6,128,297	I	By ARCH Venture Fund X, L.P. ⁽¹⁾⁽³⁾⁽⁴⁾
Common Stock								6,128,297	I	By ARCH Venture Fund X Overage, L.P. ⁽²⁾⁽³⁾⁽⁴⁾
Common Stock	08/01/2025		P		3,030,300	A	\$3.3	6,230,300	I	By ARCH Venture Fund XII, L.P. ⁽⁵⁾⁽⁶⁾
Common Stock								16,080	I	See Footnote ⁽⁷⁾

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					

Explanation of Responses:

- 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.
- ARCH Venture Partners X, LLC ("AVP X LLC") is the sole general partner of each of AVP X LP and AVP X Overage LP. In addition to the Reporting Person, Keith Crandell, Kristina Burow and Steve Gillis are also members of the investment committee of AVP X LLC (the "AVP X Investment 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 Investment 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 other AVP X Investment Committee Members have filed a separate Form 4 and disclaim beneficial ownership except to the extent of any pecuniary interest therein.
- The Reporting Person is also an AVP X Investment Committee Member and may be deemed to share the power to direct the disposition and vote of own the shares held by ARCH X and ARCH X Overage. The Reporting Person disclaims beneficial ownership of such shares 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 him for Section 16 or any other purpose.
- Represents shares held directly by ARCH Venture Fund XII, L.P. ("ARCH XII"). ARCH Venture Partners XII, L.P. ("AVP XII LP") is the general partner of ARCH XII. ARCH Venture Partners XII, LLC (AVP XII LLC) is the general partner of AVP XII LP. In addition to the Reporting Person, Keith Crandell, Kristina Burow and Steven Gillis are also members of the investment committee of AVP XII LLC (the "AVP XII LLC Investment Committee Members"). Each of AVP XII LP and AVP XII LLC may be deemed to beneficially own the shares held by ARCH XII, and each of the AVP XII LLC Investment Committee Members may be deemed to share the power to direct the disposition and vote of the shares held by ARCH XII. Each of AVP XII LP, AVP XII LLC and the other AVP XII LLC Investment Committee Members have filed a separate Form 4 and disclaim beneficial ownership except to the extent of their pecuniary interest therein, if any.

6. The Reporting Person is also an AVP XII Investment Committee Member and may be deemed to share the power to direct the disposition and vote of the shares held by ARCH XII. The Reporting Person disclaims beneficial ownership of such shares 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 him for Section 16 or any other purpose.

7. Shares held by a trust for the benefit of family members of the Reporting Person.

Robert Nelsen /s/ Mark
McDonnell, attorney-in-fact 08/01/2025

** 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.