FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington, | D.C. | 20549 |
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| | OMB APPROVAL | | | | | | | | |
|--|--|-----|--|--|--|--|--|--|--|
| | OMB Number: 3235-028 Estimated average burden | | | | | | | | |
| | | | | | | | | | |
| | hours per response: | 0.5 | | | | | | | |

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

| 1. Name and Address of Reporting Person* Alenson Carman | | | | | 2. Issuer Name and Ticker or Trading Symbol Prime Medicine, Inc. [PRME] | | | | | | | eck all applio Directo | cable) or | Person(s) to Is | wner | |
|--|--|------------|------------|----------------|---|---|----------|--|-------------------------|--|-----------------|---|---|--|--|--|
| (Last) (First) (Middle) C/O PRIME MEDICINE, INC. | | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 03/31/2023 | | | | | | | X Officer (give title Other (specibelow) See Remarks | | | |
| 21 ERIE STREET | | | | | 4.1 | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | Line | 6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person | | | | |
| (Street) CAMBR | IDGE 1 | MA | 02139 | | | | | | | | | | | iled by More | than One Rep | I |
| (City) | (| State) | (Zip) | | R | | | ` , | Transa | | | | | | | |
| 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. | | | | | | | | ed to | | | | | | | | |
| | | Tak | le I - Nor | n-Deriv | vativ | e Se | curities | s Ac | quired, D | isposed o | of, or Be | neficiall | y Owned | l . | | |
| 1. Title of Security (Instr. 3) 2. Transar Date (Month/Date) | | | | | | Execution Date, | | 3. Transaction Code (Instr. 3, 4) Securities Acquired (A) Disposed Of (D) (Instr. 3, 4) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1 | | | | Beneficia Owned F | es Form ally (D) o following (I) (Ir | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | Code V | Amount | (A) or (D) Pric | | Reported Transact (Instr. 3 a | ion(s) | | (Instr. 4) | |
| | | | | | | | | | uired, Dis , options | | | | Owned | | | |
| 1. Title of Derivative Security (Instr. 3) | Conversion Date or Exercise (Month/Day/Year) | | if any | cution Date, T | | 4. Transaction Code (Instr. 8) | | of E | | 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) | Ownershi Form: Direct (D) or Indirec (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 | | | | |
| Stock Option (right to buy) | \$12.3 | 03/31/2023 | | | A | | 90,498 | | (1) | 03/31/2033 | Common Stock | 90,498 | \$0 | 90,498 | D | |

Explanation of Responses:

1. 1/48th of the shares underlying this option vest and become exercisable in substantially equal monthly installments on each monthly anniversary of March 31, 2023, subject to the Reporting Person's continued service on each such vesting date.

Remarks:

Interim Chief Financial Officer and Chief Accounting Officer

/s/ Gabriela Morales-Rivera, attorney-in-fact

04/04/2023

** 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.