FORM 4

Check this box if no longer subject

to Section 16. Form 4 or Form 5 obligations may continue. See

Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

OMB APPROVAL

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

| 1. Name and Address of Reporting Person HAASER CHARLES B | | | | YIELD10 BIOSCIENCE, INC. [YTEN] | | | | | | | | | | ationship of Reporting k all applicable) Director Officer (give title | | 10% Ov Other (s | | wner | | |
|---|--|-------|-----------------------------|---|---|--|--------|--|-----------------|--|--|-----------------------------|---------------------------------------|---|---|--|---|-----------------------------------|------------|--|
| (Last) (First) (Middle) C/O YIELD10 BIOSCIENCE, INC. 19 PRESIDENTIAL WAY, SUITE 201 | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 02/10/2023 | | | | | | | | | belov | v) VP Financ | ce an | below) | | | |
| (Street) WOBUR (City) | | | 1801 Zip) | | 4. If A | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | |) | 6. Indi Line) X | Form filed by More than One Reporting Person Form foled by More than One Reporting Person | | | | | |
| | | Table | I - Nor | n-Deriva | tive S | Secu | rities | Acq | uired, | Dis | posed of | , or E | Benefi | cially | / Own | ed | | | | |
| 1. Title of Security (Instr. 3) | | Date | Date (Month/Day/Year) if | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | | | Disposed (| rities Acquired (A ed Of (D) (Instr. 3, | | , 4 and Secu Bene Own | | cially I Following | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | | 7. Nature of Indirect Beneficial Ownership | | | |
| | | | | | | | | | Code | v | Amount | (A) (D) | or Pri | ce | | ction(s) 3 and 4) | | | (Instr. 4) | |
| Common Stock | | | 02/10/ |)/2023 | | | | F | | 979(1) | Г | \$ | 3.59 | 3.59 10,30 | | ,300 | | | | |
| Common Stock | | | | | | | | | | | | 9,848(2) | | | I | By 401(k) Plan | | | | |
| 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 of Exercise Price of Derivative Security (Instr. 3) 3. Transaction Date (Month/Day/Year) Date (Month/Day/Year) if any (Month/Day/ | | | on Date, | 4. Transaction Code (Instr. 8) | | of | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amount of Securities Underlying Derivative Security (Ins 3 and 4) | | De Se (In: | . Price of Derivative Security Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (Instr. 4) | Owners Form: Direct (I or Indirect) (I) (Instr | Ownership | Beneficial Ownership t (Instr. 4) | | |
| | | | | | Code | v | (A) | (D) | Date Exercis | able | Expiration Date | Title | Amour or Number of Shares | or | | | | | | |

Explanation of Responses:

- 1. Represents shares withheld in payment of withholding taxes upon partial vesting of RSUs granted 2/10/2022
- $2. \ Shares \ acquired \ as \ Issuer \ matching \ contribution \ under \ the \ Yield 10 \ Bioscience, \ Inc. \ 401(k) \ Plan.$

Remarks:

<u>/s/ Charles B. Haaser</u> <u>02/14/2023</u>

** 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.