FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

| OMB APPROVAL | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | |
| Estimated average burden | | | | | | | | |

0.5

hours per response:

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

| 1. Name and Address of Reporting Person* <u>Hamilton Richard William</u> | | | | | 2. Issuer Name and Ticker or Trading Symbol YIELD10 BIOSCIENCE, INC. [YTEN] | | | | | (Che | elationship o eck all applic Director | , | rson(s) to Issu 10% Ov | | | |
|--|---|--|--------------|---------------------------------|--|--|--|---------------------|--|---------------|--|--|---|--|--|--|
| (Last) (First) (Middle) C/O YIELD10 BIOSCIENCE, INC. | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 05/23/2018 | | | | | | | Officer below) | (give title | Other (s below) | pecify | |
| 19 PRESIDENTIAL WAY | | | | - | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | 6. Individual or Joint/Group Filing (Check Applicable | | | | | |
| (Street) | RN M | IA | 01801 | | | | | | | | | Line | Form fi | ed by One Re | | |
| (City) | (S | itate) | (Zip) | | | | | | | | | | | | | |
| | | Ta | ble I - Non- | Derivat | ive Se | ecurities | Acc | quired, D | ispos | ed of | , or Ben | eficiall | y Owned | | | |
| Date | | | | 2. Transac Date (Month/Da | Execution Date, | | Code (Instr. 5) | | | | 5. Amour Securities Beneficia Owned F | Form Sollowing (I) (Ir | rm: Direct or Indirect (Instr. 4) | 7. Nature of Indirect Beneficial Ownership | | |
| | | | | | | | Code V | An | nount | (A) or (D) | Price | Reported Transacti (Instr. 3 a | on(s) | | (Instr. 4) | |
| 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) | Execution Da | Code | saction e (Instr. | Derivative Securities Acquired or Dispose | Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amoun of Securities Underlying Derivative Security (Instr. 3 and 4) | | Derivative Security | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | Code | e V | (A) | (D) | Date Exercisable | | iration | Title | Amount or Number of Shares | | (Instr. 4) | " | |
| Stock Option (right to buy) | \$1.65 | 05/23/2018 | | A | | 10,000 ⁽¹⁾ | | (2) | 05/2 | 3/2028 | Common Stock | 10,000 | \$0 | 10,000 | D | |

Explanation of Responses:

- 1. These options were issued to the Reporting Person as the annual option grant to non-employee directors pursuant to the Issuer's Director Compensation Policy for services to be rendered to the Issuer as a member of its Board of Directors and/or a committee thereof.
- 2. These options will vest and become exercisable in equal quarterly installments over 4 years from 5/23/18, beginning on 8/23/2018 and ending on 5/23/2022.

/s/ Megan N. Gates, attorney-infact 05/25/2018

** 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.