

| OMB APPROVAL                                 |           |
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| OMB Number:                                  | 3235-0287 |
| Estimated average burden hours per response: | 0.5       |

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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 if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

|  |         |          |   |  |  |  |  |  |
|--|---------|----------|---|--|--|--|--|--|
| 1. Name and Address of Reporting Person*<br><u>Yocca Frank</u> |         |          | 2. Issuer Name and Ticker or Trading Symbol<br><u>BioXcel Therapeutics, Inc. [ BTAI ]</u> |  |  | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br>Director _____ 10% Owner _____<br>X Officer (give title below) _____ Other (specify below) _____<br><b>Chief Scientific Officer</b> |  |  |
| (Last)   | (First) | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year)<br><u>01/25/2021</u>                     |  |  | 6. Individual or Joint/Group Filing (Check Applicable Line)<br>X Form filed by One Reporting Person<br>Form filed by More than One Reporting Person  |  |  |
| C/O BIOXCEL THERAPEUTICS, INC.,<br>555 LONG WHARF DRIVE        |         |          | 4. If Amendment, Date of Original Filed (Month/Day/Year)                                  |  |  |  |  |  |
| (Street)<br>NEW HAVEN CT 06511                                 |         |          |   |  |  |  |  |  |
| (City) (State) (Zip)   |         |          |   |  |  |  |  |  |

**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                    | 01/25/2021                           |  | M                              |   | 15,000  | A          | \$0.41                 | 103,397   | D  |   |
| Common Stock                    | 01/25/2021                           |  | S <sup>(1)</sup>               |   | 900   | D          | \$46.94 <sup>(2)</sup> | 102,497   | D  |   |
| Common Stock                    | 01/25/2021                           |  | S <sup>(1)</sup>               |   | 3,472   | D          | \$47.62 <sup>(3)</sup> | 99,025  | D  |   |
| Common Stock                    | 01/25/2021                           |  | S <sup>(1)</sup>               |   | 6,521   | D          | \$48.39 <sup>(4)</sup> | 92,504  | D  |   |
| Common Stock                    | 01/25/2021                           |  | S <sup>(1)</sup>               |   | 4,107   | D          | \$49.35 <sup>(5)</sup> | 88,397  | D  |   |

**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 |  | Date Exercisable   | Expiration Date |   |  |  |   |  | Amount or Number of Shares |
| Employee Stock Option (right to buy)       | \$0.41   | 01/25/2021                           |  | M                              |   | 15,000   | (6)  | 08/23/2027      | Common Stock  | 15,000                                     | \$0  | 54,310  | D  |                            |

**Explanation of Responses:**

- The sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$46.875 to \$46.97. The reporting person undertakes to provide BioXcel Therapeutics, Inc. (the "Company"), any security holder of the Company, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$47.01 to \$47.99. The reporting person undertakes to provide the Company, any security holder of the Company, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$48.02 to \$48.94. The reporting person undertakes to provide the Company, any security holder of the Company, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$49.00 to \$49.74. The reporting person undertakes to provide the Company, any security holder of the Company, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- The option vested and became exercisable as to 37,209 underlying shares on March 31, 2018, and the remaining 75% of underlying shares have vested or will vest in substantially equal monthly installments over the 36 months between August 23, 2018 and August 22, 2021, subject to the Reporting Person's continuous employment with the Issuer through the relevant vesting dates.

/s/ Richard Steinhart, as  
Attorney-in-Fact for Frank 01/27/2021  
Yocca

\*\* 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.