UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): July 30, 2019

UNITY BIOTECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-38470 (Commission File Number) 26-4726035 (IRS Employer Identification Number)

3280 Bayshore Blvd, Suite 100 Brisbane, CA 94005

(Address of principal executive offices, including Zip Code)

Registrant's telephone number, including area code: (650) 416-1192

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2 below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	UBX	The Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company $extsf{X}$

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events

On July 30, 2019, Unity Biotechnology, Inc., a Delaware corporation ("UNITY" or the "Company"), announced the Phase 2 clinical development plan for UBX0101 in patients with osteoarthritis ("OA") of the knee.

UNITY plans to initiate a Phase 2 study of UBX0101 in patients with painful, moderate-to-severe OA of the knee. The study is expected to enroll approximately 180 patients with initiation expected in the fourth quarter of 2019 and initial 12-week results expected in the second half of 2020. The study will be a randomized, double-blind, placebo-controlled study evaluating three doses (0.5 mg, 2.0 mg and 4.0 mg) of UBX0101 administered via a single intraarticular injection. The primary measure will be an assessment of pain at 12 weeks as measured using the WOMAC-A instrument. Secondary measures will include safety and tolerability, pain (by 10 point Numerical Rating Scale) and function (by WOMAC-C) at 12 weeks, as well as similar measures at 24 weeks.

In addition, UNITY plans to study the safety, tolerability and initial effectiveness of both a new higher dose and repeat doses in a parallel Phase 1B study.

Forward-Looking Statements

To the extent that statements contained herein are not descriptions of historical facts regarding UNITY, they are forward-looking statements reflecting the current beliefs and expectations of management made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including statements related to the Company's expectations regarding the potential benefits, activity, effectiveness and safety of UBX0101, the Company's expectations with regard to the timing of the initiation of clinical studies as well as the timing of the results of such clinical studies, and the design of the Company's planned Phase 2 trial of UBX0101. Such forward-looking statements involve substantial risks and uncertainties that could cause the Company's clinical development programs, future results, performance, or achievements to differ significantly from those expressed or implied by the forward-looking statements. For a description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of the Company in general, see UNITY's reports filed with the Securities and Exchange Commission ("SEC"), including its Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the SEC on May 8, 2019, as well as other documents that may be filed by the Company from time to time with the SEC.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

UNITY BIOTECHNOLOGY, INC.

By: /s/ Robert C. Goeltz II

Robert C. Goeltz II Chief Financial Officer

Date: July 30, 2019