UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K/A

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 6, 2021

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)

285 East Grand Ave.
South San Francisco, CA 94080
(Address of principal executive offices, including Zip Code)

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

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

tollow	following provisions:				
	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 ⊠

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. \Box

Explanatory Note

On July 6, 2021, UNITY Biotechnology, Inc. filed a Current Report on Form 8-K (the "Original Report") to report that it announced positive data from its Phase 1 safety study of UBX1325 in patients with advanced disease from diabetic macular edema (DME) or wet or neovascular age-related macular degeneration (AMD) for whom anti-VEGF therapy was no longer considered beneficial. The Original Report included a presentation, filed as Exhibit 99.2, which was incorporated by reference therein. This Form 8-K/A is being filed as an amendment to the Original Report solely to file as Exhibit 99.2 a revised presentation to supersede and replace the original presentation included in the Original Report solely to correct the legend on Slide 18 of the presentation.

Item 9.01 Financial Statements and Exhibits.

Reference is made to the Exhibit Index attached hereto.

EXHIBIT INDEX

Exhibit No.	Description
99.2	Presentation of UNITY Biotechnology, Inc. dated July 6, 2021
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

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.

Date: July 7, 2021 By: /s/ Anirvan Ghosh

Anirvan Ghosh, Ph.D. Chief Executive Officer





UBX1325 Phase 1 Data Conference Call

Anirvan Ghosh, CEO Jamie Dananberg, CMO Lynne Sullivan, CFO

July 6th, 2021



SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This presentation and the accompanying oral commentary contain forward-looking statements including statements related to UNITY's understanding of cellular senescence and the role it plays in diseases of aging, the potential for UNITY's develop therapeutics to slow, halt, or reverse diseases of aging, including for ophthalmologic and neurologic diseases, our expectations regarding potential benefits, activity, effectiveness, and safety of UBX1325, the potential for UNITY's osuccessfully commence and complete clinical studies of UBX1325 for DME, AMD, and other ophthalmologic diseases, the expected timing of results of our studies of UBX1325, the timing of the expected commencement, progression, and conclusion of our studies including those of UBX1325, and UNITY's expectations regarding the sufficiency of its cash runway. These statements involve substantial known and unknown risks, uncertainties, and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from the information expressed or implied by these forward-looking statements, including the risk that the COVID-19 worldwide pandemic may continue to negatively impact the development of preclinical and clinical drug candidates, including delaying or disrupting the enrollment of patients in clinical trials, risks relating to the uncertainties inherent in the drug development process, and risks relating to UNITY's understanding of senescence biology. We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in the forward-looking statements. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not

UNITY

UBX1325 PROVIDES AN OPPORTUNITY FOR A TRANSFORMATIVE, DISEASE-MODIFYING THERAPY FOR DME AND nAMD PATIENTS

4 Weeks

"The imaging data demonstrating structural improvements in the retina are compelling at this stage of clinical development and represent defined endpoints for disease improvement..."

Week 4

Jeffrey Heier, M.D.

Baseline

Director of the Vitreoretinal Service and Retina Research, Ophthalmic Consultants of Boston

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UBX1325 PROVIDES AN OPPORTUNITY FOR A TRANSFORMATIVE, DISEASE-MODIFYING THERAPY FOR DME AND nAMD PATIENTS

Phase 1 Data Highlights

- UBX1325, the first senolytic drug being explored in eye disease, had a favorable safety and tolerability profile
- Initial efficacy data show rapid improvements in vision and retinal structure in DME and nAMD patients after a single dose

Implications for Addressing Unmet Need

- Could provide disease-modification by reversing pathophysiology and restoring tissue health
- Novel mechanism of action could benefit both treatment-naïve patients as well as poor anti-VEGF responders

Built on UNITY's Senescent Cell Biology Platform

- Data support senolytic therapeutic hypothesis
- · Mechanism has broad implication for diseases of aging

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UNITY IS DEVELOPING TRANSFORMATIVE MEDICINES TO SLOW, HALT, OR REVERSE DISEASES OF AGING



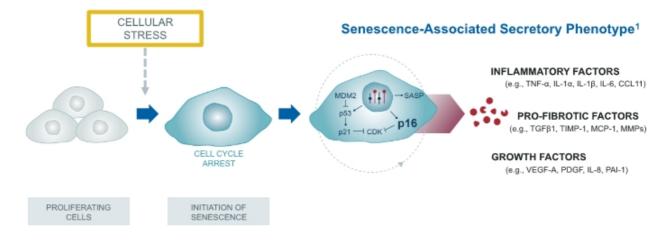




NEUROLOGY: Alzheimer's, FTD, PSP (and other Tauopathies), ALS, Cognitive Disorders

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SENESCENT CELLS AFFECT THE TISSUE MICRO-ENVIRONMENT TO DRIVE DISEASE PROGRESSION

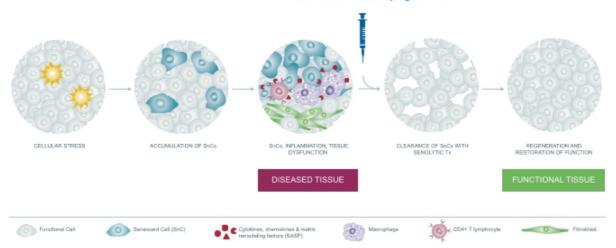


¹Coppe et al. Annu Rev Pathol 2010;5:99-118.



UNITY IS DEVELOPING SENOLYTIC MEDICINES TO ELIMINATE SENESCENT CELLS TO RESTORE TISSUE HEALTH

Target Senescent Cells and neutralize SASP factors to eliminate root cause of disease progression



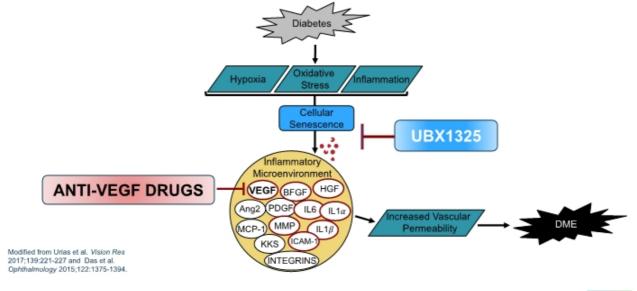
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THERAPEUTIC HYPOTHESIS: ELIMINATION OF VASCULAR SENESCENT CELLS BY UBX1325 SHOULD RE-ESTABLISH BARRIER FUNCTION AND REVERSE DISEASE PROGRESSION IN DME AND NAMD PATIENTS



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UBX1325 TARGETS A NODE UPSTREAM OF ANTI-VEGF THERAPIES



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UBX1325 PROVIDES AN OPPORTUNITY FOR A TRANSFORMATIVE BEST-IN-DISEASE THERAPY

UBX1325

Aspirational Treatment Benefits for DME and nAMD Patients

- Rapid effect with greater efficacy and durability than SoC
- **✓** Novel MOA and favorable pharmacology
- ✓ Able to use in combination with anti-VEGF agents
- ✓ Potential for improvement of retinal/choroidal blood flow
- ✓ Able to reduce ischemic regions of the retina
- ✓ Potential for disease modification

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UBX1325 CLINICAL PROGRAM

Single Injection of UBX1325



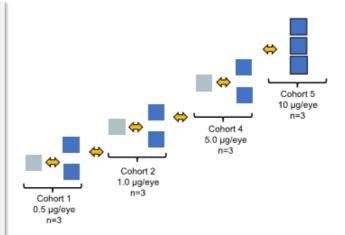
*Study under consideration



STUDY UBX1325-01: SINGLE ASCENDING DOSE SAFETY STUDY IN PATIENTS WITH ADVANCED DME OR nAMD

Study Population

- Advanced DME or nAMD with BCVA of 20/80 (55 ETDRS letters) or worse in the first 2 cohorts; 20/40 (70 ETDRS letters) or worse in later cohorts
- Patients for whom anti-VEGF therapy was no longer considered beneficial
- Patients had received neither an anti-VEGF agent nor a corticosteroid in the 3 months preceding enrollment
- DME patients had ≥350 µm of fluid; nAMD patient had presence of either sub - or intra-retinal fluid



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EXECUTIVE SUMMARY: UBX1325 PHASE 1 SAD STUDY

Favorable Safety and Tolerability Profile

 In patients with advanced DME and nAMD in the SAD Phase 1 study, UBX1325 was well tolerated with favorable acute safety profile supporting development; no dose-limiting toxicities; a total of two nonserious, nondrug-related AE's were reported

BCVA: Gain in ETDRS Letters from Baseline

- · Overall (all doses): 10 of 12 patients showed a gain at 2 weeks; 9 of 12 patients at 4 weeks
- In higher dose cohorts (5, 10 μg): 6 of 6 patients showed a gain at 2 weeks; 5 of 6 patients at 4 weeks

CST: Decrease from Baseline

- · Overall (all doses): 6 of 12 patients had a decrease at 2 weeks; 5 of 12 patients at 4 weeks
- In higher dose cohorts (5,10 μg): 4 of 6 patients showed a decrease at 2 weeks; 3 of 6 patients at 4 weeks

Reduction in Subretinal / Intraretinal Fluid in nAMD Patients

•KOLs see current data as highly indicative of disease-relevant biologic activity

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UBX1325 WAS WELL-TOLERATED THROUGH ALL DOSES

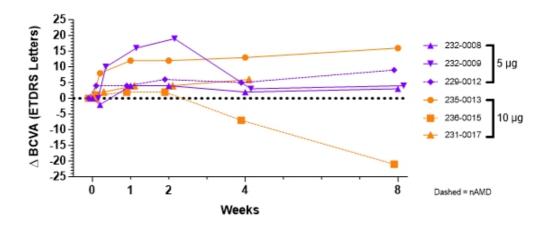
Measure	Assessment
Acute inflammation	None observed
Evidence of ocular infection	None observed
Persistent and clinically relevant increases in intraocular pressure	None observed
Clinically relevant changes in BCVA	2 events in 2 patients*
Retinal changes as determined by color fundus photography	None observed
Adverse structural changes to retina as measured by SD-OCT	None observed
Retinal or vitreal hemorrhage	None observed
Structural changes by slit-lamp exam	None observed
Retinal detachment	None observed
Other clinical or laboratory assessments	None observed
Patient reported symptoms	2 decreased VA in 2 patients*
Dose-limiting toxicity	None observed

Safety and Tolerability acceptable to advance to additional clinical studies with UBX1325 in ocular diseases

* Same patients, not treatment-related

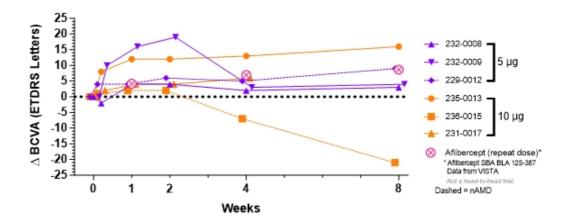


BY 4 WEEKS, PATIENTS SHOW RAPID INCREASE IN BCVA AMONGST HIGH DOSE COHORTS AFTER SINGLE DOSE UBX1325



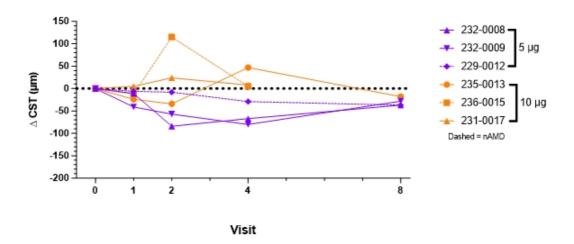
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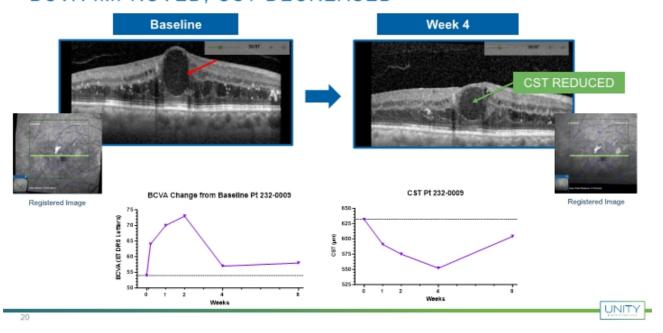
BY 4 WEEKS, MAJORITY OF PATIENTS SHOW DECREASE IN CST AMONGST HIGH DOSE COHORTS AFTER SINGLE DOSE UBX1325



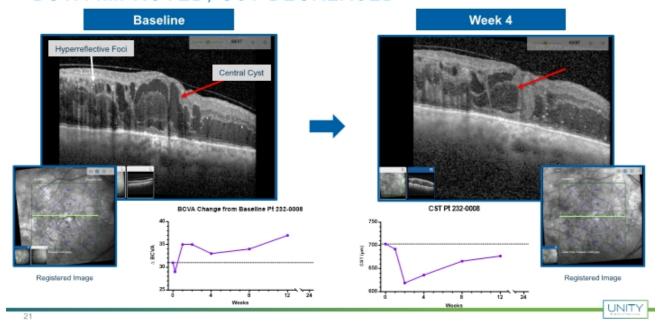
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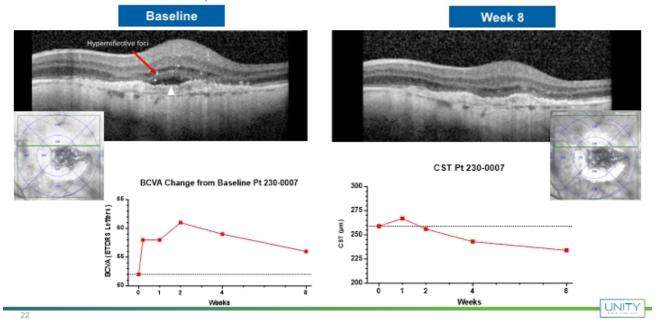
DME PATIENT 232-0009, 5 μg BCVA IMPROVED, CST DECREASED



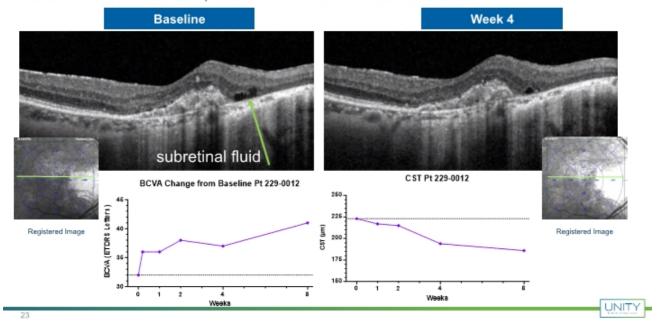
DME PATIENT 232-0008, 5 µg BCVA IMPROVED, CST DECREASED



nAMD PATIENT 230-0007: 1 μg BCVA IMPROVED, CST AND SRF REDUCED



nAMD PATIENT 229-0012: 5 μg BCVA IMPROVED, CST AND SRF REDUCED



EXECUTIVE SUMMARY: UBX1325 PHASE 1 SAD STUDY

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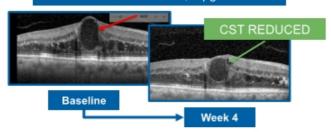
Reduction in Subretinal / Intraretinal Fluid in nAMD Patients

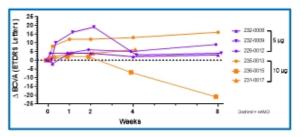
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UBX1325 PROVIDES AN OPPORTUNITY FOR A TRANSFORMATIVE, DISEASE-MODIFYING THERAPY FOR DME AND nAMD PATIENTS

PATIENT 232-0009 DME, 5 µg UBX1325





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Jeffrey Heier, M.D.

Director of the Vitreoretinal Service and Retina Research, Ophthalmic Consultants of Boston

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