

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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) August 14, 2023

YIELD10 BIOSCIENCE, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

001-33133

(Commission File Number)

04-3158289

(IRS Employer Identification No.)

19 Presidential Way, Woburn, Massachusetts

(Address of Principal Executive Offices)

01801

(Zip Code)

(617) 583-1700

(Registrant's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

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 Instruction 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

Common Stock

Trading Symbol(s)

YTEN

Name of each exchange on which registered

The Nasdaq Capital 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.

Item 2.02 Results of Operations and Financial Condition.

On August 14, 2023, Yield10 Bioscience, Inc. issued a press release announcing the financial results for the three and six months ended June 30, 2023. A copy of the press release is attached hereto as Exhibit 99.1. This information, including Exhibit 99.1, shall not be deemed “filed” for purposes of Section 18 of the Exchange Act, or incorporated by reference in any filing under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1 104	Press Release dated August 14, 2023 announcing financial results for the three and six months ending June 30, 2023 Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

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

YIELD10 BIOSCIENCE, INC.

August 14, 2023

By: /s/ Oliver P. Peoples
Oliver P. Peoples
President & Chief Executive Officer



Yield10 Bioscience Announces Second Quarter 2023 Financial Results

- Harvesting underway for contracted winter and spring Camelina acres for the biofuels market*
- Reported positive results in first field tests of stacked herbicide tolerant Camelina*
- Filed a request for regulatory status review with USDA-APHIS for omega-3 (EPA) Camelina*
- Strengthened balance sheet with recent financing*
- Management will host a conference call today at 4:30 pm (ET)*

WOBURN, Mass. - August 14, 2023 - Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today reported financial results for the three and six months ended June 30, 2023.

"The first half of 2023 was productive for Yield10 as we demonstrated significant progress toward building our value chain for broadly commercializing Camelina as a platform crop to produce low-carbon intensity feedstock oil for the biofuel market," said Oliver Peoples, Ph.D., President and Chief Executive Officer of Yield10. "We continue to engage with potential supply chain and customer prospects in the biofuel space, including ongoing discussions with Marathon Petroleum and Mitsubishi with the goal of finalizing Camelina oil offtake and investment agreements.

"We have supported our Camelina growers throughout the season and anticipate harvesting all contracted acres across the U.S. and Canada over the coming weeks. I am pleased to report that we are seeing a building momentum in new interest, as well as repeat interest, among growers for participation in our upcoming 2023/2024 winter Camelina grower contracting program.

"Our research team recently reported positive results in the first field test of stacked herbicide tolerance ("HT") traits in spring Camelina, setting the stage for broad adoption of the crop for production of biofuels. In the second quarter, we filed a request for regulatory status review ("RSR") under USDA-APHIS's SECURE rule covering stacked herbicide tolerance traits in Camelina. With the achievement of these key milestones, we remain firmly on-track to develop and commercialize stacked HT spring and winter Camelina varieties. We anticipate the launch of our first commercial HT spring Camelina variety in 2025 with stacked HT Camelina varieties following soon after.

"In the second quarter, we filed an RSR covering Camelina designed to produce the eicosapentaenoic acid ("EPA") component of omega-3 oil. This spring, we planted omega-3 (EPA) Camelina at acre-scale in the U.S. to enable us to ramp-up our seed inventory for future planting as well as produce oil samples to support business development activities. Producing omega-3 oils sustainably in Camelina could address a significant market opportunity in animal feed and human nutrition.

"In the second half of 2023, our focus will remain on securing offtake agreements for the biofuel market, engaging growers to sign winter grower contracts, advancing our HT and omega-3 Camelina varieties toward launch, innovating to introduce high-value traits into Camelina, and building shareholder value," concluded Dr. Peoples.

Recent Accomplishments

- **Executing on commercial Camelina grower contracts for production of grain for the biofuel market.**
 - *2022/2023 winter:* The harvest of winter Camelina under grower contracts is well underway. The first delivery of Camelina grain to a biofuel customer has been completed. This milestone is expected to produce Yield10's first grain product revenue and demonstrates the steps in our biofuel value chain spanning seed multiplication and planting, grain harvest and ultimately delivery of grain to a biofuel crusher/refiner customer.
 - *2023 spring:* The harvest of spring Camelina under grower contracts is expected to take place through the end of August. Yield10 anticipates selling some of the grain for biofuel feedstock oil and using some for the production for customer samples.
 - *2023/2024 winter:* Yield10 is engaging with growers in the U.S. and Canada who are interested in planting winter Camelina for the 2023/2024 season. The Company anticipates that contracts will be signed with growers and that winter seed will be planted by the end of the third quarter of 2023.
- **Building the value chain for Camelina offtake in biofuels:** Yield10 continues discussions with Marathon Petroleum Corporation and Mitsubishi Corporation for potential investment and offtake agreements for low-carbon intensity Camelina feedstock oil for use in renewable fuel production.
- **Obtained positive field test results for stacked HT Camelina to enable planting on large acreage:** In the second quarter of 2023, Yield10 researchers initiated the first field tests of candidate E3902 spring Camelina lines deployed with stacked HT traits. These traits are intended to provide the plants with tolerance to the application of an over-the-top broadleaf herbicide for weed control as well as tolerance to soil residues of Group 2 herbicides,

specifically including tolerance to both imidazolinones (“IMI”) and sulfonylureas (“SU”). Group 2 herbicides are commonly used to manage weeds in cereal and other crop rotations and can persist in the soil for months following use. The initial field test results show promising tolerance to both target herbicide chemistries. Yield10 intends to harvest the plants and collect seed yield and oil yield data in the weeks ahead with the goal of selecting lead and back-up stacked HT spring E3902 Camelina lines for commercial development and seed scale-up. Field tests for the first winter stacked HT Camelina lines are planned in the upcoming winter season.

- **Yield10 achieved a key regulatory milestone in the omega-3 program:** In July, the Company announced the filing of a request for a Regulatory Status Review (RSR) with USDA-APHIS Biotechnology Regulatory Services (BRS) under the SECURE Rule for proprietary elite Camelina varieties containing genes enabling the plant to produce the EPA component of omega-3 oil. In addition, in the second quarter, Yield10 planted omega-3 (EPA) Camelina at acre-scale in the U.S. to begin the ramp up of seed inventory for future planting as well as to produce oil for use in business development activities.
- **Strengthened the balance sheet with recent capital raise:** On August 11, 2023, the Company priced a \$3.7 million public offering of units consisting of one share of common stock and one warrant to purchase one share of common stock.

SECOND QUARTER 2023 FINANCIAL OVERVIEW

Cash Position

Yield10 Bioscience is managed with an emphasis on cash flow and deploys its financial resources in a disciplined manner to achieve its key strategic objectives.

Yield10 ended the second quarter of 2023 with \$2.3 million in unrestricted cash and cash equivalents; a net increase of \$0.5 million from unrestricted cash and cash equivalents of \$1.8 million reported as of March 31, 2023. The increase in the Company's cash balance as of the end of the second quarter was the result of completing a registered direct offering of common stock and warrants that resulted in net proceeds of \$2.7 million after issuance costs. Also during the quarter ended June 30, 2023, the Company sold and issued a senior unsecured convertible note in the original principal amount of \$1.0 million to a subsidiary of MPC.

Net cash used by operating activities during the second quarter of 2023 was \$3.1 million compared to \$2.5 million used in the second quarter of 2022. The Company continues to estimate total net cash usage for the full year ended December 31, 2022 in a range of \$12.5 - \$13.0 million as it better

aligns resources to further develop and commercialize its Camelina plant varieties for the biofuel, omega-3 food and feed, and PHA bioplastic markets. Cash usage for operating activities will support seed scale-up and other pre-commercial Camelina production activities, employee compensation and benefits, and further expansion of the Company's crop trial programs.

Yield10's present capital resources, including net funds to be received from its public offering that is expected to close on Tuesday, August 15, are expected to fund the Company's planned operations into the fourth quarter of 2023. The Company's ability to continue operations after its current cash resources are exhausted is dependent upon its ability to obtain additional financing, including public or private equity financing, secured or unsecured debt financing, receipt of additional government research grants, as well as licensing or other collaborative arrangements.

Operating Results

Yield10 did not record grant revenue during the three months ended June 30, 2023. As of March 31, 2023, the Company's work in support of its DOE sub-award with Michigan State University ("MSU") was completed with no further revenue to be recognized from the grant. Grant revenue for the second quarter of 2022 was \$0.1 million. Research and development expenses remained consistent at \$2.0 million during the three months ended June 30, 2023 and three months ended June 30, 2022. However, the Company's crop trial expenses increased by \$0.3 million during the second quarter, primarily as a result of fieldwork conducted to develop herbicide tolerant Camelina plant varieties. This increase in crop trial expense was offset by a reduction in Camelina seed production costs of \$0.3 million during the period. General and administrative expenses were \$1.7 million and \$1.5 million for the quarters ended June 30, 2023 and June 30, 2022, respectively. The increase \$0.2 million was the result of increases in professional legal and accounting fees and an increase in travel expense related to business development and Camelina commercialization activities.

Yield10 reported a net loss of \$3.7 million for the quarter ended June 30, 2023, or \$0.64 per share, as compared to a net loss of \$3.4 million, or \$0.70 per share, for the quarter ended June 30, 2022.

For the six months ended June 30, 2023, the Company reported a net loss of \$7.5 million, or \$1.39 per share, compared to a net loss of \$6.8 million, or \$1.38 per share, during the six months ended June 30, 2022. Year to date grant revenue earned on the completed DOE sub-award with MSU totaled \$0.1 million during the six months ended June 30, 2023 and \$0.3 million during the six months ended June 30, 2022. Research and development expenses were \$4.2 million and \$3.8 million during the six months ended June 30, 2023 and June 30, 2022, respectively. General and administrative expenses were \$3.4 million and \$3.2 million during the six months ended June 30, 2023 and June 30, 2022, respectively.

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss the second quarter 2023 results. The Company also will provide a corporate update and answer questions from the investor community. A live webcast of the call with slides can be accessed through the Company's website at www.yield10bio.com in the investor relations events section. To participate in the call, dial toll-free 877-709-8150 or 201-689-8354 (international).

To listen to a telephonic replay of the conference call, dial toll-free 877-660-6853 or 201-612-7415 (international) and enter pass code 13739001. The replay will be available until August 28, 2023. In addition, the webcast will be archived on the Company's website in the investor relations events section.

About Yield10 Bioscience

Yield10 Bioscience, Inc. is an agricultural bioscience company that is using its differentiated trait gene discovery platform, the "Trait Factory", to develop improved Camelina varieties for the production of proprietary seed products, and to discover high value genetic traits for the agriculture and food industries. Our goals are to efficiently establish a high value seed products business based on developing superior varieties of Camelina for the production of feedstock oils for renewable diesel, PHA bioplastics and omega-3 (EPA, DHA+EPA) oils, and to license our yield traits to major seed companies for commercialization in major row crops, including corn, soybean and canola. Yield10 is headquartered in Woburn, MA and has a Canadian subsidiary, Yield10 Oilseeds Inc., located in Saskatoon, Canada.

For more information about the company, please visit www.yield10bio.com, or follow the Company on [Twitter](#), [Facebook](#) and [LinkedIn](#). (YTEN-E)

Safe Harbor for Forward-Looking Statements

This press release contains forward-looking statements which are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The forward-looking statements in this release do not constitute guarantees of future performance. Investors are cautioned that statements in this press release which are not strictly historical statements, including, without limitation, expectations regarding Yield10's cash position, cash forecasts and runway, expectations related to research and development and commercialization activities, intellectual property, the expected regulatory path for traits, reproducibility of data from field tests, the timing of completion of additional greenhouse and field test studies, the outcomes of its seed production activities, 2023 spring field tests, 2022-2023 winter field tests, Camelina planting under growers contracts and seed scale-up activities, the signing of research licenses and collaborations, including whether the objectives of those collaborations will be met, whether the Company will be able to generate proof points for traits in development and advance business discussions around its Camelina business plan, the geopolitical uncertainty caused by the conflict between Ukraine and Russia, and value creation as well as the overall progress of Yield10, constitute forward-looking statements. Such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated, including the risks and uncertainties detailed in Yield10's filings with the Securities and Exchange Commission. Yield10 assumes no obligation to update any forward-looking information contained in this press release or with respect to the announcements described herein.

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(FINANCIAL TABLES FOLLOW)

YIELD10 BIOSCIENCE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
UNAUDITED
(In thousands, except share and per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Revenue:				
Grant revenue	\$ —	\$ 103	\$ 60	\$ 252
Total revenue	—	103	60	252
Expenses:				
Research and development	1,997	2,016	4,159	3,779
General and administrative	1,670	1,523	3,368	3,230
Total expenses	3,667	3,539	7,527	7,009
Loss from operations	(3,667)	(3,436)	(7,467)	(6,757)
Other income (expense):				
Other income (expense), net	(14)	2	4	1
Total other income (expense)	(14)	2	4	1
Loss from operations before income taxes	(3,681)	(3,434)	(7,463)	(6,756)
Income tax provision	—	(9)	—	(18)
Net loss	\$ (3,681)	\$ (3,443)	\$ (7,463)	\$ (6,774)
Basic and diluted net loss per share	\$ (0.64)	\$ (0.70)	\$ (1.39)	\$ (1.38)
Number of shares used in per share calculations:				
Basic and diluted	5,729,012	4,900,298	5,366,324	4,894,638

YIELD10 BIOSCIENCE, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
UNAUDITED
(In thousands, except share and per share amounts)

	June 30, 2023	December 31, 2022
Assets		
Current Assets:		
Cash and cash equivalents	\$ 2,336	\$ 2,356
Short-term investments	—	1,991
Unbilled receivables	—	30
Prepaid expenses and other current assets	689	641
Total current assets	3,025	5,018
Restricted cash	264	264
Property and equipment, net	663	775
Right-of-use assets	1,851	1,961
Other assets	67	67
Total assets	\$ 5,870	\$ 8,085
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 467	\$ 109
Accrued expenses	1,375	926
Current portion of lease liabilities	628	575
Total current liabilities	2,470	1,610
Lease liabilities, net of current portion	1,842	2,075
Convertible note payable, net of issuance costs	971	—
Total liabilities	5,283	3,685
Commitments and contingencies		
Stockholders' Equity:		
Preferred stock (\$0.01 par value per share); 5,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock (\$0.01 par value per share); 60,000,000 shares authorized at June 30, 2023 and December 31, 2022; 6,100,263 and 4,944,202 shares issued and outstanding at June 30, 2023 and December 31, 2022, respectively	61	49
Additional paid-in capital	407,930	404,277
Accumulated other comprehensive loss	(244)	(229)
Accumulated deficit	(407,160)	(399,697)
Total stockholders' equity	587	4,400
Total liabilities and stockholders' equity	\$ 5,870	\$ 8,085

YIELD10 BIOSCIENCE, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
UNAUDITED
(In thousands)

	Six Months Ended June 30,	
	2023	2022
Cash flows from operating activities		
Net loss	\$ (7,463)	\$ (6,774)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	145	128
Charge for 401(k) company common stock match	63	76
Stock-based compensation	830	1,011
Non-cash lease expense	110	192
Deferred income tax provision	—	19
Changes in operating assets and liabilities:		
Accounts receivable	—	129
Unbilled receivables	30	6
Prepaid expenses and other assets	(48)	(37)
Accounts payable	331	(59)
Accrued expenses	436	(80)
Lease liabilities	(180)	(251)
Net cash used in operating activities	(5,746)	(5,640)
Cash flows from investing activities		
Purchase of property and equipment	(27)	(133)
Purchase of investments	—	(710)
Proceeds from the maturity of short-term investments	1,991	4,371
Net cash provided by investing activities	1,964	3,528
Cash flows from financing activities		
Proceeds from issuance of common stock and warrants in equity offering, net of issuance costs	2,717	—
Proceeds from At-the-Market offering, net of issuance costs	103	—
Proceeds for convertible debt note	1,000	—
Taxes paid on employees' behalf related to vesting of stock awards	(41)	(14)
Net cash provided by (used by) financing activities	3,779	(14)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(17)	(23)
Net decrease in cash, cash equivalents and restricted cash	(20)	(2,149)
Cash, cash equivalents and restricted cash at beginning of period	2,620	5,593
Cash, cash equivalents and restricted cash at end of period	\$ 2,600	\$ 3,444
Supplemental disclosure of non-cash information:		
Right-of-use assets acquired in exchange for lease liabilities	\$ 100	\$ —