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) May 10, 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, Massa	chusetts	01801
(Address of Principal Executive Of	fices)	(Zip Code)
Registrant	a's Telephone Number, Including A	area Code: (617) 583-1700
	N/A	
(Forme	r Name or Former Address, if Cha	nged Since Last Report)
Check the appropriate box below if the Form 8-K fil following provisions (<i>see</i> General Instruction A.2. b	-	satisfy the filing obligation of the registrant under any of the
☐ Written communications pursuant to Rule 425 to	under the Securities Act (17 CFR 2	30.425)
$\ \square$ Soliciting material pursuant to Rule 14a-12 und	er the Exchange Act (17 CFR 240	.14a-12)
☐ Pre-commencement communications pursuant t	o Rule 14d-2(b) under the Exchan	ge Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant t	o Rule 13e-4(c) under the Exchan	ge Act (17 CFR 240.13e-4(c))
Securities registered pursuant to Section 12(b) of the	e Act:	
Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	YTEN	The Nasdaq Capital Market
Indicate by check mark whether the registrant is an echapter) or Rule 12b-2 of the Securities Exchange A		ned in Rule 405 of the Securities Act of 1933 (§230.405 of this pter).
Emerging growth company $\ \square$		
If an emerging growth company, indicate by check n or revised financial accounting standards provided p	_	ot to use the extended transition period for complying with any new change Act. \square

Item 2.02 Results of Operations and Financial Condition.

On May 10, 2023, Yield10 Bioscience, Inc. issued a press release announcing the financial results for the three months ended March 31, 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
<u>99.1</u>	Press Release dated May 10, 2023 announcing financial results for the three months ended March 31, 2023
104	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.

May 10, 2023 By: /s/ Oliver P. Peoples

Oliver P. Peoples

President & Chief Executive Officer



Yield10 Bioscience Announces First Quarter 2023 Financial Results

-Executing commercial strategy for elite Camelina in the biofuels market

-Met target for 2023 contracted spring Camelina acres

-Permitting complete, planting underway for spring seed scale-up and field testing program

-Management will host a conference call today at 4:30 pm (ET) to review financial results and provide a corporate update

WOBURN, Mass. - May 10, 2023 - Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today reported financial results for the first quarter ended March 31, 2023.

"We remain focused on executing our commercial strategy with an emphasis on positioning elite Camelina as a source of low-carbon intensity feedstock oil for the biofuels market," said Oliver Peoples, Ph.D., President and Chief Executive Officer of Yield10 Bioscience. "I am pleased to report that we have met our target for 2023 contracted spring Camelina acres with growers in the U.S. and Canada. Our contracted 2022/2023 winter Camelina crop showed excellent cold tolerance over the season and is resuming its growth cycle driven by the arrival of warm weather. We expect harvest of both crops during the third quarter of 2023, and are committed to matching our grower contracts with Camelina grain offtake contracts. We anticipate the first grain revenue from our Camelina products business in the fourth quarter of 2023.

"There is considerable interest in Camelina as a feedstock oil for biofuels and we continue to engage with interested parties. Our plan is to build a network of alliances across the value chain to enable the production of Camelina feedstock oil for the biofuel market. We recently signed a non-binding Letter of Intent ("LOI") with Marathon Petroleum ("MPC") for an investment and offtake agreement and discussions around terms for definitive agreements are in progress. Earlier this year we signed Memorandum of Understanding agreements ("MOUs") with Mitsubishi and American Airlines driven by their respective interest in Camelina feedstock oil for use in sustainable aviation fuel. In addition, earlier this year we signed an agreement with a third party crusher/refiner as a regional customer for Camelina grain offtake.

"We are rapidly advancing the next generation of elite Camelina varieties engineered for herbicide tolerance to provide farmers with weed control while seamlessly integrating with their crop rotations. Our efforts also extend to seed scale-up activities for spring E3902-HT Camelina. Currently, we are conducting field tests at 13 sites for several traits including broad leaf herbicide tolerance, stacked herbicide tolerance (broad leaf and soil residual), as well as performance traits for seed yield and oil content. We will conduct our first field testing and seed scale-up of EPA omega-3 Camelina to enable larger-scale planting.

"We are making demonstrable progress on the commercial front engaging with growers and biofuel industry players. We are also rapidly advancing the development of elite herbicide tolerant Camelina varieties that will enable new revenue-generating options for farmers. We look forward to continuing to build value and report on our progress across our Camelina products business in 2023," concluded Dr. Peoples.

Recent Accomplishments

Recent progress by Yield10 is underscored by several key milestones achieved since the start of 2023.

- Signing grower contracts for Camelina: Yield10 has met its internal target for contracted spring Camelina acres based on good interest from growers in a variety of locations in the U.S. and Canada. These farmers will be growing Camelina on a scale of 45 to 200+ acres. Recent visits to farms participating in our winter 2022/2023 grower contracts indicate that the crop demonstrated impressive cold tolerance during the winter season, even in areas with little to no persistent snow cover. Harvest of Camelina grain under these contracts is expected in the third quarter of 2023. Yield10 continues to build awareness for the benefits of growing Camelina and to identify growers for the 2023/2024 winter Camelina contracts.
- Building the supply chain for biofuels: Yield10 continues to conduct discussions with industry players across the
 biofuel supply chain. In May, Yield10 announced signing a non-binding LOI with MPC for a potential investment and
 offtake agreement for low-carbon intensity Camelina feedstock oil for use in renewable fuel production. In connection
 with the execution of the LOI, Yield10 issued to MPC Investment, LLC, an affiliate of MPC, a senior unsecured
 promissory note in the original principal amount of \$1.0 million.
- Controlling weeds is critical to large-scale production of Camelina: Yield10 researchers are executing a program to deploy herbicide tolerance ("HT") technology in Camelina to enable robust broad-leaf weed control and to tolerate the effects of other herbicide residues

sometimes present in soil. In the first quarter of 2023, filings were made with U.S. regulatory authorities for herbicide tolerant Camelina. Yield10 filed Request for Status Review packages under the SECURE Rule with USDA-APHIS for stacked herbicide tolerance traits in Camelina. Yield10 also supported the filing of a label amendment with the U.S. Environmental Protection Agency ("EPA") to expand the label of a broad leaf herbicide to include usage in Camelina.

Producing omega-3 oil in Camelina represents a significant market opportunity: Camelina is an excellent platform
for producing omega-3 oils as a sustainable alternative to the stagnating harvest of ocean fish. Yield10 is advancing
development of Camelina lines to produce the EPA component of omega-3, conducting field trials and seed scale-up
activities, and expects to engage in commercial discussions with potential customers for this high-value specialty oil in
2023.

FIRST QUARTER 2023 FINANCIAL OVERVIEW

Cash Position

Yield10 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 first quarter of 2023 with \$1.8 million in unrestricted cash and cash equivalents; a net decrease of \$2.5 million from unrestricted cash, cash equivalents and investments of \$4.3 million reported as of December 31, 2022. The Company used \$2.7 million in cash for its operating activities during the three months ended March 31, 2023, in comparison to \$3.1 million used for operating activities during the first three months of 2022, the decrease reflecting efforts by the Company to carefully manage its cash resources. The Company reduced its total net cash usage guidance for the year ended December 31, 2023 to a range of \$12.5 - \$13.0 million, as it better aligns resources to its efforts 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.

In connection with the MPC LOI, the Company sold and issued to an affiliate of MPC a senior unsecured convertible note in the principal amount of \$1.0 million, the funds of which have been received. Also during early May, the Company closed on a \$3.0 million offering of its common stock (or prefunded warrants in lieu thereof), in a registered direct offering and concurrent private placement, receiving \$2.7 million in cash proceeds after issuance costs.

Operating Results

Research grant revenue was consistent at \$0.1 million for the three months ended March 31, 2023 and March 31, 2022. As of March 31, 2023, the Company's five-year sub-award with Michigan State University in support of a U.S. Department of Energy funded grant was completed with no further grant revenue to be recognized. Research and development expenses were \$2.2 million during the first three months of 2023 compared to \$1.8 million during the first three months of 2022. General and administrative expenses remained at \$1.7 million during both the three months ended March 31, 2023 and March 31, 2022.

Yield10 reported a net loss after taxes of \$3.8 million for the quarter ended March 31, 2023, or \$0.76 per share, as compared to a net loss after taxes of \$3.3 million, or \$0.68 per share, for the quarter ended March 31, 2022.

Conference Call Information

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss the first 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 800-709-8150 or 201-689-8354 (international). Reference Event ID:13737614. 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 <u>www.yield10bio.com</u>, or follow the Company on <u>Twitter</u>, <u>Facebook</u> and <u>LinkedIn</u>. (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 2022-2023 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.

Contacts:

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FischTank Marketing and PR

(FINANCIAL TABLES FOLLOW)

YIELD10 BIOSCIENCE, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS UNAUDITED

		Three Months Ended March 31,	
	2023	2022	
Revenue:			
Grant revenue	\$ 60	\$ 149	
Total revenue	60	149	
Expenses:			
Research and development	2,162	1,763	
General and administrative	1,698	1,707	
Total expenses	3,860	3,470	
Loss from operations	(3,800)	(3,321)	
Other income (expense):			
Other income (expense), net	18	(1)	
Total other income (expense)	18	(1)	
Loss from operations before income taxes	(3,782)		
Income tax provision	-	(9)	
Net loss	\$ (3,782)	\$ (3,331)	
Basic and diluted net loss per share	\$ (0.76)	\$ (0.68)	
Number of shares used in per share calculations:			
Basic and diluted	4,999,606	4,888,915	

YIELD10 BIOSCIENCE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS UNAUDITED

(In thousands, except share and per share amounts)

	March 31, 2023		December 31, 2022	
Assets				
Current Assets:				
Cash and cash equivalents	\$	1,809	\$ 2,356	
Short-term investments		_	1,991	
Unbilled receivables		_	30	
Prepaid expenses and other current assets		634	641	
Total current assets		2,443	5,018	
Restricted cash		264	264	
Property and equipment, net		715	775	
Right-of-use assets		1,857	1,961	
Other assets		55	67	
Total assets	\$	5,334	\$ 8,085	
	•			
Liabilities and Stockholders' Equity				
Current Liabilities:				
Accounts payable	\$	495	\$ 109	
Accrued expenses		1,184	926	
Current portion of lease liabilities		591	575	
Total current liabilities		2,270	1,610	
Lease liabilities, net of current portion		1,921	2,075	
Total liabilities		4,191	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 March 31, 2023 and December 31, 2022; 5,078,557 and 4,944,202 shares issued and outstanding at March 31, 2023 and December 31, 2022, respectively		51	49	
Additional paid-in capital		404,803	404,277	
Accumulated other comprehensive loss		(232)	(229)	
Accumulated deficit		(403,479)	(399,697)	
Total stockholders' equity		1,143	 4,400	
Total liabilities and stockholders' equity	\$	5,334	\$ 8,085	

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

Three	Months Ended
	March 31,

	March 31,		
	 2023		2022
Cash flows from operating activities			
Net loss	\$ (3,782)	\$	(3,331)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	69		59
Charge for 401(k) company common stock match	29		45
Stock-based compensation	436		523
Non-cash lease expense	104		95
Deferred income tax provision	_		6
Changes in operating assets and liabilities:			
Accounts receivable	_		40
Unbilled receivables	30		(24)
Prepaid expenses and other assets	37		(2)
Accounts payable	307		(59)
Accrued expenses	241		(330)
Lease liabilities	 (138)		(124)
Net cash used by operating activities	(2,667)		(3,102)
Cash flows from investing activities			
Purchase of property and equipment	(9)		(114)
Proceeds from the maturity of short-term investments	 1,991		26
Net cash provided (used by) investing activities	1,982		(88)
Cash flows from financing activities			
Proceeds from At-the-Market offering, net of issuance costs	182		_
Taxes paid on employees' behalf related to vesting of stock awards	(41)		(14)
Net cash provided (used by) financing activities	141		(14)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	 (3)		3
Net decrease in cash, cash equivalents and restricted cash	(547)		(3,201)
Cash, cash equivalents and restricted cash at beginning of period	2,620		5,593
Cash, cash equivalents and restricted cash at end of period	\$ 2,073	\$	2,392
Supplemental disclosure of non-cash information:			
Offering costs remaining in accounts payable	\$ 79	\$	_