

**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) April 1, 2024

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 April 1, 2024, Yield10 Bioscience, Inc. issued a press release announcing the financial results for the quarter and fiscal year ended December 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
99.1 104	Press Release dated April 1, 2024 announcing financial results for the year ending December 31, 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.

April 1, 2024

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



Yield10 Bioscience Announces Fourth Quarter and Full Year 2023 Financial Results

- Granted global commercial license to Vision Bioenergy for Camelina addressing the biofuel market*
- Advanced regulatory and seed scale-up program for omega-3 Camelina*
- E3902 oil trait in Camelina cleared by regulatory authority for planting in Canada*
- Management will host a conference call today at 4:30 p.m. (ET) to review financial results and provide a corporate update*

WOBURN, Mass. - April 1, 2024 - Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today reported financial results for the fourth quarter and full year ended December 31, 2023.

"In 2023 we successfully executed our plan and achieved several key milestones that position Yield10 to build a sustainable products business based on engineered Camelina," said Oliver Peoples, Ph.D., President and Chief Executive Officer of Yield10. "Our crop innovations are intended to support grower adoption of the crop and enable commercial-scale planting to produce Camelina oil and meal products targeting significant market opportunities.

"We believe Camelina represents a game changer for producing omega-3 oil and meal products. In early 2024, we made the strategic decision to focus our resources on the commercialization of Camelina products targeting the aquafeed and nutritional markets for omega-3 fatty acids. In the year ahead, we plan to focus on executing our development program for omega-3 Camelina, building seed inventory in anticipation of commercial scale planting, obtaining regulatory approval to sell omega-3 oil for aquafeed in Chile, and engaging with potential commercial partners to enable future commercial sale of omega-3 oil and meal in target markets. If all goes according to plan, we estimate that our omega-3 products could begin producing revenue as early as 2025.

"We also recently achieved significant regulatory milestones supporting our commercial plans. USDA-APHIS completed review of our herbicide tolerance ("HT") and omega-3 traits enabling us to plan for the commercial ramp-up of engineered Camelina varieties containing these traits in the U.S. We believe herbicide tolerance will be a significant factor in driving the adoption of Camelina. Our

team is creating a portfolio of Camelina varieties incorporating these traits and others to improve the performance and value of the crop.

"In early 2024, Yield10 granted to Vision Bioenergy Oilseeds ("VISION") a global license to certain proprietary varieties of Camelina for the production of feedstock oil for biofuels. This agreement is intended to empower farmers to capitalize on the growing biofuel market while advancing the decarbonization goals of aviation, maritime, and heavy-duty transport industries. Yield10 plans to work with biofuel players to support the production of Camelina feedstock oil.

"In 2023 we demonstrated closed-loop production of Camelina as we supplied our seed to growers under contract and arranged the offtake and sale of the grain to a biofuel refiner. We intend to continue to build relationships across the value chain to support increasing scale of Camelina production and sale of oil and meal into target markets.

"In the coming months, we expect to execute on our commercial and regulatory plan to produce omega-3 oil and meal products in Camelina, to combine our HT and omega-3 traits to produce new Camelina varieties, and to continue to support grower adoption of Camelina," said Dr. Peoples.

Recent Accomplishments

Recent progress by Yield10 is underscored by the key milestones achieved during 2023 and is setting the direction for the Company's business strategy in 2024, including:

- Yield10 planted omega-3 (EPA) Camelina at the 50 acre-scale in Chile to produce oil for use in business development activities. The crop was harvested in early 2024.
- In March of 2024, USDA-APHIS provided a positive response to the Company's announced filings for two requests for a Regulatory Status Review (RSR) with USDA-APHIS's Biotechnology Regulatory Services (BRS) under the SECURE Rule for proprietary elite Camelina varieties containing genes enabling the plant to produce the EPA and EPA+DHA components of omega-3 oil. Yield10 plans to conduct seed scale-up activities with omega-3 Camelina in 2024. Omega-3 fatty acids are used in aquafeed as well as for nutraceutical and pharmaceutical products.
- In November of 2023, USDA-APHIS determined that Yield10's [glufosinate tolerant Camelina](#) as well as its [stacked herbicide tolerant Camelina](#) may be planted and bred in the United States in response to two Requests for Regulatory Status Review ("RSRs") packages

submitted by Yield10. An application to add Camelina to a glufosinate label is pending with the U.S. Environmental Protection Agency.

- In early 2024, Yield10 granted to Vision Bioenergy Oilseeds a global license to certain proprietary varieties of Camelina for the production of feedstock oil for biofuels. Commercial production of Camelina is currently ramping up in North America as a source of ultra-low carbon feedstock oil for the biofuel industry. In consideration for the license and completion of certain deliverables, Vision will make cash payments to Yield10 totaling \$3 million.
- We recently reported encouraging results from the first field testing of our winter HT and Stacked HT Camelina varieties. We expect to harvest the winter field test plantings later this year and conduct an evaluation of seed yield, oil content, herbicide tolerance and overall agronomy.
- In early 2024, the Plant Biosafety Office (“PBO”) of the Canadian Food Inspection Agency (“CFIA”) reviewed information on the Company’s E3902 *Camelina sativa* (“Camelina”) and determined that E3902 is not a Plant with Novel Trait (PNT) and is not subject to a pre-market notification under [Part V](#) of the Seeds Regulations. Yield10’s E3902 Camelina combines genome edits in three proprietary genetic traits, C3008a, C3008b and C3009, that result in an increase in oil production by five percent.
- In 2023, Yield10 successfully demonstrated the supply chain from seed to growers contracts to oil and meal offtake to customers. In the fall of 2023, Yield10 signed growers contracts representing approximately 1,200 acres of winter Camelina production which is expected to be harvested in the third quarter of 2024.

FULL YEAR AND FOURTH 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 used \$10.1 million in cash for its operating activities during the year ended December 31, 2023 in comparison to \$11.4 million used for operating activities during the year ended December 31, 2022. The Company ended 2023 with \$1.1 million in unrestricted cash and investments in comparison to a balance of \$4.3 in unrestricted cash, cash equivalents and short-term investments as of December 31, 2022. The decrease in cash usage for operating activities during the year ended December 31, 2023, in comparison to the previous year, was the result of our

decision to delay payments to vendors and conserve cash as we continued our Camelina biofuels and omega-3 business development activities. In February of 2024, we granted a commercial license to VISION Bioenergy Oilseeds, LLC, for certain proprietary varieties of Camelina for the production of feedstock oil for biofuels. Cash proceeds from the arrangement total \$3.0 million. In March of 2024, we raised \$1.2 million, net in a warrant inducement transaction.

Operating Results

Research grant revenue for the year ended December 31, 2023 was \$0.1 million in comparison to grant revenue of \$0.5 million recorded in the previous year. Early in 2023, our work in support of a five-year DOE sub-award through Michigan State University was completed with no further grant revenue to be recognized. Research and development expense was \$8.3 million during the year ended December 31, 2023, an increase of \$0.5 million, in comparison to \$7.8 million recorded during the year ended December 31, 2022. The year-over-year increase was primarily due to the increased cost of crop trials and commercial seed production, partially offset by lower employee compensation and benefits expenses as we implemented cost cutting measures during the year. General and administrative expenses were consistent at \$6.2 million during the years ended December 31, 2023 and December 31, 2022.

Yield10 reported a net loss of \$14.5 million, or \$1.82 per share for the full year 2023, as compared to a net loss of \$13.6 million, or \$2.76 per share in 2022.

During the fourth quarter of 2023, research and development expense increased by \$0.1 million from \$1.9 million in the fourth quarter of 2022 to \$2.0 million. General and administrative expenses decreased by \$0.1 million to \$1.3 million during the fourth quarter of 2023, from \$1.4 million during the fourth quarter of 2022. Yield10 reported a loss after taxes of \$3.3 million for the fourth quarter of 2023, or \$0.27 per share, compared to a similar loss after taxes of \$3.3 million, or \$0.67 per share, in the fourth quarter of 2022.

Conference Call Information

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss the fourth quarter and full year 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). Reference Event ID:13745439. The webcast will be archived on the Company's website in the investor relations events section.

About Yield10 Bioscience

Yield10 Bioscience, Inc. ("Yield10" or the "Company") is an agricultural bioscience company that is leveraging advanced genetics to develop the oilseed *Camelina sativa* ("Camelina") as a platform crop for large-scale production of sustainable seed products. These seed products include feedstock oils for renewable diesel and sustainable aviation biofuels; omega-3 (EPA and DHA+EPA) oils for

pharmaceutical, nutraceutical and aquafeed applications; and, in the future, PHA bioplastics for use as biodegradable bioplastics. Subject to the availability of sufficient financial resources to continue operations, our commercial plan is based on establishing a grain contracting business leveraging our proprietary elite Camelina seed varieties, focusing on the growing demand for low-carbon intensity feedstock oil for biofuels and omega-3 oils for nutritional applications. 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 [X \(formerly Twitter\)](#), [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 2024 seed production activities, 2024 spring field tests, 2023-2024 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, but not limited to, the Company's ability to secure adequate funding in the near term to continue operations and to remain listed on the Nasdaq Stock Market, as to which no assurance can be given, as well as the risks and uncertainties detailed in Yield10 Bioscience'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 matters described herein.

Contacts:

Yield10 Bioscience:
Lynne H. Brum, (617) 682-4693, LBrum@yield10bio.com

(FINANCIAL TABLES FOLLOW)

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

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2023	2022	2023	2022
Revenue:				
Grant revenue	\$ —	\$ 87	\$ 60	\$ 450
Total revenue	—	87	60	450
Expenses:				
Research and development	1,960	1,888	8,323	7,750
General and administrative	1,287	1,403	6,154	6,151
Total expenses	3,247	3,291	14,477	13,901
Loss from operations	(3,247)	(3,204)	(14,417)	(13,451)
Other income (expense):				
Other income (expense), net	(19)	30	(38)	41
Total other income (expense)	(19)	30	(38)	41
Loss from operations before income taxes	(3,266)	(3,174)	(14,455)	(13,410)
Income tax provision	—	(129)	—	(156)
Net loss	\$ (3,266)	\$ (3,303)	\$ (14,455)	\$ (13,566)
Basic and diluted net loss per share	\$ (0.27)	\$ (0.67)	\$ (1.82)	\$ (2.76)
Number of shares used in per share calculations:				
Basic and diluted	11,980,392	4,943,727	7,946,281	4,914,565

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

	December 31, 2023	December 31, 2022
Assets		
Current Assets:		
Cash and cash equivalents	\$ 1,068	\$ 2,356
Short-term investments	—	1,991
Unbilled receivables	—	30
Prepaid expenses and other current assets	332	641
Total current assets	1,400	5,018
Restricted cash	264	264
Property and equipment, net	548	775
Right-of-use assets, net	1,653	1,961
Other assets	42	67
Total assets	3,907	\$ 8,085
Liabilities and Stockholders' Equity (Deficit)		
Current Liabilities:		
Accounts payable	1,202	\$ 109
Accrued expenses	2,010	926
Current portion of lease liabilities	669	575
Convertible note payable, net of issuance costs	984	—
Total current liabilities	4,865	1,610
Lease liabilities, net of current portion	1,525	2,075
Total liabilities	6,390	3,685
Commitments and contingencies		
Stockholders' Equity (Deficit):		
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 December 31, 2023 and December 31, 2022; 12,032,425 and 4,944,202 shares issued and outstanding at December 31, 2023 and December 31, 2022, respectively	120	49
Additional paid-in capital	411,814	404,277
Accumulated other comprehensive loss	(265)	(229)
Accumulated deficit	(414,152)	(399,697)
Total stockholders' equity (deficit)	(2,483)	4,400
Total liabilities and stockholders' equity (deficit)	3,907	\$ 8,085

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

	Twelve Months Ended December 31,	
	2023	2022
Cash flows from operating activities		
Net loss	\$ (14,455)	\$ (13,566)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	290	263
Charge for 401(k) company common stock match	108	133
Stock-based compensation	1,592	1,903
Non-cash lease expense	308	393
Deferred income tax provision	—	165
Changes in operating assets and liabilities:		
Accounts receivable	—	164
Unbilled receivables	30	4
Prepaid expenses and other assets	345	(160)
Accounts payable	1,093	26
Accrued expenses	1,077	(209)
Lease liabilities	(456)	(520)
Net cash used in operating activities	(10,068)	(11,404)
Cash flows from investing activities		
Purchase of property and equipment	(46)	(154)
Purchase of investments	—	(2,445)
Proceeds from the maturity of short-term investments	1,991	11,121
Net cash provided by investing activities	1,945	8,522
Cash flows from financing activities		
Proceeds from issuance of common stock and warrants in equity offerings, net of issuance costs	5,842	—
Proceeds from At-the-Market offering, net of issuance costs	103	—
Proceeds for convertible debt note	967	—
Taxes paid on employees' behalf related to vesting of stock awards	(41)	(37)
Net cash provided by (used in) financing activities	6,871	(37)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(36)	(54)
Net increase (decrease) in cash, cash equivalents and restricted cash	(1,288)	(2,973)
Cash, cash equivalents and restricted cash at beginning of period	2,620	5,593
Cash, cash equivalents and restricted cash at end of period	\$ 1,332	\$ 2,620
Supplemental Cash Flow Disclosure:		
Interest paid	\$ 68	\$ 10
Right-of-use assets acquired in exchange for lease liabilities	\$ 138	\$ —