

**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) March 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)

Registrant's Telephone Number, Including Area Code: **(617) 583-1700**

**N/A**

(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.

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**Item 2.02 Results of Operations and Financial Condition.**

On March 14, 2023, Yield10 Bioscience, Inc. issued a press release announcing the financial results for the quarter and fiscal year ended December 31, 2022. 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.

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**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

Exhibit No.	Description
<a href="#">99.1</a> 104	Press Release dated March 14, 2023 announcing financial results for the year ending December 31, 2022 Cover Page Interactive Data File (embedded within the Inline XBRL document)

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**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.

March 14, 2023

YIELD10 BIOSCIENCE, INC.

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



## **Yield10 Bioscience Announces Fourth Quarter and Full Year 2022 Financial Results**

*-Executing strategy to build supply chain alliances for the production of low-carbon intensity Camelina feedstock oil for the biofuels market*

*-Advancing development of herbicide tolerant Camelina varieties*

*-Accelerating development of omega-3 Camelina*

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

WOBURN, Mass. - March 14, 2023 - 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, 2022.

"Yield10 is building a diverse Camelina products business based on our differentiated technology capabilities in this promising crop," said Oliver Peoples, Ph.D., President and Chief Executive Officer of Yield10 Bioscience. "We made significant progress in 2022 to position Yield10 to accomplish our objectives of commercializing elite Camelina as a platform crop to produce low-carbon intensity feedstock oil for biofuels, omega-3 oil for the food and feed markets, and to produce biodegradable PHA bioplastics in the longer term.

"Our commercialization plans this year include an emphasis on the biofuels market to address the growing global demand for new sources of low-carbon intensity feedstock oil. We are developing relationships with oilseed crushers, biofuel refiners, and biofuel end-users, where our goal is to develop a network of alliances to drive the commercialization of Camelina while supporting our capital-light business model. Recent MOUs with Mitsubishi Corporation and American Airlines, as well as the signing of a regional agreement for Camelina grain offtake with a third party crusher/refiner customer, illustrate the direction we are taking to bring this alternative oil feedstock to the biofuel market.

"Even as we build seed inventory to increase seed supply for grower contracts for our current spring and winter Camelina varieties for grain production, we are rapidly advancing the next generation of

these Camelina varieties engineered for herbicide tolerance to provide farmers with effective weed control for this crop for the first time. We are on track developing spring and winter herbicide tolerant elite Camelina varieties well-suited for cover cropping and integration into the crop rotations in our launch geography. In 2023, we will continue to develop our lead herbicide tolerant Camelina varieties and begin producing seed inventory to support grower contracts and the expansion of planted acreage in future growing seasons. Feedback from growers has indicated that these new products have the potential to accelerate adoption of our Camelina varieties on their farms leading to adoption on large scale acreage.

“In 2022, we extended our collaboration with Rothamsted Research with a priority of completing the development of an elite Camelina variety that produces the EPA fatty acid component of omega-3 and will be co-deployed with our advanced technology for herbicide tolerance. In 2023 we plan to accelerate the development of advanced EPA omega-3 Camelina. We are also continuing to advance our research program aimed at optimizing PHA yield in Camelina seed to supply the growing demand for biodegradable zero waste plastic packaging.”

“We look forward to the opportunity to achieve our goals and build value in our Camelina products business in 2023,” said Dr. Peoples.

### **Recent Accomplishments**

Recent progress by Yield10 is underscored by the key milestones achieved during 2022 and is setting the direction for the Company's business strategy in 2023, including:

- **Building the supply chain for biofuels:** In 2022, Yield10 conducted extensive discussions with players across the biofuel supply chain including oil crushers, biofuel refiners, and biofuel end-users. In these discussions, Camelina is viewed as an attractive crop to produce feedstock oil for use in transportation and sustainable aviation biofuels. In 2023, Yield10 is pursuing strategic alliances that could enable larger investment into the development of new Camelina varieties, as the Company builds out the elements of a supply chain to deliver feedstock oil to customers for transportation biofuel. This approach is reflected in Yield10's recent announcements detailing its MOUs with Mitsubishi Corporation and American Airlines for potential collaborations around developing Camelina as a low-carbon feedstock oil for biofuels, including sustainable aviation fuel ("SAF"). In addition, Yield10 recently signed a regional collaboration and offtake agreement which will allow both companies to create a regional supply chain while also ramping up acres over the next few years.

- **Engaging with farmers to grow Camelina.** Yield10 began introducing its Camelina varieties to farmers in the U.S. and Canada in 2022, securing growers to plant its first winter Camelina varieties with individual farmers planting at a scale of up to 160 acres. Yield10 is also building commercial inventory of Camelina seed for planting in the U.S. and Canada and is currently working to contract additional acres with growers for planting in spring and fall 2023. This activity would provide Yield10 with a stream of grain product revenue as it is introducing new farmers to the crop and annually expanding the number of acres under contract.
- **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. Yield10 tested herbicide tolerant candidate Camelina lines in the field in two cycles in spring 2022 and winter 2022/2023 with excellent results, paving the way for the development of the commercial launch plan for these new varieties. The Company plans further field testing and seed scale-up of commercial quality HT Camelina lines in 2023, to advance development of stacked herbicide tolerant lines, and to accelerate regulatory and registration efforts.
- **Developing Camelina as a platform to produce high-value omega-3 oil:** Camelina is an excellent platform for producing omega-3 oils as a sustainable alternative to the stagnating harvest of ocean fish. In 2022, a patent application filed by Rothamsted Research was published describing significant improvements to the technology for using Camelina as a production platform to make the omega-3 fatty acid EPA for human use as a nutraceutical, pharmaceutical or food additive. Under its collaboration with Rothamsted, Yield10 is advancing development of Camelina lines to produce the EPA component of omega-3 and expects to engage in commercial discussions with potential customers for this high-value specialty oil in 2023.

## **FULL YEAR AND FOURTH QUARTER 2022 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 \$11.4 million in cash for its operating activities during the year ended December 31, 2022 in comparison to \$9.3 million used for operating activities during the year ended December 31, 2021. The Company ended 2022 with \$4.3 million in unrestricted cash and investments in comparison to a balance in unrestricted cash and cash equivalents of \$16.0 million as of December 31, 2021. The Company anticipates total net cash usage during the year ended December 31, 2023 will increase to a range of \$13.0 - \$14.0 million, primarily as it continues its efforts to develop and commercialize its elite Camelina plant varieties for the biofuel, omega-3 food and feed and PHA bioplastic markets. The increased cash usage for operating activities will support seed scale-up and other pre-commercial Camelina production activities, employee compensation and benefits from recent and future personnel hiring, and further expansion of the Company's crop trial programs.

### *Operating Results*

Research grant revenue for the year ended December 31, 2022 was \$0.5 million in comparison to grant revenue of \$0.6 million recorded in the previous year. Research and development expense was \$7.8 million during the year ended December 31, 2022, an increase of \$1.6 million, in comparison to \$6.2 million recorded during the year ended December 31, 2021. The year-over-year increase was primarily due to expenses associated with pre-commercial Camelina seed production, higher employee compensation expense resulting from new hires, and expanded crop trial and third-party research service costs. General and administrative expenses were slightly higher at \$6.2 million during the year ended December 31, 2022, in comparison to \$6.1 million during the previous year.

Yield10 reported a net loss from operations of \$13.5 million for the full year 2022, as compared to a net loss from operations of \$11.7 million in 2021. For the year ended December 31, 2022, the Company reported a net loss after taxes of \$13.6 million, or \$2.76 per share, in comparison to a net loss after taxes of \$11.0 million, or \$2.33 per share, during the year ended December 31, 2021.

Research grant revenues were \$0.1 million during the Company's fourth quarter of 2022 in comparison to \$0.2 million during the fourth quarter of 2021. Research and development expense increased by \$0.3 million from \$1.6 million in the fourth quarter of 2021 to \$1.9 million in the fourth quarter of 2022. General and administrative expenses decreased by \$0.1 million to \$1.4 million during the fourth quarter of 2022, from \$1.5 million during the fourth quarter of 2021. Yield10 reported a loss after taxes of \$3.3 million for the fourth quarter of 2022, or \$0.67 per share, compared to a loss after taxes of \$3.0 million, or \$0.61 per share, in the fourth quarter of 2021.

### *Other Income (Expense)*



Included within other income (expense) during the Company's year ended December 31, 2021, is an investment gain of \$0.7 million within other income (expense) from its 2002 investment in Tepha, Inc. ("Tepha") a related party, and was the result of Tepha's acquisition by Becton Dickinson in July 2021.

### **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 2022 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](http://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:13736811. 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](http://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 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 potential impact on operations of the continued evolution of COVID-19 and its variants, 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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(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,		Years Ended December 31,	
	2022	2021	2022	2021
<b>Revenue:</b>				
Grant revenue	\$ 87	\$ 152	\$ 450	\$ 614
Total revenue	87	152	450	614
<b>Expenses:</b>				
Research and development	1,888	1,598	7,750	6,201
General and administrative	1,403	1,522	6,151	6,105
Total expenses	3,291	3,120	13,901	12,306
Loss from operations	(3,204)	(2,968)	(13,451)	(11,692)
<b>Other income (expense):</b>				
Gain on investment in related party	—	—	—	700
Other income (expense), net	30	(1)	41	(3)
Total other income (expense)	30	(1)	41	697
Loss from operations before income taxes	(3,174)	(2,969)	(13,410)	(10,995)
Income tax provision	(129)	(11)	(156)	(36)
Net loss	\$ (3,303)	\$ (2,980)	\$ (13,566)	\$ (11,031)
<b>Basic and diluted net loss per share</b>				
	\$ (0.67)	\$ (0.61)	\$ (2.76)	\$ (2.33)
<b>Number of shares used in per share calculations:</b>				
Basic and diluted	4,943,727	4,881,809	4,914,565	4,731,833

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

	December 31, 2022	December 31, 2021
<b>Assets</b>		
Current Assets:		
Cash and cash equivalents	\$ 2,356	\$ 5,329
Short-term investments	1,991	10,661
Accounts receivable	—	164
Unbilled receivables	30	34
Prepaid expenses and other current assets	641	436
Total current assets	5,018	16,624
Restricted cash	264	264
Property and equipment, net	775	890
Right-of-use assets	1,961	2,354
Other assets	67	283
Total assets	\$ 8,085	\$ 20,415
<b>Liabilities and Stockholders' Equity</b>		
Current Liabilities:		
Accounts payable	\$ 109	\$ 83
Accrued expenses	926	1,136
Lease liabilities	575	514
Total current liabilities	1,610	1,733
Lease liabilities, net of current portion	2,075	2,656
Total liabilities	3,685	4,389
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 December 31, 2022 and 2021, and 4,944,202 and 4,881,851 shares issued and outstanding at December 31, 2022 and 2021, respectively	49	49
Additional paid-in capital	404,277	402,283
Accumulated other comprehensive loss	(229)	(175)
Accumulated deficit	(399,697)	(386,131)
Total stockholders' equity	4,400	16,026
Total liabilities and stockholders' equity	\$ 8,085	\$ 20,415

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

	<b>Years Ended December 31,</b>	
	<b>2022</b>	<b>2021</b>
<b>Cash flows from operating activities</b>		
Net loss	\$ (13,566)	\$ (11,031)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	263	220
Expense for 401(k) company common stock match	133	112
Stock-based compensation	1,903	1,675
Noncash lease expense	393	358
Deferred tax asset	165	35
Changes in operating assets and liabilities:		
Accounts receivable	164	(78)
Unbilled receivables	4	(7)
Prepaid expenses and other assets	(160)	63
Accounts payable	26	23
Accrued expenses	(209)	(160)
Lease liabilities	(520)	(463)
Net cash used in operating activities	(11,404)	(9,253)
<b>Cash flows from investing activities</b>		
Purchase of property and equipment	(154)	(189)
Purchase of investments	(2,445)	(10,639)
Proceeds from sale and maturity of short-term investments	11,121	6,250
Net cash provided by (used in) investing activities	8,522	(4,578)
<b>Cash flows from financing activities</b>		
Proceeds from warrants exercised	—	3,856
Proceeds from securities offerings, net of issuance costs	—	11,993
Taxes paid on employees' behalf related to vesting of stock awards	(37)	(103)
Net cash (used in) provided by financing activities	(37)	15,746
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(54)	(9)
Net (decrease) increase in cash, cash equivalents and restricted cash	(2,973)	1,906
Cash, cash equivalents and restricted cash at beginning of year	5,593	3,687
Cash, cash equivalents and restricted cash at end of year	\$ 2,620	\$ 5,593
<b>Supplemental Cash Flow Disclosure:</b>		
Interest paid	\$ 10	\$ 9