
**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): **October 18, 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:

- 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:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common stock, par value \$0.01 per share	YTEN	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 8.01 Other Events.

On October 18, 2023, Yield10 Bioscience, Inc. issued a press release announcing that it had exercised its option to finalize an exclusive global, commercial license to advanced omega-3 production technology from U.K.-based Rothamsted Research Limited.

A copy of the press release is attached hereto as Exhibit 99.1.

Item 9.01. Financial Statements and Exhibits**(d) Exhibits**

Exhibit No.	Description
99.1	Press Release dated October 18, 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.

Date: October 19, 2023

By: /s/ Oliver P. Peoples

Oliver P. Peoples

President & Chief Executive Officer



Yield10 Bioscience Exercises Option to Finalize an Exclusive, Global Commercial License to Advanced Omega-3 Camelina Technology from Rothamsted Research

WOBURN, Mass. – October 18, 2023 – Yield10 Bioscience, Inc. (Nasdaq:YTEN) (“Yield10” or the “Company”), an agricultural bioscience company, today announced that the Company has exercised its option to finalize an exclusive global, commercial license to advanced omega-3 production technology from U.K.-based Rothamsted Research Limited (“Rothamsted”). In 2020, Yield10 signed an exclusive collaboration agreement with Rothamsted to support Rothamsted’s Flagship Program to develop omega-3 oils in *Camelina sativa* (“Camelina”). As part of the collaboration agreement, Yield10 received an exclusive option to sign a global, exclusive license agreement for the technology.

The technology developed by Rothamsted enables the sustainable, plant-based production of omega-3 nutritional oils in Camelina. Over the last decade, the Rothamsted team, led by Professor Johnathan Napier, Ph.D., Science Director, has demonstrated the production of omega-3 oils in Camelina seed and conducted evaluations of the oils in salmon feeding and human clinical studies to demonstrate lipid lowering effects. Omega-3 oils are essential for human nutrition and have demonstrated benefits in heart health.

“Our decision to exercise the exclusive global option to the omega-3 production technology with Rothamsted underscores our belief that there will be significant market opportunities for the omega-3 oil profiles that can be produced using Camelina as a platform crop,” said Oliver Peoples, Ph.D., President and Chief Executive Officer of Yield10 Bioscience. “The Rothamsted team has advanced the omega-3 Camelina technology to where it is ready to begin commercialization. We are also planning improvements in the varieties through the deployment of our herbicide tolerance and performance traits. Commercially, we are on a promising path to commercializing elite omega-3 varieties of Camelina that combine good agronomics in the field while also producing high-value, high-purity omega-3 oils possessing very attractive economics.”

The potential market opportunity for omega-3 fatty acids produced in Camelina includes use in pharmaceutical (ethyl-EPA) products, dietary supplements, and food and feed ingredients. Currently, the primary source of the essential fatty acids EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) is ocean-caught fish, where omega-3 oil produced from anchovy harvest is the industry benchmark. Over the last few years, there has been increasing pressure on the supply of omega-3 oil due to over-fishing. In 2023, Peru, which produces 20% of the global fish oil supply, canceled its first season anchovy harvest due to a lack of mature fish. Producing omega-3 fatty acids in Camelina may represent a way to enable a predictable supply of high-quality omega-3 oils to meet the global demand for EPA and DHA.

Under the collaboration with Yield10, additional intellectual property has been developed by Rothamsted for next generation omega-3 Camelina varieties. However, in response to customer interest, Yield10 has elected to prioritize the current EPA8 omega-3 Camelina as the initial profile for commercialization. In spring 2023, Yield10 planted omega-3 (EPA) Camelina at acre-scale in the United States to begin the ramp-up of seed inventory for future planting as well as to produce oil for use in business development activities. The seed yield, oil content and oil composition of the EPA8 Camelina variety have thus far met the Company's expectations for performance, setting the stage for advanced development and possible future market introduction. Yield10 plans to conduct further seed scale-up of EPA8 Camelina in contra season in South America this winter. In the third quarter of 2023, Yield10 submitted a Request for Status Review ("RSR") for EPA8 Camelina to USDA-APHIS Biotechnology Regulatory Services under the Sustainable, Ecological, Consistent, Uniform, Responsible, Efficient (SECURE) Rule. A favorable review under the SECURE Rule would allow the crop to be grown at large scale in the United States.

Yield10 and Rothamsted are also pursuing commercial development of Camelina to produce omega-3 oil containing both EPA and DHA fatty acids as a sustainable alternative to oil obtained from ocean-harvested fish, which serves as an essential ingredient for fish feed used in aquaculture, including the farming of Atlantic salmon.

About the EPA component of Omega-3 oil

EPA is a polyunsaturated fat (PUFA) that is primarily supplied in the human diet by the consumption of oily fish such as salmon, anchovies, and mackerel. Fish obtain EPA through the consumption of algae. Clinical studies have shown that EPA is beneficial to humans as it lowers triglycerides and reduces low-density lipoprotein (LDL) cholesterol in the blood with beneficial cardiovascular effects. Using Camelina to produce EPA may represent a way to produce this beneficial ingredient without relying on the harvest of ocean fish. Several commercial products containing EPA fatty acids or their derivatives are available on the market, including pharmaceuticals, nutritional supplements, and animal feed.

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. 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](#).

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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, including, without limitation, the completion of the global commercial license to the omega-3 production technology, the development of EPA and EPA+DHA Camelina and the performance and production capacity of the omega-3 production technology, that the pending RSR will be approved by USDA-APHIS, the potential for large-scale production of EPA8 Camelina, the future commercialization, potential market opportunity, economic viability and further development of the omega-3 varieties of Camelina and the omega-3 oils produced therefrom, and the potential for the omega-3 production technology to provide sustainable alternatives to existing means of omega-3 oil production, 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 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.

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