

**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, 2018

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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

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 May 10, 2018, Yield10 Bioscience, Inc. issued a press release announcing the financial results for its fiscal quarter ended March 31, 2018. 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](#)

Press Release dated May 10, 2018 announcing financial results for quarter ending March 31, 2018.

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: May 10, 2018

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



Yield10 Bioscience Announces First Quarter 2018 Financial Results

WOBURN, Mass. - May 10, 2018 - Yield10 Bioscience, Inc. (Nasdaq:YTEN), a Company developing new technologies to achieve step-change improvements in crop yield to enhance global food security, today reported financial results for the three months ended March 31, 2018.

“In the first quarter, our team was focused on executing activities needed to enable the start of our 2018 Field Tests in Canada and the U.S.,” said Oliver P. Peoples, Ph.D., President and Chief Executive Officer of Yield10 Bioscience. “In our field tests we will evaluate versions of our second generation C3003 in Camelina and canola to generate proof-points and guide further development of this promising seed yield trait. We will also test genome-edited C3008 in Camelina in the field for the first time this growing season. C3008 is a key trait in a series of traits we are investigating to re-engineer oil biosynthesis as a strategy to increase oil content in oilseed crops.”

“Our research team continues to make solid progress deploying our novel C3000 and C4000 series yield traits and trait combinations into plants for further evaluation. In addition, our team authored two recent scientific papers providing insights into how we are using metabolic engineering concepts to drive innovations in crop yield and how we successfully identified two novel global transcription factors that are enabling us to develop strategies to identify novel yield traits in a variety of commercial crops. We look forward to maintaining our momentum and achieving our corporate milestones as 2018 progresses,” said Dr. Peoples.

Recent Highlights

2018 Field Test Program

Yield10 will test versions of its novel yield trait gene C3003 in Camelina and canola as part of its 2018 Field Test program and will grow C3003 soybean lines primarily to bulk up seed for field tests planned for 2019. The Company recently obtained regulatory permits allowing these tests to be conducted at sites in Canada. In addition, Yield10 plans to conduct a study in the U.S. of Camelina lines that have been genome-edited to inactivate the C3008 gene as part of a new multi-gene trait approach to increase seed oil content and to potentially improve oil stability. Yield10 expects to begin

planting during the second quarter with timing dependent upon suitable weather and soil conditions, and to report results of the field tests beginning in the fourth quarter of 2018.

Genome-edited Traits to Boost Oil Content in Oilseed Crops

In the first quarter, Yield10 researchers completed genome-editing in Camelina of a triple combination trait stack consisting of C3008a, C3008b and C3009. This multi-trait approach to improve carbon flow in oil biosynthesis pathways is intended to result in increased seed oil content and potentially improved oil stability. Yield10 intends to apply to USDA-APHIS for “non-regulated” status, and if granted, field test the plants in the U.S.

Recent Yield10 Publications

Yield10 published a paper entitled “Metabolic Engineering to Increase Crop Yield: From Concept to Execution,” in Plant Science. The research discusses how trait discovery programs can benefit from smart approaches that incorporate predictive models to identify novel gene targets to increase yields in key crops. The paper references Yield10’s own trait discovery program, and examines various external factors that impact the cost and timeline to reach commercialization.

Yield10 published a second research paper entitled “Novel Transcription Factors PvBMY1 and PvBMY3 increase biomass yield in greenhouse grown switchgrass (*Panicum virgatum* L.).” Yield10 refers to these transcription factors as the C4001 and C4003 trait genes, respectively. The authors describe the identification of these two previously uncharacterized global transcription factor genes (GTFs). Yield10 researchers showed that using genetic engineering to increase the activity of the GTF genes in switchgrass plants resulted in large increases in photosynthesis and biomass yield. The researchers also reported the identification of genes closely related to C4001 and C4003 in major food and feed crops including corn, soybean, and rice. These genes could enable the identification of new gene targets accessible through genome-editing for boosting seed yield.

FIRST QUARTER 2018 FINANCIAL OVERVIEW

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. The Company ended the first quarter of 2018 with \$11.6 million in unrestricted cash, cash equivalents and short-term investments. The Company’s net cash used in operating activities during the first quarter of 2018 was \$3.0 million, which was an increase of \$0.6 million from the \$2.4 million used for operating activities during the first quarter of 2017. The increase was primarily the result of lower first quarter grant revenue and the Company’s payment of 2017 employee performance bonuses during the first quarter of 2018.

The Company anticipates net cash usage of approximately \$9.0 million to \$9.5 million during its fiscal year ending December 31, 2018, including final payments of \$0.5 million during the first half of 2018 related to its restructuring that was undertaken during 2016.

For the first quarter ending March 31, 2018, the Company reported a net loss of \$2.3 million, or \$0.24 per share. The Company reported a net loss of \$2.1 million or \$0.74 per share, for the first quarter of 2017.

Total government grant revenue for the first quarter of 2018 was \$0.1 million, compared to \$0.3 million recorded during the first quarter of the previous year. The \$0.2 million decrease reflects the transitional impact of the wind-down of the Company's Camelina grant with the U.S. Department of Energy while it also waited for the new sub-award with Michigan State University to become effective during April 2018. Research and development expenses and general and administrative expenses for the three months ended March 31, 2018 and 2017 were flat at \$1.1 million and \$1.3 million, respectively, and reflects the Company's achievement of a baseline level of operations that are scaled to its current available resources.

Conference Call Information

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss first quarter 2018 results. The Company also will provide an update on the business 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 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 13677652. The replay will be available for 14 days. In addition, the webcast will be archived on the Company's website in the investor relations section.

About Yield10 Bioscience

Yield10 Bioscience, Inc. is focused on developing new technologies to achieve step-change improvements in crop yield to enhance global food security. Yield10 has an extensive track record of innovation based around optimizing the flow of carbon in living systems. Yield10 is leveraging its technology platforms and unique knowledge base to design precise alterations to gene activity and the flow of carbon in plants to produce higher yields with lower inputs of land, water or fertilizer. Yield10 is advancing several yield traits it has developed in crops such as Camelina, canola, soybean and rice. Yield10 is headquartered in Woburn, MA and has an Oilseeds Center of Excellence in Saskatoon, Canada.

For more information visit www.yield10bio.com

(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 research and development, collaborations, intellectual property, the reproducibility of data from field tests, the translation of yield improvements from Camelina to other crops, the potential to produce improvements in seed yield and oil content, the timing of completion of additional greenhouse and field test studies, the signing of research licenses and collaborations, and value creation as well as the Company's cash position, cash forecasts, and progress of Yield10 Bioscience, Inc., 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 Bioscience's filings with the Securities and Exchange Commission. Yield10 Bioscience assumes no obligation to update any forward-looking information contained in this press release or with respect to the announcements described herein.

Yield10 Inquiries:

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

Investor Relations Contact:

Amato and Partners, LLC

admin@amatoandpartners.com

Media Inquiries:

Eric Fischgrund, FischTank Marketing and PR

eric@fischtankpr.com

(FINANCIAL TABLES FOLLOW)

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

	Three Months Ended March 31,	
	2018	2017
Revenue:		
Grant revenue	\$ 60	\$ 324
Total revenue	<u>60</u>	<u>324</u>
Expenses:		
Research and development	1,094	1,109
General and administrative	1,273	1,276
Total expenses	<u>2,367</u>	<u>2,385</u>
Loss from operations	(2,307)	(2,061)
Other income (net):		
Interest income, net	35	1
Other expense, net	(18)	(32)
Total other income (expense), net	<u>17</u>	<u>(31)</u>
Net loss	<u>\$ (2,290)</u>	<u>\$ (2,092)</u>
Basic and diluted net loss per share	\$ (0.24)	\$ (0.74)
Number of shares used in per share calculations:		
Basic & Diluted	9,698,726	2,839,963

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

	March 31, 2018	December 31, 2017
Assets		
Current Assets:		
Cash and cash equivalents	\$ 7,583	\$ 14,487
Short-term investments	3,991	—
Accounts receivable	42	54
Unbilled receivables	36	65
Prepaid expenses and other current assets	442	311
Total current assets	12,094	14,917
Restricted cash	317	317
Property and equipment, net	1,526	1,539
Other assets	103	109
Total assets	\$ 14,040	\$ 16,882
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 80	\$ 76
Accrued expenses	1,352	2,299
Total current liabilities	1,432	2,375
Lease incentive obligation, net of current portion	973	1,005
Total liabilities	2,405	3,380
Commitments and contingencies		
Stockholders' Equity:		
Series A Convertible Preferred Stock (\$0.01 par value per share); 5,000,000 shares authorized at March 31, 2018 and December 31, 2017; 0 and 1,826 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	—	818
Common stock (\$0.01 par value per share); 40,000,000 shares authorized at March 31, 2018 and December 31, 2017; 9,968,455 and 9,089,159 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	100	91
Additional paid-in capital	356,667	355,431
Accumulated other comprehensive loss	(89)	(85)
Accumulated deficit	(345,043)	(342,753)
Total stockholders' equity	11,635	13,502
Total liabilities and stockholders' equity	\$ 14,040	\$ 16,882

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

	Three Months Ended March 31,	
	2018	2017
Cash flows from operating activities		
Net loss	\$ (2,290)	\$ (2,092)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation	47	53
Charge for 401(k) company common stock match	46	23
Stock-based compensation	281	264
Changes in operating assets and liabilities:		
Accounts receivables	12	(144)
Due from related party	—	1
Unbilled receivables	29	7
Prepaid expenses and other assets	(125)	(97)
Accounts payable	(27)	(5)
Accrued expenses	(971)	(168)
Contract termination obligation and other long-term liabilities	(32)	(275)
Net cash used for operating activities	(3,030)	(2,433)
Cash flows from investing activities		
Purchase of property and equipment	(3)	—
Purchase of short-term investments	(4,002)	—
Proceeds from the sale and maturity of short-term investments	11	—
Net cash used for investing activities	(3,994)	—
Cash flows from financing activities		
Proceeds from warrants exercised	124	—
Net cash provided by financing activities	124	—
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(4)	(1)
Net decrease in cash, cash equivalents and restricted cash	(6,904)	(2,434)
Cash, cash equivalents and restricted cash at beginning of period	14,804	7,741
Cash, cash equivalents and restricted cash at end of period	\$ 7,900	\$ 5,307
Supplemental disclosure of non-cash information:		
Purchase of property and equipment included in accounts payable and accrued expenses	\$ 31	\$ —