

**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) November 8, 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 November 8, 2018, Yield10 Bioscience, Inc. issued a press release announcing the financial results for the three and nine months ended September 30, 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 November 8, 2018 announcing financial results for the three months ending September 30, 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.

Dated: November 8, 2018

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



Yield10 Bioscience Announces Third Quarter 2018 Financial Results

WOBURN, Mass. - November 8, 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 and nine months ended September 30, 2018.

"During the third quarter we continued to execute on our key objectives for 2018 as we signed a new research license with Forage Genetics for testing our yield traits in sorghum, clarified the regulatory path for genome-edited plants containing multiple edits, and advanced our yield traits in development," said Oliver Peoples, Ph.D., President and Chief Executive Officer of Yield10 Bioscience. "As the end of the year approaches, we plan to report out results from our 2018 field tests; select the traits and constructs in Camelina, canola and soybean for field testing in 2019; and continue to identify opportunities for collaboration with leading players in the agricultural industry."

"Our recent agreement with Forage Genetics, a market leader in forage crops, will expand the evaluation of our traits in another commercially important crop. Further, it provides another path to generating data for our traits as well as a potential path to commercialization in sorghum if the traits add a performance benefit to the crop."

"Our results with C3004 in growth chamber studies showing seed yield improvements of up to 65% in Camelina are early, but very exciting, and highlight our leadership as an agricultural biotech innovator. This outstanding result is another demonstration that we can significantly increase seed yield based on insights developed using our technology platform. We are accelerating development of our C3004 trait alone and in combination with C3003, and we plan on using our Camelina platform for field testing in 2019. In addition, we believe there may be paths to develop C3004 as a genome-edited, nonregulated trait, and work is underway to deploy C3004 in canola and soybean," concluded Dr. Peoples.

Recent Accomplishments

Signed Research License with Forage Genetics for Development of Novel Traits for Sorghum. Yield10 signed a non-exclusive research license with Forage Genetics International, LLC, a subsidiary of Land O'Lakes, Inc., to evaluate five novel yield traits in forage sorghum. Under the

license, Forage Genetics plans to conduct research with the novel traits within its sorghum development program as a strategy to improve biomass yields. The novel yield traits included in the research license agreement include C3003, a trait derived from algae, as well as four traits from Yield10's "GRAIN" platform, C4001, C4002, C4003 and C4029. The C4000 series traits included in the research license have been shown to significantly increase photosynthesis and biomass in research conducted by Yield10.

Nonregulated Status Confirmed for Camelina Containing Novel Oil Biosynthesis Pathway. Yield10 received confirmation of nonregulated status from USDA-APHIS for its genome-edited *Camelina sativa* plant lines developed using CRISPR-Cas9 for increased oil content. This clarification of the regulatory status of the triple genome-edited Camelina plant lines accelerates the path to conducting field trials in the United States in 2019.

Reported Promising Results for C3004 Trait in Camelina Platform. Yield10 reported promising results for its novel yield trait C3004 in growth chamber studies conducted using its Camelina platform. Camelina plant lines containing C3004 grew more vigorously, and the best lines produced increases in average seed yield (grams per plant) in a range of 26% to 65% as compared to control plants. Yield10 plans to conduct field tests of the C3004 trait in Camelina as part of its 2019 Field Test program in Canada. In addition, Yield10 is fast tracking deployment of the C3004 trait into canola and soybean to determine if the trait produces similar effects on plant vigor and seed yield in major oilseed crops.

Harvest Complete for 2018 Field Test Program. Yield10 recently completed the harvest of plants and seeds at field test sites in the U.S. and Canada. In the field test program, Yield10 tested versions of C3003 in Camelina and canola, and grew C3003 containing soybean lines primarily to bulk up seed for field tests planned for 2019. Yield10 also conducted a study in the U.S. of Camelina lines that have been genome-edited to deactivate 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 report results of the field tests beginning in the fourth quarter of 2018.

THIRD 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 third quarter of 2018 with \$7.8 million in unrestricted cash, cash equivalents and short-term investments. The Company's net cash used in operating activities during the third quarter of 2018 and the third quarter of 2017 was \$1.8 million and \$2.0 million, respectively.

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 made during the first half of 2018 related to its restructuring that was undertaken in 2016.

For the third quarter ending September 30, 2018, the Company reported a net loss of \$2.6 million, or \$0.26 per share. The Company reported a net loss of \$2.0 million or \$0.59 per share, for the third quarter of 2017.

Total government grant revenue for the third quarter of 2018 and the third quarter of 2017 was \$0.1 million and \$0.2 million, respectively. Grant revenue for the third quarter of 2018 was earned from the Company's subcontract with Michigan State University. Research and development expenses for the three months ending September 30, 2018 and September 30, 2017 were \$1.3 million and \$1.1 million, respectively. The variance is primarily the result of increased employee compensation and benefits expense, resulting from the hiring of additional research personnel during 2018. General and administrative expenses for the three months ending September 30, 2018 and September 30, 2017 were \$1.4 million and \$1.1 million, respectively. The increase in general and administrative expense of \$0.3 million is primarily the result of a lease impairment charge of \$0.2 million recorded during the quarter for the Company's discontinued use of its Lowell, Massachusetts facility pursuant to a lease that will terminate in May 2020.

For the nine months ending September 30, 2018, the Company reported a net loss of \$7.3 million, or \$0.74 per share, as compared to a net loss of \$6.8 million, or \$2.25 per share, for the nine months ending September 30, 2017.

Total research grant revenue for the nine months ending September 30, 2018 was \$0.4 million, compared to \$0.8 million for the nine months ending September 30, 2017. Research and development expenses and general and administrative expenses were \$3.7 million and \$4.1 million, respectively, for the nine months ending September 30, 2018 compared to \$3.4 million and \$4.2 million, respectively, for the nine months ending September 30, 2017.

Conference Call Information

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss the results for the third quarter of 2018. The Company will also 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 13684058. 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.

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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 September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenue:				
Grant revenue	\$ 76	\$ 223	\$ 421	\$ 840
Total revenue	76	223	421	840
Expenses:				
Research and development	1,330	1,132	3,677	3,379
General and administrative	1,407	1,073	4,132	4,215
Total expenses	2,737	2,205	7,809	7,594
Loss from operations	(2,661)	(1,982)	(7,388)	(6,754)
Other income (net):				
Interest income, net	43	2	123	5
Other expense, net	(12)	(45)	(45)	(95)
Total other income (expense), net	31	(43)	78	\$ (90)
Net loss	\$ (2,630)	\$ (2,025)	\$ (7,310)	\$ (6,844)
Basic and diluted net loss per share	\$ (0.26)	\$ (0.59)	\$ (0.74)	\$ (2.25)
Number of shares used in per share calculations:				
Basic & Diluted	10,010,762	3,410,847	9,901,459	3,035,352

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

	September 30, 2018	December 31, 2017
Assets		
Current Assets:		
Cash and cash equivalents	\$ 3,306	\$ 14,487
Short-term investments	4,491	—
Accounts receivable	54	54
Unbilled receivables	29	65
Prepaid expenses and other current assets	384	311
Total current assets	8,264	14,917
Restricted cash	332	317
Property and equipment, net	1,435	1,539
Other assets	106	109
Total assets	\$ 10,137	\$ 16,882
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 39	\$ 76
Accrued expenses	1,770	2,299
Total current liabilities	1,809	2,375
Other liabilities, net of current portion	1,000	1,005
Total liabilities	2,809	3,380
Commitments and contingencies		
Stockholders' Equity:		
Series A Convertible Preferred Stock (\$0.01 par value per share); 5,000,000 shares authorized at September 30, 2018 and December 31, 2017; 0 and 1,826 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	—	818
Common stock (\$0.01 par value per share); 60,000,000 shares and 40,000,000 shares authorized at September 30, 2018 and December 31, 2017, respectively; 10,011,395 and 9,089,159 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	100	91
Additional paid-in capital	357,396	355,431
Accumulated other comprehensive loss	(105)	(85)
Accumulated deficit	(350,063)	(342,753)
Total stockholders' equity	7,328	13,502
Total liabilities and stockholders' equity	\$ 10,137	\$ 16,882

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

	Nine Months Ended	
	September 30,	
	2018	2017
Cash flows from operating activities		
Net loss	\$ (7,310)	\$ (6,844)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation	146	158
Charge for 401(k) company common stock match	91	68
Stock-based compensation	952	1,063
Changes in operating assets and liabilities:		
Accounts receivable	29	(69)
Due from related party	—	1
Unbilled receivables	36	19
Prepaid expenses and other assets	(70)	715
Accounts payable	(37)	(8)
Accrued expenses	(563)	(828)
Other long-term liabilities	(5)	(584)
Net cash used for operating activities	<u>(6,731)</u>	<u>(6,309)</u>
Cash flows from investing activities		
Purchase of property and equipment	(42)	(6)
Purchase of short-term investments	(9,742)	—
Proceeds from the sale and maturity of short-term investments	5,250	—
Net cash used for investing activities	<u>(4,534)</u>	<u>(6)</u>
Cash flows from financing activities		
Proceeds from warrants exercised	124	—
Taxes paid related to net share settlement upon vesting of stock awards	(6)	(12)
Proceeds from registered direct offering	—	1,966
Net cash provided by financing activities	<u>118</u>	<u>1,954</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(19)	3
Net decrease in cash, cash equivalents and restricted cash	(11,166)	(4,358)
Cash, cash equivalents and restricted cash at beginning of period	14,804	7,741
Cash, cash equivalents and restricted cash at end of period	<u>\$ 3,638</u>	<u>\$ 3,383</u>
Supplemental disclosure of non-cash information:		
Reversal of deferred financing costs related to Aspire stock purchase agreement	\$ —	\$ 450