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) August 10, 2017

YIELD10 BIOSCIENCE, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE

(State or Other Jurisdiction of Incorporation)

001-33133 04-3158289

(Commission File Number) (IRS Employer Identification No.)

19 Presidential Way, Woburn, Massachusetts

01801

(Address of Principal Executive Offices)

(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):

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o 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 o

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. o

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Item 2.02 Results Of Operations and Financial Condition.

On August 10, 2017, Yield10 Bioscience, Inc. issued a press release announcing the financial results for its fiscal quarter ended June 30, 2017. 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 August 10, 2017.

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: August 10, 2017 By: /s/ Oliver P. Peoples

Oliver P. Peoples

President & Chief Executive Officer

INDEX TO EXHIBITS

Exhibit
No. Description

99.1 Press Release dated August 10, 2017.



Yield10 Bioscience Announces Second Quarter 2017 Financial Results

WOBURN, Mass. - August 10, 2017 - Yield10 Bioscience, Inc. (NASDAQ:YTEN) today reported financial results for the three months ended June 30, 2017.

"We made solid progress in the second quarter driving toward the generation of proof points in our research and development programs," commented Oliver Peoples, Ph.D., President and Chief Executive Officer. "We announced the start of field tests at sites in Canada in early June for the evaluation of our novel yield trait gene C3003 in Camelina and canola. Harvest of the crops is expected to start in the coming weeks. In addition, our C3003 yield trait has been introduced into soybean through a collaborator and greenhouse studies are currently underway. Progress with these studies keeps us on track to begin reporting out additional yield data on C3003 in oilseed crops starting in the fourth quarter of 2017."

"Our T3 Platform provides us with a novel approach to discover performance traits and to develop strategies for genome editing for deployment in commercial crops. At the recent Plant Biology 2017 conference, we reported results showing that our C4001 trait produces significant increases in plant biomass yield and we are making progress deploying this trait in rice. We recently began additional work with the C4000 series of traits for yield improvement and drought tolerance in wheat through a new collaboration. Highlighting our work in genome editing as well as our efforts to establish a robust internal process for obtaining nonregulated status with USDA for new traits, we submitted to USDA-APHIS an 'Am I regulated?' letter for genome-edited Camelina during the second quarter."

"On the corporate front, we filed four additional patent applications in the first half of the year related to expanding coverage around our inventions including C3003. More recently in July, we shored up our balance sheet raising \$2.0 million of net proceeds in an offering of common stock and warrants. We look forward to the second half of the year as we continue to generate and report proof points, which we believe will validate the use of our performance traits in agriculturally important crops," said Dr. Peoples.

SECOND QUARTER 2017 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 second quarter with \$3.0 million in unrestricted cash and cash equivalents. The Company's net cash used in operating activities during the three months ended June 30, 2017 was \$1.9 million, which was an increase of \$0.8 million from the \$1.1 million used for operating activities during the three months ended June 30, 2016. During the three months ended June 30, 2016, the Company received one-time license and royalty payments totaling \$3.0 million, significantly offsetting the net cash used during the period.

On July 7, 2017, the Company completed an offering of the Company's securities and raised net proceeds of approximately \$2.0 million. As a result of acquiring these additional funds, the Company anticipates that its current cash resources will be sufficient to fund operations and meet its obligations, including its restructuring obligations, when due, into the first quarter of 2018.

The Company anticipates that it will use approximately \$8.0 to \$8.5 million of cash during 2017, including anticipated payments for restructuring costs. The Company's present capital resources are not sufficient to fund its planned operations for a twelve month period and, therefore, raise substantial doubt about the Company's ability to continue as a going concern.

The Company's ability to continue operations after its current cash resources are exhausted depends on its ability to obtain additional financing, including public or private equity financing, secured or unsecured debt financing, receipt of additional government research grants as well as licensing or other collaborative arrangements.

On May 26, 2017, the Company effected a 1-for-10 reverse stock split of its common stock in order to regain compliance with NASDAQ's \$1.00 per share minimum market price. The ratio for the reverse stock split was determined by the Company's board of directors following approval by stockholders at the Annual Meeting held on May 24, 2017. All share amounts, per share data and share prices set forth in this release have been adjusted retroactively to reflect this reverse stock split.

Continuing Operations

For the three months ending June 30, 2017, the Company reported a net loss from continuing

operations of \$2.7 million, or \$0.96 per share, as compared to a net loss from continuing operations of \$2.5 million, or \$0.90 per share, for the three months ended June 30, 2016.

Total research grant revenue for the three months ended June 30, 2017 was \$0.3 million, compared to \$0.2 million recorded for the three months ended June 30, 2016. Research and development expenses and general and administrative expenses from continuing operations were \$1.1 million and \$1.9 million, respectively, for the three months ended June 30, 2017 compared to \$1.5 million and \$1.1 million, respectively, for the three months ended June 30, 2016.

For the six months ending June 30, 2017, the Company reported a net loss from continuing operations of \$4.8 million, or \$1.69 per share, as compared to a net loss from continuing operations of \$6.0 million, or \$2.20 per share, for the six months ended June 30, 2016.

Total research grant revenue for the six months ended June 30, 2017 was \$0.6 million, compared to \$0.3 million recorded for the six months ended June 30, 2016. Research and development expenses and general and administrative expenses from continuing operations were \$2.2 million and \$3.1 million, respectively, for the six months ended June 30, 2017 compared to \$3.0 million and \$3.4 million, respectively for the six months ended June 30, 2016.

Discontinued Operations

In July 2016, the Board of Directors of the Company approved a strategic restructuring plan under which Yield10 Bioscience became the Company's core business. As a result of this strategic shift, the Company completed the sale of its biopolymer assets in September 2016 in a transaction that met the requirements for discontinued operations reporting. The Company's financial statements for the three and six months ended June 30, 2016 have therefore been prepared to reflect the Company's former biopolymer operations as a discontinued operation. Net loss and net loss per share from discontinued operations were \$0.7 million and \$0.25, respectively, for the three months ended June 30, 2016 and a \$3.6 million net loss and a \$1.32 net loss per share for the six months ended June 30, 2016.

Conference Call Information

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss second quarter 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 13665015. 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 corn. 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 activities, collaborations, intellectual property and value creation as well as the Company's restructuring costs, cash position, cash forecasts, ability to obtain sufficient financing to continue operating, headcount forecasts, the reproducibility of data from field tests, the translation of yield improvements from Camelina to other crops, the potential to produce improvements in seed and/or biomass yield, the timing of completion of additional greenhouse and field test studies and receipt of data from those studies, 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.

Contacts:

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

Investor Relations Contact: Amato and Partners, LLC 90 Park Avenue, 17th Floor New York, NY 10016 admin@amatoandpartners.com

(FINANCIAL TABLES FOLLOW)

YIELD10 BIOSCIENCE, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS UNAUDITED

(In thousands, except share and per share amounts)

	T	Three Months Ended June 30,			Six Months Ended June 30,				
		2017	2016		2017		2016		
Revenue:									
Grant revenue	\$	293	\$	188	\$	617	\$	345	
Total revenue		293		188		617		345	
Expenses:			,						
Research and development		1,138		1,547		2,247		2,975	
General and administrative		1,866		1,149		3,142		3,421	
Total expenses		3,004		2,696		5,389		6,396	
Loss from continuing operations		(2,711)		(2,508)		(4,772)		(6,051)	
Other (expense) income, net		(16)		1		(47)		4	
Net loss from continuing operations		(2,727)	,	(2,507)		(4,819)		(6,047)	
Discontinued operations:									
Loss from discontinued operations		_		(691)		_		(3,649)	
Total loss from discontinued operations		_		(691)		_		(3,649)	
Net loss	\$	(2,727)	\$	(3,198)	\$	(4,819)	\$	(9,696)	
Basic and Diluted net loss per share:									
Net loss from continuing operations	\$	(0.96)	\$	(0.90)	\$	(1.69)	\$	(2.20)	
Net loss from discontinued operations		_		(0.25)		_		(1.32)	
Net loss per share	\$	(0.96)	\$	(1.15)	\$	(1.69)	\$	(3.52)	
Number of shares used in per share calculations:									
Basic & Diluted		2,849,069		2,771,736		2,844,492		2,754,232	

YIELD10 BIOSCIENCE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS UNAUDITED

(In thousands, except share and per share amounts)

		June 30, 2017		December 31, 2016	
Assets					
Current Assets:					
Cash and cash equivalents	\$	3,011	\$	7,309	
Accounts receivable		213		66	
Due from related parties		_		1	
Unbilled receivables		95		121	
Prepaid expenses and other current assets		443		363	
Deferred equity financing costs		146			
Total current assets		3,908		7,860	
Restricted cash		432		432	
Property and equipment, net		1,633		1,739	
Deferred equity financing costs		_		622	
Other assets		95		95	
Total assets	\$	6,068	\$	10,748	
Liabilities and Stockholders' Equity					
Current Liabilities:					
Accounts payable	\$	70	\$	56	
Accrued expenses		2,689		2,702	
Total current liabilities		2,759		2,758	
Lease incentive obligation, net of current portion		1,068		1,132	
Contract termination obligation, net of current portion		_		489	
Total liabilities		3,827		4,379	
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); 250,000,000 shares authorized at June 30, 2017 and December 31, 2016; 2,879,550 and 2,834,244 shares issued and outstanding at June 30, 2017 and					
December 31, 2016, respectively		29		28	
Additional paid-in capital		340,472		339,782	
Accumulated other comprehensive loss		(84)		(84)	
Accumulated deficit		(338,176)		(333,357)	
Total stockholders' equity		2,241		6,369	
Total liabilities and stockholders' equity	\$	6,068	\$	10,748	

YIELD10 BIOSCIENCE, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS UNAUDITED

(In thousands)

	Six Months Ended June 30,			
	 2017	2016		
Cash flows from operating activities				
Net loss	\$ (4,819)	\$ (9,696		
Adjustments to reconcile net loss to cash used in operating activities:				
Depreciation	106	272		
Charge for 401(k) company common stock match	46	232		
Stock-based compensation	663	901		
Gain on sale of discontinued operation and property and equipment	_	(31		
Changes in operating assets and liabilities:				
Accounts receivable	(147)	(72		
Due from related parties	1	118		
Unbilled receivables	26	47		
Inventory	_	(17		
Prepaid expenses and other assets	542	1,043		
Accounts payable	14	1,273		
Accrued expenses	(165)	(2,141		
Contract termination obligation and other long-term liabilities	(553)	(150		
Deferred revenue	_	605		
Net cash used in operating activities	(4,286)	(7,616		
Cash flows from investing activities				
Purchase of property and equipment	_	(389		
Proceeds from sale of discontinued operation and property and equipment	_	31		
Change in restricted cash	_	(307		
Net cash used by investing activities	_	(665		
Cash flows from financing activities				
Taxes paid on employees' behalf related to vesting stock awards	(12)	(274		
Net cash provided by financing activities	 (12)	(274		
Effect of exchange rate changes on cash and cash equivalents	_	(6		
Net decrease in cash and cash equivalents	(4,298)	(8,561		
Cash and cash equivalents at beginning of period	 7,309	12,269		
Cash and cash equivalents at end of period	\$ 3,011	\$ 3,708		
Supplemental disclosure of non-cash information:				
Purchase of property and equipment included in accounts payable and accrued expenses	\$ _ :	\$ 301,000		
Lease incentive paid by lessor	\$	\$ 1,332,000		
Offering costs remaining in accrued expenses	\$	\$		
Reversal of deferred financing costs related to Aspire stock purchase agreement	\$	\$ —		