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 8, 2018

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

TABLE OF CONTENTS

Item 2.02. Results of Operations and Financial Condition
Item 9.01. Financial Statements and Exhibits
Signatures
Exhibit 99.1

Item 2.02 Results Of Operations and Financial Condition.

On March 8, 2018, Yield10 Bioscience, Inc. issued a press release announcing the financial results for its fiscal year ended December 31, 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 March 8, 2018 announcing financial results for year ending December 31, 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: March 8, 2018 By: /s/ Oliver P. Peoples

Oliver P. Peoples

President & Chief Executive Officer



Yield10 Bioscience Announces Fourth Quarter and Full Year 2017 Financial Results

WOBURN, Mass. - March 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 months and full year ended December 31, 2017.

"In 2017, our team delivered a series of achievements reflecting our commitment to build Yield10 into a leader in agricultural innovation based on the development of novel crop yield traits," said Oliver P. Peoples, Ph.D., President and Chief Executive Officer of Yield10. "Recent highlights among our achievements for the year include the completion of successful field tests for our novel yield trait gene C3003 in Canada; signing a research license with Monsanto Company for evaluation of C3003 in soybean; designing new pathways for oil biosynthesis using genome editing technology in oilseed crops; and strengthening our balance sheet following the completion of a public offering in December."

"We expect the momentum to continue in 2018, as permitting is currently underway for field tests of C3003 planned to begin at sites in Canada in the second quarter. These field tests are designed to evaluate versions of C3003 in Camelina, canola and soybean. We seek to advance research around traits and combinations of traits accessible through genome editing as an innovative approach to boosting oil content in specialty oilseed crops. Yield10 also plans to make further investments in our technology platform and capabilities to drive new discoveries and identification of novel traits and trait stacks to improve crop performance. We will also focus on signing licenses and establishing collaborations with industry players to expand the evaluation of our traits in food and feed crops."

Recent Highlights

Non-Exclusive Research License with Monsanto Company

In December 2017, Yield10 announced that it has granted a non-exclusive research license to Monsanto Company to evaluate its novel C3003 and C3004 yield traits in soybean. Under the license, Monsanto plans to research both traits within its soybean pipeline as a strategy to improve plant yields. Derived from algae, C3003 represents the lead plant trait in Yield10's portfolio of traits in development. C3004, another trait, is believed to play a role in carbon partitioning. Monsanto plans to conduct research with C3003 and C3004 individually and in combination to evaluate the effectiveness of this trait stack.

December 2017 Underwritten Public Offering

On December 21, 2017, the Company announced the closing of an underwritten public offering, with net proceeds of approximately \$13.1 million after deducting underwriting discounts and commissions and other estimated offering expenses, including full exercise of the underwriters' overallotment option. In the transaction, the Company issued and sold 4,667,000 Class A Units, priced at \$2.25 per unit, with each unit consisting of one share of common stock; a five-year warrant to purchase one

share of common stock at an exercise price of \$2.25 per share; a nine-month warrant to purchase 0.5 share of common stock at an exercise price of \$2.25 per share; and 3,987 Class B Units, priced at \$1,000 per unit, with each unit consisting of one share of Series A preferred stock convertible into 445 shares of common stock at a conversion price of \$2.25; five-year warrants to purchase 445 shares of common stock with an exercise price of \$2.25 per share; and nine-month warrants to purchase 223 shares of common stock with an exercise price of \$2.25 per share.

As of March 5, 2018, holders of 3,879 (97%) shares out of the 3,987 initially issued shares of Series A preferred stock have elected to convert their shares into 1,724,000 shares of common stock. Following such conversions, 9,865,355 shares of common stock and 108 (3%) shares of Series A preferred stock remain outstanding.

FULL YEAR AND FOURTH 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 2017 with \$14.5 million in unrestricted cash and cash equivalents. The Company's net cash used in operating activities during 2017 was \$8.2 million, which was a decrease of \$6.2 million from the \$14.4 million used for operating activities during 2016. The decrease in net cash used for operating activities during the year ended December 31, 2017 was primarily a result of the Company's strategic decision to discontinue its biopolymer operations and initiate a strategic restructuring during the third quarter of 2016. The restructuring included a significant reduction in the Company's workforce, termination of long-term biopolymer manufacturing agreements and a general reduction in operating costs across many categories related to the former biopolymer operations. During 2017, the Company experienced a full year of cost reductions associated with the restructuring, partially offset by certain restructuring payments that carried over into 2017, such as manufacturing contract termination costs and employee severance.

The Company anticipates net cash usage of approximately \$8.5 million to \$9.0 million during 2018, including anticipated payments of \$0.5 million during the first half of 2018 for final restructuring costs. During the three months ended December 31, 2017, the Company completed a public offering of its securities and raised net proceeds from the transaction of approximately \$13.1 million, net of offering costs. As a result of raising these additional funds, the Company anticipates that its current cash resources will be sufficient to fund operations and meet its obligations for at least the next twelve months.

Continuing Operations

For the year ending December 31, 2017, the Company reported a net loss applicable to common shareholders from continuing operations of \$10.8 million, or \$3.29 per share. This loss includes a \$1.4 million adjustment related to the accounting for a deemed dividend from a beneficial conversion feature recorded in connection with the Series A convertible preferred stock issued in the December 2017 financing. The Company reported a net loss from continuing operations of \$9.2 million, or \$3.30 per share, for 2016.

Total research grant revenue from continuing operations for the full year 2017 was \$0.9 million, compared to \$1.2 million recorded in the prior year. Research and development expenses for continuing operations were \$4.6 million in 2017, compared to \$5.7 million for 2016. General and administrative expenses for continuing operations were \$5.6 million and \$5.7 million for the years ended December 31, 2017 and 2016, respectively.

The Company reported a net loss applicable to common shareholders from continuing operations of \$4.0 million, or \$0.99 per share, for the fourth quarter of 2017, compared to a net loss of \$1.6 million, or \$0.56 per share, for the fourth quarter of 2016.

Total research grant revenue in the fourth quarter of 2017 was \$0.1 million, compared to \$0.3 million for the comparable quarter in 2016.

In the fourth quarter of 2017, research and development expenses were \$1.2 million, and general and administrative expenses totaled \$1.4 million. This compares to \$1.1 million of research and development expenses and \$0.8 million of general and administrative expenses in the fourth quarter of 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 sold its biopolymer intellectual property along with certain equipment and inventory during its third quarter of 2016 for approximately \$10.0 million in a transaction that met the requirements for discontinued operations reporting. The Company's condensed consolidated statements of operations for the three and twelve months ended December 31, 2016 have therefore been prepared to reflect the Company's former biopolymer operations as a discontinued operation. Since none of the sold intellectual property was previously capitalized, the gain on the sale of these assets contributed to the Company reporting net income and net income per share from discontinued operations of \$1.6 million and \$0.57, respectively, for the year ended December 31, 2016. The Company did not have further involvement in the operations of the discontinued biopolymer business during 2017.

Conference Call Information

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss the year-end and fourth 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 13676737. 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: 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 December 31,			Twelve Months Ended December 31,			
		2017		2016		2017		2016
Revenue:								
Grant revenue	\$	104	\$	341	\$	944	\$	1,159
Total revenue		104		341		944		1,159
Expenses:								
Research and development		1,218		1,148		4,597		5,670
General and administrative		1,415		786		5,630		5,737
Total expenses		2,633		1,934		10,227		11,407
Loss from continuing operations		(2,529)		(1,593)		(9,283)		(10,248)
Other income (expense), net		(23)		(34)		(113)		(38)
Net loss from continuing operations before income tax benefit		(2,552)		(1,627)		(9,396)		(10,286)
Income tax benefit		_		55		_		1,097
Net loss from continuing operations		(2,552)		(1,572)		(9,396)		(9,189)
Discontinued operations								
Income (loss) from discontinued operations		_		(522)		_		2,682
Income tax benefit (provision)		_		162		_		(1,097)
Total net (loss) income from discontinued operations				(360)		_		1,585
Net loss	\$	(2,552)	\$	(1,932)	\$	(9,396)	\$	(7,604)
Loss attributable to common shareholders and loss per common share:								
Net loss	\$	(2,552)	\$	(1,932)	\$	(9,396)	\$	(7,604)
Deemed dividend on Series A Preferred Stock issuance		(1,427)				(1,427)		
Net loss attributable to common shareholders	\$	(3,979)	\$	(1,932)	\$	(10,823)	\$	(7,604)
Paris and Piloted ant less are shown								
Basic and Diluted net loss per share:	¢	(0.00)	φ	(0.50)	φ	(2.20)	ď	(2.20)
Net loss from continuing operations	\$	(0.99)	\$	(0.56)	\$	(3.29)	\$	(3.30)
Net loss par share	¢.	(0.00)	φ	(0.12)	¢	(2.20)	¢	0.57
Net loss per share	\$	(0.99)	\$	(0.68)	\$	(3.29)	\$	(2.73)
Number of shares used in per share calculations:		4.040.150		2 020 700		2 200 610		2 701 105
Basic & Diluted		4,040,156		2,828,790		3,288,618		2,781,185

YIELD10 BIOSCIENCE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS UNAUDITED

(In thousands, except share and per share amounts)

	December 31, 2017		De	ecember 31, 2016
Assets				
Current Assets:				
Cash and cash equivalents	\$	14,487	\$	7,309
Accounts receivable		54		66
Due from related parties		_		1
Unbilled receivables		65		121
Prepaid expenses and other current assets		311		363
Total current assets		14,917		7,860
Restricted cash		317		432
Property and equipment, net		1,539		1,739
Deferred equity financing costs		_		622
Other assets		109		95
Total assets	\$	16,882	\$	10,748
Liabilities and Stockholders' Equity				
Current Liabilities:				
Accounts payable	\$	76	\$	56
Accrued expenses		2,299		2,702
Total current liabilities		2,375		2,758
Lease incentive obligation, net of current portion		1,005		1,132
Contract termination obligation, net of current portion		_		489
Total liabilities		3,380		4,379
Commitments and contingencies				
Stockholders' Equity:				
Series A Convertible Preferred stock (\$0.01 par value per share); 5,000,000 authorized at December 31, 2017 and 2016, respectively; 1,826 and zero shares issued and outstanding at December 31, 2017 and 2016, respectively		818		_
Common stock (\$0.01 par value per share); 40,000,000 shares and 250,000,000 shares authorized at December 31, 2017 and 2016, respectively; 9,089,159 and 2,834,244 shares issued and outstanding at December 31, 2017 and 2016, respectively		91		28
Additional paid-in capital		355,431		339,782
Accumulated other comprehensive loss		(85)		(84)
Accumulated deficit		(342,753)		(333,357)
Total stockholders' equity		13,502		6,369
Total liabilities and stockholders' equity	\$	16,882	\$	10,748

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

				Years Ended December 31,				
		2017	2016					
Cash flows from operating activities								
Net loss	\$	(9,396)	\$	(7,604)				
Adjustments to reconcile net loss to cash used in operating activities:								
Depreciation		206		515				
Expense for 401(k) company common stock match		85		281				
Stock-based compensation		1,395		848				
Inventory impairment		_		199				
Gain on sale of discontinued operation and property and equipment		_		(9,833)				
Non-cash restructuring expense paid through stock and equipment		_		196				
Changes in operating assets and liabilities:								
Accounts receivable		12		172				
Due from related parties		1		145				
Unbilled receivables		56		29				
Inventory		_		180				
Prepaid expenses and other assets		660		1,302				
Accounts payable		17		(51)				
Accrued expenses		(622)		(845)				
Contract termination obligation and other long-term liabilities		(616)		339				
Deferred revenue		_		(277)				
Net cash used in operating activities		(8,202)		(14,404)				
Cash flows from investing activities								
Purchase of property and equipment		(6)		(752)				
Proceeds from sale of discontinued operation and property and equipment		_		10,317				
Change in restricted cash		115		187				
Net cash provided by investing activities		109		9,752				
Cash flows from financing activities								
Proceeds from private placement offering, net of issuance costs		1,966		_				
Proceeds from public stock offering, net of issuance costs		13,318		_				
Taxes paid on employees' behalf related to vesting of stock awards		(12)		(296)				
Net cash provided by (used in) financing activities		15,272		(296)				
Effect of exchange rate changes on cash and cash equivalents		(1)		(12)				
Net increase (decrease) in cash and cash equivalents		7,178		(4,960)				
Cash and cash equivalents at beginning of period		7,309		12,269				
Cash and cash equivalents at end of period	\$	14,487	\$	7,309				
Supplemental Cash Flow Disclosure:								
Interest paid	\$	116	\$	45				
Supplemental Disclosure of Non-cash Information:								
Write-off of deferred financing costs related to Aspire stock purchase agreement	\$	(450)	\$	_				
Stock offering costs remaining in accounts payable and accrued expenses	\$	221	\$					
Deemed dividend related to Series A Preferred Stock beneficial conversion feature	\$	1,427	\$	_				
Lease incentive paid by lessor	\$	_	\$	1,332				
Transfer of equipment to settle contractual liability	\$	_	\$	111				
Issuance of common stock to settle contractual liability	\$	_	\$	85				