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 11, 2022

YIELD10 BIOSCIENCE, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

04-3158289

001-33133

(Commission File Numb	er)	(IRS Employer Identification No.)			
19 Presidential Way, Woburn, M (Address of Principal Executive		01801 (Zip Code)			
	(617) 583-1700 (Registrant's Telephone Number, Inc.	luding Area Code)			
(Fo	ormer Name or Former Address, if Cha	nged Since Last Report)			
Check the appropriate box below if the Form 8-I following provisions (<i>see</i> General Instruction A	ž ,	atisfy the filing obligation of the registrant under any of the			
☐ Written communications pursuant to Rule 4	.25 under the Securities Act (17 CFR 2	30.425)			
$\hfill \square$ Soliciting material pursuant to Rule 14a-12	under the Exchange Act (17 CFR 240.	14a-12)			
☐ Pre-commencement communications pursua	ant to Rule 14d-2(b) under the Exchang	ge Act (17 CFR 240.14d-2(b))			
☐ Pre-commencement communications pursua	ant to Rule 13e-4(c) under the Exchang	ge Act (17 CFR 240.13e-4(c)).			
	Securities registered pursuant to Secti	on 12(b) of the Act:			
<u>Title of each class</u> Common Stock	<u>Trading Symbol(s).</u> YTEN	Name of each exchange on which registered The Nasdaq Capital Market			
Indicate by check mark whether the registrant is chapter) or Rule 12b-2 of the Securities Exchange		ed in Rule 405 of the Securities Act of 1933 (§230.405 of this oter).			
Emerging growth company $\ \Box$					
If an emerging growth company, indicate by che or revised financial accounting standards provide		t to use the extended transition period for complying with any new hange Act. \square			

Item 2.02 Results of Operations and Financial Condition.

On May 11, 2022, Yield10 Bioscience, Inc. issued a press release announcing the financial results for its fiscal year ended December 31, 2021.	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.

Description	
Press Release dated May 11, 2022 announcing financial results for the three months ending March 31, 2022	
Cover Page Interactive Data File (embedded within the Inline XBRL document)	
	Press Release dated May 11, 2022 announcing financial results for the three months ending March 31, 2022

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.

May 11, 2022 By: /s/ Oliver P. Peoples

Oliver P. Peoples

President & Chief Executive Officer



Yield10 Bioscience Announces First Quarter 2022 Financial Results

-Management will host a conference call today at 4:30 p.m. (ET) to review financial results and provide a corporate update

WOBURN, Mass. - May 11, 2022 - Yield10 Bioscience, Inc. (Nasdaq:YTEN) ("Yield10" or the "Company"), an agricultural bioscience company, today reported financial results for the three months ended March 31, 2022.

"The development of Camelina as a commercial oilseed crop addresses three fundamental challenges facing not just our generation but future generations as well: climate change, global food security and plastic waste," said Oliver Peoples, Ph.D., Chief Executive Officer of Yield10 Bioscience. "We are operationalizing our commercial plan to launch Camelina as a platform crop to supply low-carbon feedstock oil for the biofuel market and to produce omega-3 nutritional oil and PHA bioplastic longer term. In the first quarter, we hired Darren Greenfield to lead seed operations and we recently named Dr. Willie Loh, a former Cargill executive, as a commercial and technical advisor who will provide important insights and guidance as we execute our commercial plans for Camelina oil.

"We are poised to begin engaging growers for seed production under contract in the U.S. and Canada as well as securing supply chain partners for offtake of seed for crushing. This activity has been initiated in 2022 and will continue to ramp up in 2023. In support of this plan, we have identified spring and winter Camelina varieties for initial commercialization in the North American biofuels market.

"Harvest of our 2021/2022 winter field trials is currently underway and will enable us to evaluate the performance of various spring and winter varieties across a range of geographies and provide seed for scale up. Designed to generate proof points on a broad range of Camelina varieties and traits, our 2022 spring field program will be our most extensive to date. Permitting is now complete and planting has begun for this program that is designed to evaluate herbicide tolerance, pest resistance, seed yield, oil content and other key aspects of Camelina performance. In addition, we also expect to

plant PHA Camelina at acre-scale during the second quarter of 2022 and continue to support Rothamsted Research in the development of Camelina omega-3 (DHA+EPA) nutritional oil.

"As 2022 progresses, we expect to continue building our commercial capabilities and to continue protecting our crop discoveries with intellectual property and plant variety registrations in our target markets. As global trends drive interest in Camelina and in new crop yield traits discovered by our team using GRAIN, we remain encouraged by ongoing discussions around collaborative opportunities for Yield10," said Peoples.

Recent Accomplishments

- Establishing commercial capabilities: In the first quarter, Yield10 appointed Darren Greenfield as senior director of seed operations. Mr. Greenfield brings more than 25 years of experience with major agricultural companies managing the development and commercial production of proprietary canola plant varieties. Yield10 recently named Willie Loh, Ph.D. as a special commercial advisor to the Company. Dr. Loh most recently served as Vice President, Market Development, Global Edible Oils division at Cargill and brings more than 25 years of experience in the area of commodity and specialty oils, including omega-3.
- 2022 seed scale up and field test program underway: Yield10 plans to evaluate candidate Camelina lines for
 herbicide tolerance to identify lead and back up lines for commercial development and regulatory approval. In addition, a
 prototype Camelina PHA line will be grown at acre-scale to produce PHA for process development and business
 development purposes. Further objectives for the field test program include the ongoing evaluation of traits C3007 and
 C3020 as well as identifying candidate Camelina lines resistant to downy mildew, a fungal pathogen.
- 2021/2022 winter season field testing and seed scale up on track: Yield10's winter season Camelina program
 remains on track. The objective of the program is to scale up seed of Camelina line E3902 and two winter Camelina
 lines, as well as to determine if winter planting in certain U.S. geographies could be viable for spring Camelina lines. The
 harvest of seed from sites in the U.S. and Canada is ongoing and is expected to be completed by the end of the second
 quarter of 2022.
- New patents granted: A new patent was granted in Australia covering trait C3007 for boosting seed oil content in oilseed crops. Yield10 is the exclusive licensee of this intellectual property from the University of Missouri. A new patent was also granted in Canada covering advanced technology to produce omega-3 oil in Camelina. Yield10 has an exclusive option to secure a commercial license to this technology.

Geopolitical Uncertainty and COVID-19 Impact on Operations

The Company has implemented business continuity plans to address the COVID-19 pandemic and minimize disruptions to ongoing operations. In addition, the conflict in Ukraine has resulted in significant uncertainty in the agriculture and commodities markets, and may have a significant impact on the Company's business and operations. To date, despite the pandemic, Yield10 has been able to move forward with the operational steps required to execute its 2021-2022 winter field trials and start up its 2022 spring field trials in Canada and the United States. However, it is possible that any potential future closures of research facilities, should they continue for an extended time, or delays in receiving supplies and materials needed to conduct field trials and research, or economic repercussions of the pandemic or other geopolitical uncertainty, such as the ongoing conflict between Ukraine and Russia, could adversely impact the Company's anticipated time frames for evaluating and/or reporting data from our field trials and other work we plan to accomplish during 2022 and beyond.

FIRST QUARTER 2022 FINANCIAL OVERVIEW

Cash Position

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.

Yield10 ended the first quarter of 2022 with \$12.7 million in unrestricted cash and investments; a net decrease of \$3.3 million from unrestricted cash and investments of \$16.0 million reported as of December 31, 2021. The Company used \$3.1 million in cash for its operating activities during the three months ended March 31, 2022, in comparison to \$2.6 million used for operating activities during the three months ended March 31, 2021. The greater use of cash for operating activities was primarily the result of Yield10's greater net loss of \$3.3 million during the first quarter of 2022 in comparison to a net loss of \$2.6 million reported for the same quarter of last year. The greater loss is due to the Company's increased operating expenses related to staffing, expanded Camelina spring and winter field trials, increased regulatory-related expenditures as well as due to seed scale up and other early stage seed commercialization activities.

The Company continues to estimate total net cash usage for the full year ended December 31, 2022 in a range of \$12.0 to \$12.5 million as it continues its controlled growth to develop proprietary Camelina plant varieties and to support the launch of its Camelina products. Yield10's present capital resources are expected to fund its planned operations into the first quarter of 2023. The Company's ability to continue operations after its current cash resources are exhausted is dependent upon 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.

Operating Results

Research grant revenue for the three months ended March 31, 2022 was \$0.1 million in comparison to grant revenue of \$0.2 million recorded during the three months ended March 31, 2021. Research and development expenses were \$1.8 million during the first three months of 2022 compared to \$1.3 million recorded during the first three months of 2021. General and administrative expenses were \$1.7 million and \$1.4 million for the three months ended March 31, 2022 and 2021, respectively.

Yield10 reported a net loss of \$3.3 million for the quarter ended March 31, 2022, or \$0.68 per share, as compared to a net loss of \$2.6 million, or \$0.60 per share, for the quarter ended March 31, 2021.

Conference Call Information

Yield10 Bioscience management will host a conference call today at 4:30 p.m. (ET) to discuss the first quarter 2022 results. The Company also will provide a corporate update 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 events 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 13728757. The replay will be available until May 25, 2022. In addition, the webcast will be archived on the Company's website in the investor relations events section.

About Yield10 Bioscience

Yield10 Bioscience, Inc. is an agricultural bioscience company that is using its differentiated trait gene discovery platform, the "Trait Factory", to develop improved Camelina varieties for the production of proprietary seed products, and to discover high value genetic traits for the agriculture and food industries. Our goals are to efficiently establish a high value seed products business based on developing superior varieties of Camelina for the production of feedstock oils for renewable diesel, PHA bioplastics and omega-3 (DHA+EPA) oils, and to license our yield traits to major seed companies for commercialization in major row crops, including corn, soybean and canola. Yield10 is headquartered in Woburn, MA and has an Oilseeds Center of Excellence in Saskatoon, Canada.

For more information about the company, please visit <u>www.yield10bio.com</u>, or follow the Company on <u>Twitter</u>, <u>Facebook</u> and <u>LinkedIn</u>. (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 cash position, cash forecasts and runway, expectations related to research and development activities, intellectual property, the expected regulatory path for traits, reproducibility of data from field tests, the timing of completion of additional greenhouse and field test studies, the

outcomes of 2021-2022 winter field tests and seed scale-up activities, the signing of research licenses and collaborations, including whether the objectives of those collaborations will be met, whether the Company will be able to generate proof points for traits in development and advance business discussions around its Camelina business plan, the potential impact on operations of the COVID-19 pandemic, the geopolitical uncertainty caused by the conflict between Ukraine and Russia, and value creation as well as the overall 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:

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FischTank Marketing and PR

(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,		
	2022		2021	
Revenue:				
Grant revenue	\$ 149	\$	196	
Total revenue	149		196	
Expenses:				
Research and development	1,763		1,316	
General and administrative	1,707		1,432	
Total expenses	3,470		2,748	
Loss from operations	(3,321)	(2,552)	
Other income (expense):				
Other income (expense), net	(1)	(1)	
Total other income (expense)	(1)	(1)	
Loss from operations before income taxes	(3,322)	(2,553)	
Income tax provision	(9)	(8)	
Net loss	\$ (3,331) \$	(2,561)	
Basic and diluted net loss per share	\$ (0.68) \$	(0.60)	
Number of shares used in per share calculations:				
Basic and diluted	4,888,915		4,296,129	

YIELD10 BIOSCIENCE, INC. CONDENSED CONSOLIDATED BALANCE SHEETS UNAUDITED

(In thousands, except share and per share amounts)

]	March 31, 2022		December 31, 2021
Assets				
Current Assets:				
Cash and cash equivalents	\$	2,128	\$	5,329
Short-term investments		10,614		10,661
Accounts receivable		124		164
Unbilled receivables		58		34
Prepaid expenses and other current assets		451		436
Total current assets		13,375		16,624
Restricted cash		264		264
Property and equipment, net		945		890
Right-of-use assets		2,259		2,354
Other assets		261		283
Total assets	\$	17,104	\$	20,415
Liabilities and Stockholders' Equity				
Current Liabilities:				
Accounts payable	\$	24	\$	83
Accrued expenses	Ψ	823	Ψ	1.136
Current portion of lease liabilities		529		514
Total current liabilities		1,376	_	1,733
Lease liabilities, net of current portion		2,512		2,649
Other long-term liabilities		5		7
Total liabilities		3,893		4,389
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); 60,000,000 shares authorized at March 31, 2022 and December 31, 2021; 4,893,403 and 4,881,851 shares issued and outstanding at March 31, 2022 and December 31, 2021, respectively		49		49
Additional paid-in capital		402,817		402,283
Accumulated other comprehensive loss		(193)		(175)
Accumulated deficit		(389,462)		(386,131)
Total stockholders' equity		13,211		16,026
Total liabilities and stockholders' equity	\$	17,104	\$	20,415

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

Three	Months	Ended
	March 3	31,

	 March 31,		
	 2022		2021
Cash flows from operating activities			
Net loss	\$ (3,331)	\$	(2,561)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	59		54
Charge for 401(k) company common stock match	45		44
Stock-based compensation	523		324
Non-cash lease expense	95		87
Deferred income tax provision	6		6
Changes in operating assets and liabilities:			
Accounts receivable	40		47
Unbilled receivables	(24)		(93)
Prepaid expenses and other assets	(2)		(6)
Accounts payable	(59)		51
Accrued expenses	(330)		(480)
Lease liabilities	(122)		(109)
Other liabilities	 (2)	_	(1)
Net cash used in operating activities	(3,102)		(2,637)
Cash flows from investing activities			
Purchase of property and equipment	(114)		(101)
Purchase of investments	_		(869)
Proceeds from the maturity of short-term investments	 26		3,000
Net cash (used in) provided by investing activities	(88)		2,030
Cash flows from financing activities			
Proceeds from warrants exercised	_		3,856
Proceeds from public offering, net of issuance costs	_		11,993
Taxes paid on employees' behalf related to vesting of stock awards	(14)		(83)
Net cash (used in) provided by financing activities	(14)		15,766
Effect of exchange rate changes on cash, cash equivalents and restricted cash	 3		_
Net (decrease) increase in cash, cash equivalents and restricted cash	(3,201)		15,159
Cash, cash equivalents and restricted cash at beginning of period	5,593		3,687
Cash, cash equivalents and restricted cash at end of period	\$ 2,392	\$	18,846