
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

SCHEDULE 13D

(Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT
TO RULE 13d-2(a)
(Amendment No. 2)*

Yield10 Bioscience, INC

(Name of Issuer)

COMMON STOCK, \$0.01 PAR VALUE PER SHARE
(Title of Class of Securities)

98585K201
(CUSIP Number)

Matthew Strobeck
c/o Birchview Capital
688 Pine Street, Suite D
Burlington, VT 05401
(802) 923-3080

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

December 21, 2017

(Date of Event Which Requires Filing of This Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

(Continued on the following pages)

(Page 1 of 12 Pages)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act.

1.	Names of reporting persons Birchview Fund, LLC EIN 46-4846115	
2.	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC use only	
4.	Source of funds OO	
5.	Check box if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7.	Sole voting power 186,079 (1)
	8.	Shared voting power 0
	9.	Sole dispositive power 186,079 (1)
	10.	Shared dispositive power 0
11.	Aggregate amount beneficially owned by each reporting person 186,079 (1)	
12.	Check box if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/>	
13.	Percent of class represented by amount in Row 11 2.2%	
14.	Type of reporting person CO	

(1) Includes 70,599 of Common Stock underlying warrants exercisable at any time by Birchview Fund, LLC, the holder thereof.

1.	Names of reporting persons Birchview Capital, LP EIN 38-3924650	
2.	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC use only	
4.	Source of funds OO	
5.	Check box if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7.	Sole voting power 350,536 (1)
	8.	Shared voting power 0
	9.	Sole dispositive power 350,536 (1)
	10.	Shared dispositive power 0
11.	Aggregate amount beneficially owned by each reporting person 350,536 (1)	
12.	Check box if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/>	
13.	Percent of class represented by amount in Row 11 4.1%	
14.	Type of reporting person IA, PN	

(1) Includes 70,599 of Common Stock underlying warrants exercisable at any time by Birchview Fund, LLC, the holder thereof. Includes 9,177 of Common Stock underlying warrants exercisable at any time by Matt Strobeck, the holder thereof.

1.	Names of reporting persons Birchview Capital GP, LLC EIN 46-4872561	
2.	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC use only	
4.	Source of funds OO	
5.	Check box if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7.	Sole voting power 350,536 (1)
	8.	Shared voting power 0
	9.	Sole dispositive power 350,536 (1)
	10.	Shared dispositive power 0
11.	Aggregate amount beneficially owned by each reporting person 350,536 (1)	
12.	Check box if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/>	
13.	Percent of class represented by amount in Row 11 4.1%	
14.	Type of reporting person CO	

(1) Includes 70,599 of Common Stock underlying warrants exercisable at any time by Birchview Fund, LLC, the holder thereof. Includes 9,177 of Common Stock underlying warrants exercisable at any time by Matt Strobeck, the holder thereof.

1.	Names of reporting persons Birchview Partners, LLC EIN 46-4853938	
2.	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC use only	
4.	Source of funds OO	
5.	Check box if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or place of organization Delaware	
Number of shares beneficially owned by each reporting person with	7.	Sole voting power 350,536 (1)
	8.	Shared voting power 0
	9.	Sole dispositive power 350,536 (1)
	10.	Shared dispositive power 0
11.	Aggregate amount beneficially owned by each reporting person 350,536 (1)	
12.	Check box if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/>	
13.	Percent of class represented by amount in Row 11 4.1%	
14.	Type of reporting person CO	

(1) Includes 70,599 of Common Stock underlying warrants exercisable at any time by Birchview Fund, LLC, the holder thereof. Includes 9,177 of Common Stock underlying warrants exercisable at any time by Matt Strobeck, the holder thereof.

1.	Names of reporting persons Matthew Strobeck	
2.	Check the appropriate box if a member of a group (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
3.	SEC use only	
4.	Source of funds PF	
5.	Check box if disclosure of legal proceedings is required pursuant to Item 2(d) or 2(e) <input type="checkbox"/>	
6.	Citizenship or place of organization United States	
Number of shares beneficially owned by each reporting person with	7.	Sole voting power 352,713 (1)
	8.	Shared voting power 0
	9.	Sole dispositive power 352,713 (1)
	10.	Shared dispositive power 0
11.	Aggregate amount beneficially owned by each reporting person 352,713 (1)	
12.	Check box if the aggregate amount in Row (11) excludes certain shares <input type="checkbox"/>	
13.	Percent of class represented by amount in Row 11 4.1%	
14.	Type of reporting person IN	

(1) Includes 70,599 of Common Stock underlying warrants exercisable at any time by Birchview Fund, LLC, the holder thereof. Includes 9,177 of Common Stock underlying warrants exercisable at any time by Matt Strobeck, the holder thereof.

Explanatory Note

The following constitutes Amendment No. 2 (the "Amendment No. 2") to the Schedule 13D filed by the undersigned. This Amendment No. 2 amends the Schedule 13D as specifically set forth herein.

ITEM 4. Purpose of Transaction.

Item 4 of the Schedule 13D is hereby amended and restated in its entirety as follows:

December 2017 Underwriting Agreement

On December 19, 2017, the Issuer entered into an Underwriting Agreement (the "Underwriting Agreement") with Ladenburg Thalmann & Co. Inc. (the "Underwriter"), pursuant to which the Issuer agreed to issue and sell, in a registered public offering by the Issuer (the "Public Offering"), 3,828,000 Class A Units (the "Class A Units"), with each Class A Unit consisting of one share of the Company's common stock, par value \$0.01 per share (the "Common Stock"), a warrant to purchase one share of Common Stock, exercisable at a price of \$2.25 for a five year period (a "Series A Warrant"), and a warrant to purchase 0.5 of one share of Common Stock, exercisable at a price of \$2.25 for a nine month period (a "Series B Warrant" and together with the Series A Warrants, the "Warrants"), with each Class A Unit to be offered to the public at an offering price of \$2.25 per Class A Unit

In the Public Offering, the Fund purchased 44,444 shares of Common Stock, 44,444 Series A Warrants and 22,222 Series B Warrants, for an aggregate purchase price of \$100,000.

Additional Disclosure

The Reporting Persons intend to hold the Units (together with the Common Stock, the Warrants and Common Stock underlying the Warrants collectively, the "Securities") for investment purposes in the ordinary course of their business of investing in securities for their own accounts. The Reporting Persons reserve the right to formulate plans and/or make proposals, and take such actions with respect to their investment in the Issuer, including, subject to applicable law, (i) to hold its Securities as a passive investor or as an active investor, (ii) to acquire beneficial ownership of additional Securities in the open market, in privately negotiated transactions or otherwise, (iii) to dispose of all or part of its holdings of Securities, (iv) to take other actions which could involve one or more of the types of transactions or have one or more of the results described in Item 4 of this Schedule 13D, or (v) to change its intention with respect to any or all of the matters referred to in this Item 4.

ITEM 5. Interest in Securities of the Issuer.

Item 5 of the Schedule 13D is hereby amended and restated in its entirety as follows:

(a) The aggregate percentage of shares of Common Stock reported owned by each person named herein is based upon 8,661,379 shares of Common Stock outstanding. This latter number of shares of Common Stock is arrived at by adding the number of shares of Common Stock reported as being outstanding in the Issuer's 10-K filed December 21, 2017 (8,581,603 shares of Common Stock) to the number of shares of Common Stock (79,776 shares of Common Stock) which would be receivable by the Reporting Persons if they were to convert all of the Issuer's Warrants held by them into shares of Common Stock.

(b) As of the date hereof, the Fund beneficially owned 186,079 shares of Common Stock, representing approximately 2.2% of the shares of the Common Stock of the Issuer outstanding. (The Investment Manager is the investment manager of the Fund and may be deemed to have sole power to direct the voting and disposition of the shares of Common Stock held by the Fund (the "Fund Shares"). The Manager is a member of the Fund and may be deemed to have sole power to direct the voting and disposition of the Fund Shares. The GP is the general partner of the Investment Manager and may be deemed to have sole power to direct the voting and disposition of the Fund Shares. Mr. Strobeck is the sole member of the GP, a partner of the Investment Manager and sole member and principal of the Manager and has the power to direct the voting and disposition of the Fund Shares. Each of the Reporting Persons disclaims beneficial ownership of the Fund Shares except to the extent of their pecuniary interest therein, if any.

As of the date hereof, Mr. Strobeck is deemed to beneficially own 352,713 shares of Common Stock, representing approximately 4.1% of the shares of the Common Stock of the Issuer outstanding, which includes the Fund Shares and 166,634 shares of Common Stock beneficially owned by Mr. Strobeck.

The Fund:

- (i) Sole power to vote or to direct the vote: 186,079
- (ii) Shared power to vote or direct the vote: 0
- (iii) Sole power to dispose or to direct the disposition of: 186,079
- (iv) Shared power to dispose of to direct the disposition of: 0

The Investment Manager:

- (i) Sole power to vote or to direct the vote: 350,536
- (ii) Shared power to vote or direct the vote: 0
- (iii) Sole power to dispose or to direct the disposition of: 350,536
- (iv) Shared power to dispose of to direct the disposition of: 0

The GP:

- (i) Sole power to vote or to direct the vote: 350,536
- (ii) Shared power to vote or direct the vote: 0
- (iii) Sole power to dispose or to direct the disposition of: 350,536
- (iv) Shared power to dispose of to direct the disposition of: 0

The Manager:

- (i) Sole power to vote or to direct the vote: 350,536

- (ii) Shared power to vote or direct the vote: 0
- (iii) Sole power to dispose or to direct the disposition of: 350,536
- (iv) Shared power to dispose of to direct the disposition of: 0

Mr. Strobeck:

- (i) Sole power to vote or to direct the vote: 352,713
 - (ii) Shared power to vote or direct the vote: 0
 - (iii) Sole power to dispose or to direct the disposition of: 352,713
 - (iv) Shared power to dispose of to direct the disposition of: 0
- (c) On December 21, 2017, the Fund purchased 44,444 shares of Common Stock, 44,444 Series A Warrants and 22,222 Series B Warrants.
- Except as set forth above, the Reporting Persons have not effected any transaction in the shares of Common Stock in the last 60 days.

(d) Except as set forth in this Schedule 13D, to the knowledge of the Reporting Person, no person had the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, securities covered by this Schedule 13D.

(e) Not applicable.

ITEM 7. Material to be Filed as Exhibits.

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|-----------|---|
| Exhibit 1 | Underwriting Agreement, dated as of December 19, 2017, by and between Yield10 Bioscience, Inc. and Ladenburg Thalmann & Co. Inc. as representative of the several underwriters, if any, named on Schedule I thereto (incorporated by reference to Exhibit 1.1 to the Current Report on Form 8-K filed by the Issuer with the SEC on December 21, 2017). |
| Exhibit 2 | Form of Series A Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by the Issuer with the SEC on December 21, 2017). |
| Exhibit 3 | Form of Series B Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K filed by the Issuer with the SEC on December 21, 2017). |

SIGNATURE

After reasonable inquiry and to the best of the undersigned's knowledge and belief, the undersigned hereby certifies that the information set forth in this statement is true, complete and correct.

Dated: December 29, 2017

BIRCHVIEW FUND, LLC

By: /s/ Richard McCormick
Name: Richard McCormick
Title: CFO

BIRCHVIEW CAPITAL, LP

By: /s/ Matthew Strobeck
Name: Matthew Strobeck
Title: Managing Partner

BIRCHVIEW CAPITAL GP, LLC

By: /s/ Matthew Strobeck
Name: Matthew Strobeck
Title: Partner

BIRCHVIEW PARTNERS, LLC

By: /s/ Matthew Strobeck
Name: Matthew Strobeck
Title: Principal

By: /s/ Matthew Strobeck
Name: Matthew Strobeck