UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT *UNDER THE SECURITIES ACT OF 1933*

Achieve Life Sciences, Inc.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

2835 (Primary Standard Industrial

Classification Code Number)

1040 West Georgia, Suite 1030, Vancouver, British Columbia, V6E 4H1 (604) 210-2217

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

John Bencich Chief Executive Officer Achieve Life Sciences, Inc. 1040 West Georgia, Suite 1030, Vancouver, British Columbia, V6E 4H1 (604) 210-2217

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Alan Smith Amanda Rose Chelsea Anderson Fenwick & West LLP 1191 2nd Ave, 10th Floor Seattle, WA 98101 (206) 389-4510 M. Ali Panjwani, Esq. Pryor Cashman LLP 7 Times Square New York, New York 10036 (212) 421-4100

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an "emerging growth company". See the definitions of "large accelerated filer," "accelerated filer," accelerated f

Large accelerated filer \Box

Accelerated filer \Box

Non-accelerated filer \boxtimes

Smaller reporting company \boxtimes Emerging growth company \square

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 7(a)(2)(B) of the Securities Act.

95-4343413

(I.R.S. Employer

Identification Number)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, par value \$0.001 per share (1)	\$1,903,250	\$207.64
Underwriter's Warrants to Purchase Common Stock (2)	—	—
Common Stock underlying Underwriter's Warrants (3)	\$43,750	\$4.77
Total:	\$1,947,000	\$212.42

(1) The registration fee is calculated in accordance with Rule 457(o) under the Securities Act of 1933, as amended, or the Securities Act. The Registrant previously registered securities with an aggregate offering price not to exceed \$15,906,450 on a Registration Statement on Form S-1, as amended (File No. 333-250074), which was declared effective by the Securities and Exchange Commission on December 2, 2020. In accordance with Rule 462(b) under the Securities Act, an additional amount of shares having a proposed maximum aggregate offering price of \$1,947,000 are hereby registered, which includes the additional shares that the underwriters have the option to purchase.

(2) (3)

No registration fee pursuant to Rule 457(g) under the Securities Act. Represents 5,000 addition number of shares underlying a warrant to be issued to the underwriter of this offering, with an exercise price equal to 125% of the per share public offering price of common stock in this offering. Does not include the securities that the Registrant previously registered on the Registration Statement on Form S-1, as amended (File No. 333-250074).

This Registration Statement shall become effective upon filing in accordance with Rule 462(b) under the Securities Act.

EXPLANATORY NOTE AND INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

Pursuant to Rule 462(b) under the Securities Act of 1933, as amended, Achieve Life Sciences, Inc. ("Registrant") is filing this Registration Statement on Form S-1 (this "Registration Statement") with the Securities and Exchange Commission ("Commission"). This Registration Statement relates to the public offering of securities contemplated by the Registration Statement on Form S-1, as amended (File No. 333-250074) (the "Prior Registration Statement"), which the Registrant originally filed with the Commission on November 13, 2020, as amended, and the Commission declared effective on December 2, 2020.

The Registrant is filing this Registration Statement for the sole purpose of registering an increase in the maximum aggregate offering price of \$1,947,000 of securities of the same classes as were included in the Prior Registration Statement. The increase in the maximum aggregate offering price being registered is in an amount that represents no more than 20% of the maximum aggregate offering price set forth in the Calculation of Registration Fee table contained in the Prior Registration Statement. The information set forth in the Prior Registration Statement and all exhibits to the Prior Registration Statement are incorporated by reference into this Registration Statement.

The required opinions and consents are listed on the Exhibit Index attached hereto and filed herewith.

EXHIBIT INDEX

Exhibit Number	Description
5.1*	Opinion of Fenwick & West LLP
23.1*	Consent of Independent Registered Public Accounting Firm
23.2*	Consent of Fenwick & West LLP (included in Exhibit 5.1)
24.1	Power of Attorney (incorporated by reference to Exhibit 24.1 to the Registration Statement on Form S-1 (Registration No. 333-250074))

Filed herewith

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Seattle, Washington, on December 2, 2020.

ACHIEVE LIFE SCIENCES, INC.

By:

/s/ John Bencich John Bencich

Chief Executive Officer

Chief Executive Officer		
Title	Date	
Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer)	December 2, 2020	
Senior Director of Accounting Operations (Principal Accounting Officer)	December 2, 2020	
Executive Chairman and Director	December 2, 2020	
Director	December 2, 2020	
Director	December 2, 2020	
Director	December 2, 2020	
Director	December 2, 2020	
Director	December 2, 2020	
	Title Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer) Senior Director of Accounting Operations (Principal Accounting Officer) Executive Chairman and Director Director	

*By: <u>/s/ John Bencich</u> John Bencich Attorney-in-Fact



1191 SECOND AVENUE, 10TH FLOOR SEATTLE, WA 98101 TEL: 206.389.4510 FAX: 206.389.4511 WWW.FENWICK.COM

December 2, 2020

Achieve Life Sciences, Inc. 1040 West Georgia, Suite 1030 Vancouver, British Columbia, V6E 4H1

Ladies and Gentlemen:

We have acted as counsel to Achieve Life Sciences, Inc., a Delaware corporation (the "Company"), in connection with the registration statement on Form S-1 (File No. 333-250074) filed with the Securities and Exchange Commission (the "Commission") on November 13, 2020, each amendment thereto, and the registration statement filed by the Company with the Commission on December 2, 2020 pursuant to Rule 462(b) (collectively, the "Registration Statement"), relating to the registration under the Securities Act of 1933, as amended (the "Act"), an aggregate of 2,472,500 shares in Securities (as defined below), which may include 2,150,000 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock") plus 322,500 shares of Common Stock subject to an over-allotment option granted to the underwriter (the "Shares"), and a warrant to purchase 50,000 shares of Common Stock (the "Representative's Warrant"). The Shares, the Representative's Warrant, including the shares of Common Stock issuable upon the conversion of the Representative's Warrant (the "Londerwriting Agreement") to be entered into by and between the "Securities." The Securities are to be sold by the Company pursuant to an underwriting agreement (the "Underwriting Agreement") to be entered into by and between the Company and Lake Street Capital Markets, LLC. The Securities are to be offered and sold in the manner described in the Registration Statement and the related prospectus included therein (the "Prospectus").

In connection with our opinion expressed below we have examined originals or copies of the Company's certificate of incorporation, as amended (the "*Certificate*") and bylaws, as amended (the "*Bylaws*"), certain corporate proceedings of the Company's board of directors (the "*Board*") and stockholders relating to the Registration Statement and the Prospectus, the Representative's Warrant, the Underwriting Agreement and such other agreements, documents, certificates and statements of the Company, its transfer agent and public or government officials, as we have deemed advisable, and have examined such questions of law as we have considered necessary. We have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures on document submitted to us, the conformity to originals of all documents submitted to us as copies, and the absence of any undisclosed termination, waiver or amendment to any document reviewed by us. In giving our opinion, we have also relied upon a good standing certificate regarding the Company issued by the Delaware Secretary of State and representations made to us by the Company.

We render this opinion only with respect to, and express no opinion herein concerning the application or effect of the laws of any jurisdiction other than, the existing Delaware General Corporation Law of the State of Delaware.

Based upon, and subject to, the foregoing, we are of the opinion that:

1. The Shares, when issued against payment therefor as set forth in the Registration Statement, will be validly issued, fully paid and non-assessable.

Achieve Life Sciences, Inc. Page 2

- 2. The Representative's Warrant, when issued as set forth in the Registration Statement, will be legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.
- 3. The Representative's Warrant Shares, when issued and delivered upon exercise of the Representative's Warrant in accordance with the terms thereof, will be validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us, if any, in the Registration Statement, the Prospectus constituting a part thereof and any amendments thereto. We do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder. This opinion is intended solely for use in connection with the issuance and sale of the Securities subject to the Registration Statement and is not to be relied upon for any other purpose. In providing this opinion, we are opining only as to the specific legal issues expressly set forth above, and no opinion shall be inferred as to any other matter or matters. This opinion is rendered on, and speaks only as of, the date first written above, and does not address any potential change in facts or law that may occur after the date of this opinion. We assume no obligation to advise you of any fact, circumstance, event or change in the law or the facts that may hereafter be brought to our attention, whether or not such occurrence would affect or modify any of the opinions expressed herein.

[Signature Page Follows]

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Very truly yours,

/s/ Fenwick & West LLP

FENWICK & WEST LLP

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this registration statement on Form S-1 of Achieve Life Sciences, Inc. of our report dated March 13, 2020 relating to the financial statements of Achieve Life Sciences, Inc., which appears in Achieve Life Sciences, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2019. We also consent to the reference to us under the heading "Experts" in such registration statement.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants Vancouver, Canada December 2, 2020