

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

SCHEDULE 14A INFORMATION

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934 (Amendment No.)**

Filed by the Registrant Filed by a party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

2seventy bio, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if Other Than The Registrant)

Payment of Filing Fee (Check all boxes that apply):

- No fee required.
- Fee paid previously with preliminary materials
- Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11



April 26, 2022

Dear Stockholder:

You are cordially invited to attend the 2022 Annual Meeting of Stockholders of 2seventy bio, Inc. We intend to hold the Annual Meeting on June 8, 2022 at 8:30 a.m. EDT. Given the continuing COVID-19 pandemic, we have determined that the Annual Meeting will be held in a virtual meeting format only via the Internet, with no physical in-person meeting. You will be able to attend and participate in the Annual Meeting online by visiting the meeting center at www.virtualshareholdermeeting.com/TSVT2022 and entering your control number found on your enclosed proxy card, where you will be able to listen to the Annual Meeting live, submit questions and vote. We encourage you to vote your shares prior to the annual meeting.

Details regarding admission to the Annual Meeting and the business to be conducted are more fully described in the accompanying Notice of Annual Meeting and Proxy Statement. At this Annual Meeting, the agenda includes the election of two Class I directors for three-year terms and the ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022.

Under Securities and Exchange Commission rules, we are providing access to the proxy materials for the Annual Meeting to stockholders via the Internet. Accordingly, you can access the proxy materials and vote at www.proxyvote.com. Instructions for accessing the proxy materials and voting are described below and in the Notice of Annual Meeting that you received in the mail. Your vote is very important. Whether or not you plan to attend the Annual Meeting, please carefully review our proxy statement and then cast your vote, regardless of the number of shares you hold. If you are a stockholder of record, you may vote over the Internet, by telephone, or, if you request to receive a printed set of the proxy materials, by completing, signing, dating and mailing the accompanying proxy card in the return envelope. Submitting your vote via the Internet or by telephone or proxy card will not affect your right to vote at the Annual Meeting if you decide to attend the Annual Meeting virtually. If your shares are held in street name (held for your account by a broker or other nominee), you will receive instructions from your broker or other nominee explaining how to vote your shares, and you will have the option to cast your vote by telephone or over the Internet if your voting instruction form from your broker or nominee includes instructions and a toll-free telephone number or Internet website to do so. In any event, to be sure that your vote will be received in time, please cast your vote by your choice of available means at your earliest convenience.

We hope that you will join us on June 8, 2022. Your continuing interest in 2seventy is very much appreciated.

Sincerely,

A handwritten signature in black ink that reads "Nick Leschly". The signature is written in a cursive, flowing style.

Nick Leschly
President & Chief Executive Officer



NOTICE OF 2022 ANNUAL MEETING OF STOCKHOLDERS

Date	June 8, 2022
Time	8:30 a.m. Eastern Time
Virtual Meeting	This year's Annual Meeting will be a virtual meeting via live webcast on the internet at www.virtualshareholdermeeting.com/TSVT2022 .
Record Date	April 11, 2022. Only stockholders of record at the close of business on the record date are entitled to receive notice of, and to vote at, the Annual Meeting.
Purpose	<ul style="list-style-type: none">•To elect Nick Leschly and Ramy Ibrahim, M.D. as Class I members of the Board of Directors, to serve until our 2025 Annual Meeting of Stockholders and until their successors are duly elected and qualified;•To ratify the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022; and•To transact any other business that may properly come before the meeting or any adjournment thereof.
Proxy Voting	If you are a stockholder of record, please vote via the Internet or, for shares held in street name, please submit the voting instruction form you receive from your broker or nominee, as soon as possible so your shares can be voted at the Annual Meeting. You may submit your voting instruction form by mail. If you are a stockholder of record, you may also vote by telephone or by submitting a proxy card by mail. If your shares are held in street name, you will receive instructions from your broker or other nominee explaining how to vote your shares, and you may also have the choice of instructing the record holder as to the voting of your shares over the Internet or by telephone. Follow the instructions on the voting instruction form you received from your broker or nominee.
Corporate Headquarters	60 Binney Street, Cambridge, MA 02142

By order of the Board of Directors,
Teresa Jurgensen, Secretary

Cambridge, Massachusetts
April 26, 2022

2seventy bio, Inc. ("2seventy bio" or "the Company") is an "emerging growth company" under applicable federal securities laws and therefore permitted to conform with certain reduced public company reporting requirements. As an emerging growth company, we provide in this proxy statement the scaled disclosure permitted under the Jumpstart Our Business Startups Act of 2012 (the JOBS Act), including the compensation disclosures required of a "smaller reporting company," as that term is defined in Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act). In addition, as an emerging growth company, we are not required to conduct votes seeking approval, on an advisory basis, of the compensation of our named executive officers or the frequency with which such votes must be conducted. We will remain an "emerging growth company" until the earliest of (i) the last day of the fiscal year following the fifth anniversary of becoming a public company; (ii) the last day of the fiscal year in which our total annual gross revenue is equal to or more than \$1.07 billion; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, or the SEC.

**Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to Be Held on
June 8, 2022**

This communication is not a form for voting and presents only an overview of the more complete proxy materials, which contain important information and are available to you on the Internet or by mail. We encourage you to access and review the proxy materials before voting.

The Notice of 2022 Annual Meeting of Stockholders, proxy statement and our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, are available at ir.2seventybio.com.

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**SEVENTY BIO, INC.
60 BINNEY STREET
CAMBRIDGE, MASSACHUSETTS 02142**

**PROXY STATEMENT
FOR THE 2022 ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON JUNE 8, 2022
AT 8:30 AM EDT**

GENERAL INFORMATION

When are this proxy statement and the accompanying materials scheduled to be sent to stockholders?

We have elected to provide access to our proxy materials to our stockholders via the Internet. Accordingly, on or about April 29, 2022, we will begin mailing a Notice of Internet Availability of Proxy Materials and the proxy materials, including the Notice of 2022 Annual Meeting of Stockholders, this proxy statement and accompanying proxy card or, for shares held in street name (held for your account by a broker or other nominee), voting instruction form, and the Annual Report on Form 10-K for the year ended December 31, 2021 will be made available to stockholders on the Internet on the same date.

Why did I receive a Notice of Internet Availability of Proxy Materials instead of a full set of proxy materials?

Pursuant to rules adopted by the Securities and Exchange Commission (SEC), we are providing access to our proxy materials over the Internet rather than printing and mailing the proxy materials. We believe electronic delivery will expedite the receipt of materials and will help lower our costs and reduce the environmental impact of our annual meeting materials. Therefore, a Notice of Internet Availability will be mailed to holders of record and beneficial owners of our common stock starting on or around April 29, 2022. The Notice of Internet Availability will provide instructions as to how stockholders may access and review the proxy materials, including the Notice of Annual Meeting, proxy statement, proxy card and Annual Report on Form 10-K, on the website referred to in the Notice of Internet Availability or, alternatively, how to request that a copy of the proxy materials, including a proxy card, be sent to them by mail. The Notice of Internet Availability will also provide voting instructions. In addition, stockholders of record may request to receive the proxy materials in printed form by mail or electronically by e-mail on an ongoing basis for future stockholder meetings. Please note that, while our proxy materials are available at the website referenced in the Notice of Internet Availability, and our Notice of Annual Meeting, proxy statement and Annual Report on Form 10-K are available on our website, no other information contained on either website is incorporated by reference in or considered to be a part of this document.

How do I attend and participate in the Annual Meeting online?

To attend and participate in the Annual Meeting, stockholders will need to access the live audio webcast of the meeting. To do so, you will need to log in at www.virtualshareholdermeeting.com/TSVT2022 and use your sixteen-digit control number, which can be found on the Notice, voting instruction form or proxy card you received. If your shares are held in "street name" through a bank, broker or other nominee and you do not have a sixteen-digit control number, you must contact such broker, bank or nominee so that you can be provided with a control number or legal proxy. Those without a control number may attend as guests of the Annual Meeting but will not have the option to vote or ask questions during the meeting.

Will I be able to ask questions during the Annual Meeting?

If you have logged into the Annual Meeting using your sixteen-digit control number and wish to ask a question during the meeting, you may do so on the virtual meeting website by typing your question into the "Ask a Question" field, and clicking "Submit." Those without a control number will not have the option to ask questions during the meeting.

If questions submitted are repetitive as to a particular topic, the Chairman of the meeting may limit discussion on such topic. During the formal portion of the meeting, all questions presented should relate directly to the proposal under discussion. We will also hold a question and answer period at the end of the meeting, as time permits, during which time we welcome questions not relating to specific proposals.

For further details, please review the Annual Meeting's Rules of Conduct, which will be posted on www.virtualshareholdermeeting.com/TSVT2022 during the Annual Meeting. Following the Annual Meeting, an archived replay of the audio webcast will be available on the Investor Relations section of our website for approximately ninety days thereafter.

How can I get help if I have trouble checking in or listening to the meeting online?

Beginning 15 minutes prior to the start of and during the Annual Meeting, we will have technicians ready to assist you with any technical difficulties you may have accessing or hearing the virtual meeting or submitting questions. If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number that will be posted on the Virtual Shareholder Meeting log in page.

Who is soliciting my vote?

The Board of Directors of 2seventy bio, Inc. is soliciting your vote for the 2022 Annual Meeting of Stockholders.

When is the record date for the Annual Meeting?

The Board has fixed the record date for the Annual Meeting as of the close of business on April 11, 2022.

How many votes can be cast by all stockholders?

A total of 37,615,797 shares of our common stock were outstanding on April 11, 2022, all of which are entitled to be voted at the Annual Meeting with respect to all matters to be acted upon at the Annual Meeting. Each stockholder of record is entitled to one vote on each matter for each share of our common stock held by such stockholder. None of our shares of undesignated preferred stock were outstanding on the record date.

How do I vote?

By attending the Annual Meeting Online

If you are a stockholder of record, you may vote online at the Annual Meeting by attending the Annual Meeting online and following the instructions posted at www.virtualshareholdermeeting.com/TSVT2022. If you hold your shares through a bank or broker and wish to vote online at the meeting, you must obtain a valid proxy from the firm that holds your shares.

By Proxy

If you do not wish to attend the Annual Meeting online, you may vote by proxy. You can vote by proxy over the Internet by following the instructions provided in the Notice, or, if you requested printed copies of the proxy materials by mail, you can vote by mailing your proxy as described in the proxy materials. In order to be counted, proxies submitted by Internet must be received by the cutoff time of 11:59 p.m. Eastern Time on June 7, 2022. Proxies submitted by mail must be received before the start of the Annual Meeting.

If you complete and submit your proxy before the Annual Meeting, the persons named as proxies will vote the shares represented by your proxy in accordance with your instructions. If you submit a proxy without giving voting instructions, your shares will be voted in the manner recommended by the board of directors on all matters presented in this proxy statement, and as the persons named as proxies may determine in their discretion with respect to any other matters properly presented at the Annual Meeting. You may also authorize another person or persons to act for you as proxy in a writing, signed by you or your authorized representative, specifying the details of those proxies' authority. The original writing must be given to each of the named proxies, although it may be sent to them by electronic transmission if, from that transmission, it can be determined that the transmission was authorized by you.

If any other matters are properly presented for consideration at the Annual Meeting, including, among other things, consideration of a motion to adjourn the Annual Meeting to another time or place (including, without limitation, for the purpose of soliciting additional proxies), the persons named in your proxy and acting thereunder will have discretion to vote on those matters in accordance with their best judgment. We do not currently anticipate that any other matters will be raised at the Annual Meeting.

What are the Board’s recommendations on how to vote my shares?

Our Board recommends a vote:

Proposal 1: **FOR** election of the two Class I director nominees

Proposal 2: **FOR** ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm

Who pays the cost for soliciting proxies?

We will pay the cost for the solicitation of proxies by the Board. The solicitation of proxies will be made primarily by mail and through Internet access to materials. Proxies may also be solicited personally, by telephone, fax or e-mail by employees of 2seventy bio without any remuneration to such individuals other than their regular compensation. We will also reimburse brokers, banks, custodians, other nominees and fiduciaries for forwarding these materials to their principals to obtain the authorization for the execution of proxies.

Will my shares be voted if I do not return my proxy?

If your shares are registered directly in your name, your shares will not be voted if you do not vote over the Internet, by telephone, by returning your proxy or by ballot at the Annual Meeting. If your shares are held in street name, your bank, broker or other nominee may under certain circumstances vote your shares if you do not timely return your proxy. Banks, brokers and other nominees can vote customers’ unvoted shares on routine matters, but cannot vote such shares on non-routine matters. If you do not timely return a proxy to your bank, broker or other nominee to vote your shares, your bank, broker or other nominee may, on routine matters, either vote your shares or leave your shares unvoted. Your bank, broker or other nominee cannot vote your shares on any non-routine matter. The election of directors (Proposal 1) is a non-routine matter. The ratification of the appointment of our independent registered public accounting firm (Proposal 2) is a routine matter. We encourage you to provide voting instructions to your bank, broker or other nominee by giving your proxy to them. This ensures that your shares will be voted at the Annual Meeting according to your instructions. You should receive directions from your bank, broker or other nominee about how to submit your proxy to them at the time you receive this proxy statement.

How do I revoke my proxy?

If you are a stockholder of record, you may revoke your proxy by (1) following the instructions on the Notice and entering a new vote over the Internet or by telephone by the cutoff time of 11:59 p.m. Eastern Time on June 7, 2022, (2) attending the Annual Meeting online and voting by following the instructions at www.virtualshareholdermeeting.com/TSVT2022 or (3) by filing an instrument in writing revoking the proxy or submitting another duly executed proxy card bearing a later date with our Corporate Secretary. Any written notice of revocation or subsequent proxy card must be received by our Corporate Secretary prior to the taking of the vote at the Annual Meeting. Such written notice of revocation or subsequent proxy card should be hand delivered to our Corporate Secretary or sent to our principal executive offices at 60 Binney Street, Cambridge, Massachusetts 02142, Attention: Corporate Secretary.

If a broker, bank or other nominee holds your shares, you must contact such broker, bank or nominee in order to find out how to change your vote.

How is a quorum reached?

The presence, in person or by proxy, of holders of at least a majority of the total number of outstanding shares entitled to vote is necessary to constitute a quorum for the transaction of business at the Annual Meeting. Shares held of record by stockholders or brokers, bankers or other nominees who do not return a signed and dated proxy or attend the Annual Meeting in person will not be considered present or represented at the Annual Meeting and will not be counted in determining the presence of a quorum. Abstentions and broker non-votes, if any, will be counted for purposes of determining whether a quorum is present for the transaction of business at the meeting. Under the General Corporation Law of the State of Delaware, shares that are voted “abstain” or “withheld” and broker “non-votes” are counted as present for purposes of determining whether a quorum is present at the Annual Meeting. If a quorum is not present, the meeting may be adjourned until a quorum is obtained.

What vote is required to approve each item and how are votes counted?

Votes cast by proxy or in person at the Annual Meeting will be counted by the persons appointed by 2seventy bio to act as tabulators for the meeting. The tabulators will count all votes FOR and AGAINST, abstentions, frequency votes, and broker non-votes, as applicable, for each matter to be voted on at the Annual Meeting. Abstentions and broker non-votes are not counted as votes cast and, therefore, do not have the effect of votes in opposition to such proposals. A broker non-vote occurs when a nominee holding shares for a beneficial owner does not vote on a particular proposal because the nominee does not have discretionary voting power with respect to that item and has not received instructions from the beneficial owner.

Proposal 1 - Election of two Class I director nominees

For the election of the two Class I director nominees, each director nominee presented must receive a plurality of the votes cast and entitled to vote on the proposal, meaning that the two director nominees receiving the most votes will be elected. Shares voting "withheld" will have no effect on the outcome of Proposal 1. Additionally, **Proposal 1 is a non-routine matter**. Therefore, if your shares are held by your bank, broker or other nominee in street name and you do not vote your shares, your bank, broker or other nominee cannot vote your shares on Proposal 1. Shares held in street name by banks, brokers or nominees who indicate on their proxies that they do not have authority to vote the shares on Proposal 1 will not be counted as votes FOR or AGAINST any director nominee and will be treated as broker non-votes. As a result, broker non-votes will have no effect on the outcome of Proposal 1.

Proposal 2 - Ratification of selection of Ernst & Young LLP as our independent registered public accounting firm

For the ratification of the selection of Ernst & Young LLP as our independent registered public accounting firm for our 2022 fiscal year, the votes cast FOR must exceed the votes cast AGAINST. Only FOR and AGAINST votes will affect the outcome. Abstentions will have no effect on the voting of Proposal 2. **Proposal 2 is a routine matter**. Therefore, if your shares are held by your bank, broker or other nominee in street name and you do not vote your shares, your bank, broker or other nominee may vote your shares on Proposal 2.

Could other matters be decided at the Annual Meeting?

2seventy does not know of any other matters that may be presented for action at the Annual Meeting. Should any other business come before the meeting, the persons named on the enclosed proxy will have discretionary authority to vote the shares represented by such proxies in accordance with their best judgment. If you hold shares through a broker, bank or other nominee as described above, they will not be able to vote your shares on any other business that comes before the Annual Meeting unless they receive instructions from you with respect to such matter.

What happens if the meeting is postponed or adjourned?

If you have completed a proxy, your proxy may be voted at the postponed or adjourned meeting. You will still be able to revoke and change your proxy until it is voted.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be published in a Current Report on Form 8-K, that we expect to file with the SEC within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the Annual Meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

What does it mean if I receive more than one proxy card or voting instruction form?

It means that you have multiple accounts at the transfer agent or with brokers. Please complete and return all proxy cards or voting instruction forms to ensure that all of your shares are voted.

**PROPOSAL 1
ELECTION OF DIRECTORS**

In accordance with Delaware law and our certificate of incorporation and By-laws, our Board is divided into three classes of approximately equal size. The members of each class are elected to serve a three-year term with the term of office of each class ending in successive years. Nick Leschly and Ramy Ibrahim, M.D. are the directors whose terms expire at this Annual Meeting. Each of Nick Leschly and Ramy Ibrahim has been nominated for and has agreed to stand for re-election to the Board to serve as a Class I director of the Company until the 2025 Annual Meeting and until his successor is duly elected.

Our By-laws provide for a plurality voting standard for the election of directors. It is intended that, unless you give contrary instructions, shares represented by proxies solicited by the Board will be voted for the election of the two director nominees listed below. We have no reason to believe that any director nominee will be unavailable for election at the Annual Meeting. In the event that one or more director nominees is unexpectedly not available to serve, proxies may be voted for another person nominated as a substitute by the Board, or the Board may reduce the number of directors to be elected at the Annual Meeting. Information relating to each director nominee and for each continuing director, including his or her period of service as a director of 2seventy bio, principal occupation and other biographical material is shown below.

**THE BOARD UNANIMOUSLY RECOMMENDS THAT YOU VOTE
FOR
EACH OF THESE DIRECTOR NOMINEES FOR CLASS I DIRECTOR:
NICK LESCHLY
RAMY IBRAHIM, M.D.
(PROPOSAL 1 ON YOUR PROXY CARD)**

CORPORATE GOVERNANCE

Board Composition

We currently have eight directors and the terms of office of the directors are divided into three classes:

Class I	Term expiring 2022
Class II	Term expiring 2023
Class III	Term expiring 2024

At each Annual Meeting, the successors to directors whose terms will then expire shall serve from the time of election and qualification until the third Annual Meeting following election and until their successors are duly elected and qualified. A resolution of the Board may change the authorized number of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of the Board may have the effect of delaying or preventing changes in control or management of our Company.

CLASS I DIRECTOR NOMINEES:

The following table identifies our nominees for Class I directors, and sets forth their principal occupation and business experience during the last five years and their ages as of April 15, 2022.

Name	Positions and Offices Held with 2seventy	Director Since	Age
Nick Leschly	President, Chief Executive Officer and Director	2021	49
Ramy Ibrahim, M.D.	Director	2021	47

CLASS I DIRECTOR NOMINEES:

Nick Leschly. Mr. Leschly has been a member of our board of directors, our president since May 4, 2021 and our chief executive officer since the separation by bluebird bio of its oncology portfolio and programs into 2seventy bio, which we refer to as the separation. Prior to the separation, Mr. Leschly served as bluebird bio's chief executive officer since September 2010. Prior to joining bluebird bio, Mr. Leschly served as a partner of Third Rock Ventures, L.P. ("Third Rock"). From its founding in 2007, Mr. Leschly played an integral role in the overall formation, development and business strategy of several of Third Rock's portfolio companies, including Agios Pharmaceuticals, Inc. and Edimer Pharmaceuticals, Inc. Prior to joining Third Rock, he worked at Millennium Pharmaceuticals, Inc. (now a subsidiary of Takeda), leading several early-stage drug development programs and served as the product and alliance leader for VELCADE. Mr. Leschly also founded and served as chief executive officer of MedXtend Corporation. Mr. Leschly currently serves as a member of the board of directors of Synlogic, Inc. and bluebird bio, Inc. He received his B.S. in molecular biology from Princeton University and his M.B.A. from The Wharton School of the University of Pennsylvania. We believe that Mr. Leschly is qualified to serve on our board of directors because of his extensive knowledge and experience in management, finance and corporate governance with respect to the biotechnology and pharmaceutical industries.

Ramy Ibrahim, M.D. Dr. Ibrahim has served as a member of our board of directors since October 15, 2021. Prior to the separation, Dr. Ibrahim served on the board of directors of bluebird bio. Dr. Ibrahim is a medical oncologist who has served as the Chief Medical Officer of BitBio since October 2020 and as the Chief Medical Officer of CMO Milkyway Advisors since January 2021. Dr. Ibrahim also serves as a board member for Surface Oncology, Inc. and was a board member bluebird bio, Inc. from January 2021 until the separation. Dr. Ibrahim is a scientific advisory board member for Harpoon Therapeutics and a clinical advisor at the Parker Institute for Cancer Immunotherapy. He formerly served as Chief Medical Officer at the Parker Institute for Cancer Immunotherapy from 2016 to 2021. Prior to the Parker Institute, Dr. Ibrahim served as the vice president of clinical development for immuno-oncology at AstraZeneca from 2011 to 2016. In this role, he led the development of the early checkpoint inhibitor antibodies durvalumab and tremelimumab. From 2005 to 2011, at Bristol-Myers Squibb, Dr. Ibrahim played a key role in the clinical development of ipilimumab, the first FDA-approved immune checkpoint inhibitor, from early phase II through multiple global launches. He also played a key role in the early development of

nivolumab, as well as the development of anti-PD-L1 and anti-CD137 antibody programs. Dr. Ibrahim trained in medicine and medical oncology at Cairo University then conducted bench and clinical immunotherapy research at the cancer vaccine branch of the National Cancer Institute in Bethesda, Maryland, prior to moving into industry. We believe that Dr. Ibrahim is qualified to serve on our board of directors because of his significant industry knowledge and drug development experience, as well as his broad scientific and medical expertise.

CONTINUING DIRECTORS:

The following table identifies our Class II and Class III directors, and sets forth their principal occupation and business experience during the last five years and their ages as of April 15, 2022.

Name	Positions and Offices Held with 2seventy	Director Since	Class and Year in Which Term Will Expire	Age
Daniel S. Lynch	Chairman and Director	2021	Class II - 2023	64
Sarah Glickman	Director	2021	Class II - 2023	52
Denice Torres	Director	2021	Class III - 2023	62
Marcela Maus, M.D., Ph.D.	Director	2021	Class III - 2024	46
William R. Sellers, M.D.	Director	2021	Class II - 2023	61

Sarah Glickman Ms. Glickman has served as a member of our board of directors and the chair of the audit committee of the board since October 15, 2021. Prior to the separation, Ms. Glickman served on the board of directors of bluebird bio. Since September 2020, Ms. Glickman has served as Chief Financial Officer of Criteo S.A., a global technology company headquartered in Paris, France. Ms. Glickman also serves as a member of the board of directors for Criteo S.A. Prior to joining Criteo, she served as Acting Chief Financial Officer at XPO Logistics, a leading global provider of transportation and logistics solutions, where she previously served as Senior Vice President, Corporate Finance and Transformation. Before that, she held operational Chief Financial Officer roles at Novartis and Honeywell International and served in various executive roles in shared services and operations, internal audit, transformation and controllership at both Honeywell International and Bristol-Myers Squibb. She started her career at PricewaterhouseCoopers. Ms. Glickman is a U.S. CPA and a U.K. Fellow Chartered Accountant with a degree in economics from the University of York in England. We believe that Ms. Glickman is qualified to serve on our board of directors because of her corporate leadership experience and broad financial expertise.

Daniel S. Lynch. Mr. Lynch has served as a member of our board of directors since October 15, 2021. Prior to the separation, Mr. Lynch served on the board of directors of bluebird bio. Mr. Lynch joined Third Rock Ventures, L.P. as an entrepreneur-in-residence in May 2011, became a Venture Partner in May 2013, and now he is a Senior Advisor. Previously, Mr. Lynch served as Chief Executive and Chief Financial Officer of ImClone Systems Inc. As ImClone's Chief Executive Officer, he helped secure FDA approval of ERBITUX (Cetuximab), a novel cancer treatment. As its Chief Financial Officer, Mr. Lynch led negotiations to form the major partnership between ImClone and BMS. Earlier in his career, he served in various financial positions at BMS over a fifteen-year tenure. He served on the board of directors and the audit committee of U.S. Oncology, Inc. for five years until December 2010, when it was acquired by McKesson. Mr. Lynch currently serves on the board of directors of Omega Alpha Spac (Nasdaq: OMEG), a special purpose acquisition company, and SpringWorks Therapeutics, Inc. (Nasdaq: SWTX). He previously served as a member of the board of directors of Sesen Bio, Inc.(Nasdaq: SESN), Blueprint Medicines Corporation (Nasdaq: BPMC), Surface Oncology, Inc. (Nasdaq: SURF) and Translate Bio, Inc. (Nasdaq: TBIO). Mr. Lynch received his B.A. in mathematics from Wesleyan University and his M.B.A. from the Darden Graduate School of Business Administration at the University of Virginia. We believe that Mr. Lynch is qualified to serve on our board of directors because of his extensive knowledge and experience with respect to the biotechnology and pharmaceutical industries and significant management, financial and corporate governance experience.

Marcela Maus, M.D., Ph.D. Dr. Maus has served as a member of our board of directors since October 15, 2021. Prior to the separation, Dr. Maus served on the board of directors of bluebird bio. Dr. Maus is currently an associate professor at Harvard Medical School, the Paula O'Keefe chair in oncology and director of cellular immunotherapy at the Massachusetts General Hospital (Mass General) Cancer Center, as well as an attending physician in the Hematopoietic Cell Transplant and Cell Therapy division of Oncology at Mass General. Dr. Maus currently serves as a member of the board of directors of Ichnos Sciences Inc. She is an associate member of the Broad Institute of Harvard and Massachusetts Institute of Technology (MIT), and an associate member of the Ragon Institute of Mass General, MIT, and Harvard. Dr. Maus' laboratory focuses on the biology of human T cell activation, costimulation, and memory, and on the application of human T cell therapies to human disease, including forward and reverse translation of engineered T cell therapies in early-phase clinical trials. She also serves on

several scientific and clinical advisory boards for the biotechnology industry as well as external academic medical centers. Dr. Maus completed undergraduate studies at MIT and earned her M.D. and Ph.D. from the University of Pennsylvania. Dr. Maus trained in internal medicine at the University of Pennsylvania and in hematology and medical oncology at Memorial Sloan Kettering Cancer Center and is board-certified in these three disciplines. We believe that Dr. Maus is qualified to serve on our board of directors because of her extensive scientific and medical expertise, particularly in the field of medical oncology, and her significant industry knowledge.

William R. Sellers, M.D. Dr. Sellers has served as a member of our board of directors since October 15, 2021. Prior to the separation, Dr. Sellers served on the board of directors of bluebird bio. Since 2017, Dr. Sellers has served as a Core Institute Member at the Broad Institute and a Professor of Medicine at the Dana-Farber Institute and Harvard Medical School where he is responsible for running a research group focused on translating genomic discoveries into new therapeutics. In 2019, Dr. Sellers co-founded Civetta Therapeutics, where he serves as a member of the board of directors. Dr. Sellers also serves as a member of the scientific advisory board for several biopharmaceutical companies, including Ideaya Biosciences, and Epidarex Capital. Furthermore, he served as a member of the board of directors for Peloton Therapeutics from 2017 to 2019, as well as Servier Pharmaceuticals and Astex Pharmaceuticals in 2017. Dr. Sellers previously served as Vice President / Global Head of Oncology at Novartis Institutes for BioMedical Research from 2005 to 2016, where he led preclinical drug discovery and early clinical development. Appointed by President Barack Obama, he also served as a member of the National Cancer Advisory Board from 2011 to 2016. He previously was an Associate Professor of Medicine at the Dana-Farber Cancer Institute and Harvard Medical School and an Associate Member of the Broad Institute. Dr. Sellers received his B.S. in biology from Georgetown University in 1982 and M.D. from the University of Massachusetts Medical School in 1986. He completed his internship and residency in internal medicine at the University of California San Francisco in 1989 and trained in medical oncology at the Dana-Farber Cancer Institute. We believe that Dr. Sellers is qualified to serve on our board of directors because of his extensive research and drug discovery experience and broad scientific and medical knowledge.

Denice Torres. Ms. Torres has served as a member of our board of directors since October 15, 2021. Prior to the separation, Dr. Sellers served on the board of directors of bluebird bio. Ms. Torres is currently chief executive officer of The Ignited Company, a Pennsylvania-based consulting firm she founded in 2017. From 2005 to 2017, she served in various senior leadership roles at Johnson & Johnson (J&J). From 2015 to 2017, she was chief strategy and transformation officer for J&J's global medical device business and from 2011 to 2015, she was president of J&J McNeil Consumer Healthcare. From 2009 to 2011, she served as president of J&J Janssen Pharmaceuticals, Neuroscience, and from 2006-2009 she held various marketing positions at J&J. Before joining J&J, Ms. Torres spent fourteen years at Eli Lilly and Company, where she focused on marketing and business unit management. She is also the founder of The Mentoring Place, a nonprofit organization offering free executive mentoring to help women achieve their careers goals. Ms. Torres currently serves on the board of directors of Glaukos Corporation (NYSE: GKOS), Surface Oncology, Inc. (Nasdaq: SURF) and Karuna Therapeutics, Inc. (Nasdaq: KRTX). Ms. Torres holds a B.S. in Psychology from Ball State University, a J.D. from Indiana University and an M.B.A. from the University of Michigan. She is a member of the Michigan Bar Association. We believe that Ms. Torres is qualified to serve on our board of directors because of her extensive executive and operational leadership experience, as well as her expertise in cultural transformation and leadership development in the healthcare and pharmaceutical industries.

There are no family relationships between or among any of our directors or executive officers. There is no arrangement or understanding between any of our directors and any other person or persons pursuant to which he or she is to be selected as a director. There are no material legal proceedings to which any of our directors is a party adverse to us or our subsidiary or in which any such person has a material interest adverse to us or our subsidiary.

Identifying and Evaluating Director Nominees

Our Board is responsible for selecting its own members. The Board delegates the selection and nomination process to the Nominating and Corporate Governance Committee, with the expectation that other members of the Board, and of management, will be requested to take part in the process as appropriate.

Generally, our Nominating and Corporate Governance Committee together with our management team identifies candidates for director nominees, through the use of search firms or other advisors, and through the recommendations submitted by stockholders or through such other methods as the Nominating and Corporate Governance Committee deems to be helpful in identifying candidates. Once candidates have been identified, our Nominating and Corporate Governance Committee confirms that the candidates meet all of the minimum qualifications for director nominees established by the Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee working with management may gather information about the candidates through interviews, detailed questionnaires, background checks or any other means that the Nominating and Corporate Governance Committee deems to be appropriate in the evaluation process. The Nominating and Corporate Governance Committee then meets as a group to discuss and evaluate the qualities and skills of each

candidate, both on an individual basis and taking into account the overall composition and needs of our Board. Based on the results of the evaluation process, the Nominating and Corporate Governance Committee recommends candidates for the Board's approval as director nominees for election to the Board.

Director Qualifications and Diversity

Our Nominating and Corporate Governance Committee will consider, among other things, the following qualifications, skills and attributes when recommending candidates for the Board's selection as director nominees for the Board and as candidates for appointment to the Board's committees: a director nominee shall have the highest personal and professional integrity, shall have demonstrated exceptional ability and judgment, and shall be most effective, in conjunction with the other director nominees to the Board, in collectively serving the long-term interests of the stockholders.

In evaluating proposed director candidates, our Nominating and Corporate Governance Committee may consider, in addition to the minimum qualifications and other criteria for board membership approved by the Board from time to time, all facts and circumstances that it deems appropriate or advisable, including, among other things, diversity considerations, the skills of the proposed director candidate, his or her depth and breadth of professional experience or other background characteristics, his or her independence, and the needs of the Board. Our corporate governance guidelines also provide that diversity on the Board should be considered by our Nominating and Corporate Governance Committee in the director evaluation and nomination process. While we do not have a formal policy with respect to diversity, our Nominating and Corporate Governance Committee believes that it is essential that the members of the Board represent diverse viewpoints. Our Nominating and Corporate Governance Committee believes that the backgrounds and qualifications of our directors, considered as a group, should provide a composite mix of experience, knowledge and abilities that will allow our Board to promote our strategic objectives and fulfill its responsibilities to our stockholders, and considers diversity of gender, race, national origin, education, professional experience, and differences in viewpoints and skills when evaluating proposed director candidates.

Our Nominating and Corporate Governance Committee's priority in selecting directors is identification of persons who will further the interests of our Company through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among directors, and professional and personal experiences and expertise relevant to our growth strategy. The Nominating and Corporate Governance Committee will consider candidates recommended by stockholders.

The composition of our board of directors currently includes five individuals who are diverse under the Nasdaq listing rule regarding board diversity, as presented in the below Board Diversity Matrix. Under the applicable Nasdaq listing rule, directors who self-identify as (i) female, (ii) an underrepresented minority, or (iii) LGBTQ+ are defined as being diverse.

Board Diversity Matrix

As of April 26, 2022

Total Number of Directors	7			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	3	4	—	—
Part II: Demographic Background				
African American or Black	—	—	—	—
Alaskan Native or Native American	—	—	—	—
Asian	—	1	—	—
Hispanic or Latinx	2	—	—	—
Native Hawaiian or Pacific Islander	—	—	—	—
White	2	4	—	—
Two or More Races or Ethnicities	1	1	—	—
LGBTQ+	1	—	—	—
Did Not Disclose Demographic Background	—	—	—	—

Board Independence

Our Board has determined, upon the recommendation of our Nominating and Corporate Governance Committee, that each of our directors, other than Nick Leschly, who serves as our President and Chief Executive Officer, has no relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and is independent within the meaning of the director independence standards of the Nasdaq Stock Market rules and the SEC. At least annually, our Board evaluates all relationships between us and each director in light of relevant facts and circumstances for the purposes of determining whether a material relationship exists that might signal a potential conflict of interest or otherwise interfere with such director's ability to satisfy his or her responsibilities as an independent director. Based on this evaluation, our Board makes an annual determination of whether each director is independent within the meaning of the Nasdaq Stock Market rules and the SEC independence standards.

Board Meetings and Attendance

Our Board held two meetings and acted by written consent four times during the fiscal year ended December 31, 2021. In the fiscal year ended December 31, 2021, each of our directors attended at least 75% of the meetings of the Board and the committees of the Board, in the period for which he or she served. We encourage our directors to attend the Annual Meeting of Stockholders. Upon completion of the separation on November 4, 2021, we became an independent public company and did not hold an annual meeting of stockholders in 2021.

Board Committees

Our Board has established three standing committees: the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee, each of which is comprised solely of independent directors, and is described more fully below. Each of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee operates pursuant to a written charter and each committee reviews and assesses the adequacy of its charter and submits its charter to the Board for approval on an annual basis. The charters for the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are all available on our website www.2seventybio.com in the *Investors & Media - Corporate Governance* section. Our Board may establish additional committees from time to time.

Audit Committee

Our Audit Committee is currently composed of Ms. Glickman, Mr. Lynch and Ms. Torres, with Ms. Glickman serving as chair of the committee. Our Board has determined that each member of the Audit Committee meets the independence requirements of Rule 10A-3 under the Securities Exchange Act of 1934, as amended, and the applicable listing standards of NASDAQ. Our Board has determined that Ms. Glickman is an "audit committee financial expert" within the meaning of the SEC regulations and applicable listing standards of NASDAQ. During the fiscal year ended December 31, 2021, the Audit Committee met once. The report of the Audit Committee is included in this Proxy Statement under *Report of the Audit Committee*. The Audit Committee's responsibilities include among other duties:

- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements, earnings releases and related disclosures;
- reviewing and discussing with management and our independent registered public accounting firm our internal controls and internal auditing procedures, including any material weaknesses or significant deficiencies in our internal controls;
- discussing our accounting policies and all material correcting adjustments with our management and our independent registered public accounting firm;
- discussing with our management and our independent registered public accounting firm any significant risks facing the Company and the related mitigation plans, as well as monitoring our internal control over financial reporting and disclosure controls and procedures;
- appointing, overseeing, approving the compensation for and, when necessary, terminating our independent registered public accounting firm;
- approving all audit services and all permitted non-audit, tax and other services to be performed by our independent registered public accounting firm, in each case, in accordance with the Audit Committee's pre-approval policy;
- discussing with the independent registered public accounting firm its independence and ensuring that it receives the written disclosures regarding these communications required by the Public Company Accounting Oversight Board;
- reviewing and approving all transactions or series of similar transactions to which we were or are a party in which the amount involved exceeded or exceeds \$120,000 and in which any of our directors, executive

officers, holders of more than 5% of any class of our voting securities, or any member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest, other than compensation arrangements with directors and executive officers;

- recommending whether the audited financial statements should be included in our annual report and preparing the audit committee report required by SEC rules;
- reviewing all material communications between our management and our independent registered public accounting firm; and
- reviewing, updating and recommending to our board approval of our code of business conduct and ethics; and establishing procedures for the receipt, retention, investigation and treatment of accounting related complaints and concerns.

Compensation Committee

Our Compensation Committee is currently composed of Mr. Lynch, Ms. Torres and Ms. Glickman, with Mr. Lynch serving as chair of the committee. Our Board has determined each member of the Compensation Committee is “independent” as defined under the applicable listing standards of NASDAQ. In addition, each member qualifies as a non-employee director, as defined in Rule 16b-3 of the Securities Exchange Act. During the fiscal year ended December 31, 2021, the Compensation Committee met twice. The Compensation Committee’s responsibilities include, among other duties:

- reviewing and approving corporate goals and objectives relevant to executive officer compensation and evaluating the performance of executive officers in light of those goals and objectives;
- reviewing and approving executive officer compensation, including salary, bonus and incentive compensation, deferred compensation, perquisites, equity compensation, benefits provided upon retirement, severance or other termination of employment, and any other forms of executive compensation;
- reviewing and approving our chief executive officer's compensation based on its evaluation of our chief executive officer's performance;
- overseeing and administering our incentive compensation plans and equity based plans and recommending the adoption of new incentive compensation plans and equity based plans to our board of directors;
- making recommendations to our board of directors with respect to director compensation; and
- making recommendations to our board of directors with respect to management succession planning, including planning with respect to our chief executive officer.

Nominating and Corporate Governance Committee

Our Nominating and Corporate Governance Committee is composed of Ms. Torres, Dr. Ibrahim, and Dr. Maus, with Ms. Torres serving as chair of the committee. Our Board has determined that each member of the Nominating and Corporate Governance Committee is “independent” as defined under the applicable listing standards of NASDAQ. The Nominating and Corporate Governance Committee did not meet during the fiscal year ended December 31, 2021. The Nominating and Corporate Governance Committee’s responsibilities include, among other duties:

- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors;
- assisting our board of directors in recruiting such nominees;
- recommending to our board of directors qualified individuals to serve as committee members;
- performing an annual evaluation of our board of directors;
- evaluating the need and, if necessary, creating a plan for the continuing education of our directors;
- assessing and reviewing our corporate governance guidelines and recommending any changes to our board of directors; and
- evaluating and approving any requests from our executives to serve on the board of directors of another for-profit company.

Non-Management Director Meetings

In addition to the meetings of the committees of the Board described above, in connection with the Board meetings, the non-management directors met two (2) times in executive session during the fiscal year ended December 31, 2021. The Chair of the Board, Mr. Lynch, presides at these executive sessions. The Audit Committee and the Board have established a procedure whereby interested parties may make their concerns known to non-management directors, which is described on our website.

Leadership Structure and Risk Oversight

Our Board is currently chaired by Mr. Lynch. As a general policy, our Board believes that separation of the positions of Chair and Chief Executive Officer reinforces the independence of the Board from management, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of the Board as a whole. As such, Mr. Leschly serves as our President and Chief Executive Officer while Mr. Lynch serves as our Chair of the Board but is not an officer.

We face a number of risks in our business, including risks related to clinical research and development of our programs in severe genetic disease and oncology; manufacturing and supply chain; regulatory reviews and approvals; commercial operations and our ability to obtain reimbursement for our products if, and when, they gain marketing approval; growth and capability expansion in the United States and Europe; intellectual property filings, prosecution, maintenance and challenges; the establishment and maintenance of strategic alliances; competition; litigation and government investigations; and the ability to access additional funding for our business; among other risks. Our management is responsible for the day-to-day management of the risks that we face, while our Board, as a whole and through its committees, has responsibility for the oversight of risk management.

Our Board performs its oversight role by using several different levels of review. Our Chair meets regularly with our Chief Executive Officer and other executive officers to discuss our strategy and material risks. Members of senior management attend the quarterly Board meetings, present on strategic matters involving our business, and are available to address any questions or concerns raised by the Board on risk management-related issues and any other matters. Our Board reviews the risks, including any environmental or social governance risks, associated with our business strategies periodically throughout the year as part of its consideration of undertaking any such business strategies.

Each of the committees of our Board also oversees the management of our risk that falls within the committee's areas of responsibility. In performing this function, each committee has full access to management, as well as the ability to engage advisors. The Audit Committee oversees our enterprise risk management program as it relates to our operations by identifying the primary risks associated with our operations and corporate functions, receiving periodic updates on activities to manage such risks, and providing reports to the Board regarding such activities. In carrying out its responsibilities for the oversight of operational risk management, members of the Audit Committee regularly discuss with management our risk exposures in the areas of financial reporting, internal controls, information security, and our legal and regulatory compliance programs, and the steps we take to manage them. Our Audit Committee also meets privately with representatives from our independent registered public accounting firm as part of its oversight of our risk management. The Compensation Committee assists the Board in fulfilling its oversight responsibilities with respect to the management of risks arising from our compensation policies and programs and succession planning for our executive officers, and evaluates potential risks associated with independent director compensation for consideration by the full Board. The Nominating and Corporate Governance Committee assists the Board in fulfilling its oversight responsibilities with respect to the management of risks associated with Board organization, membership and structure, succession planning for our directors, and corporate governance.

Compensation Committee Interlocks and Insider Participation

Mr. Lynch, Ms. Torres and Ms. Glickman served as members of our Compensation Committee during the year ended December 31, 2021. None of the members of our Compensation Committee have at any time been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or on a compensation committee of any entity that has one or more executive officers serving on our Board or Compensation Committee. For a description of transactions between us and members of our Compensation Committee and affiliates of such members, please see *Certain Relationships and Related Party Transactions*.

Code of Business Conduct and Ethics and Corporate Governance Guidelines

We have adopted a Code of Business Conduct and Ethics for our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A copy of our Code of Business Conduct and Ethics is available on our website at www.2seventybio.com and going to the *Investors & Media-Corporate Governance* section. We intend to post on its website any amendment to, or waiver under, a provision of the Code of Business Conduct and Ethics.

A copy of the Corporate Governance Guidelines is also available on our website at www.2seventybio.com and going to the *Investors & Media-Corporate Governance* section.

EXECUTIVE OFFICERS

The following table sets forth information regarding our executive officers and certain key employees as of April 15, 2022:

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>
Executive Officers:		
Nick Leschly ⁽¹⁾	49	President, Chief Executive Officer and Director (Principal Executive Officer)
William D. Baird, III	50	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
Philip Gregory, D. Phil.	51	Chief Scientific Officer
Nicola Heffron	49	Chief Operating Officer

(1) Nick Leschly is also a director and his biographical information appears on page 7.

William D. Baird, III. Mr. Baird has served as our chief financial officer since the completion of the separation. Mr. Baird formerly served as bluebird bio’s chief financial officer since February 2019, bluebird bio’s Principal Financial Officer since March 2019 and bluebird bio’s Principal Accounting Officer since February 2021. Mr. Baird served as chief financial officer of Amicus Therapeutics, Inc. from April 2012 until February 2019. From April 2005 until April 2012, Mr. Baird served as chief financial officer of PTC Therapeutics, Inc. (“PTC”). Before that, Mr. Baird held various positions of increasing responsibility with PTC from 2002 to 2005. Mr. Baird previously worked in the life science practice at L.E.K. Consulting, a strategy consulting firm, from 1999 to 2002, and at First Union National Bank as a corporate underwriter from 1994 to 1997. Since June 2018, Mr. Baird has served on the Board of Directors of Axcella Health, a biotechnology company. Mr. Baird received a B.S. from Georgetown University’s Edmund A. Walsh School of Foreign Service, and an M.B.A. from The Wharton School of the University of Pennsylvania.

Philip Gregory, D. Phil. Dr. Gregory has served as our chief scientific officer since completion of the separation. Dr. Gregory formerly served as bluebird bio’s chief scientific officer since June 2015. Prior to joining bluebird bio, Dr. Gregory was formerly with Sangamo BioSciences, where he held multiple leadership positions over a nearly 15-year tenure, most recently serving as chief scientific officer and senior vice president, Research. In this role, he was responsible for the scientific direction and strategic research planning for the company. Dr. Gregory played an integral role in Sangamo’s partnerships and drove early discovery and development for several product candidates in multiple therapeutic areas. Prior to joining Sangamo, he was a postdoctoral fellow at Ludwig-Maximilians- Universität in Munich, Germany. Dr. Gregory holds a D. Phil in biochemistry from Oxford University, Keble College and a B.Sc. in microbiology from Sheffield University.

Nicola Heffron. Ms. Heffron has served as our chief operating officer since the completion of the separation. Ms. Heffron formerly served as bluebird bio’s chief operating officer since January 2021. Prior to that, she served as bluebird bio’s chief commercial officer from October 2020 to January 2021 and as bluebird bio’s senior vice president, Europe, from January 2020 to October 2020. Ms. Heffron has over twenty-five years of experience in research and development, global commercial, and local operational and marketing strategy roles. Before joining bluebird bio, she served as head of global marketing for Celgene’s myeloid portfolio and in several positions of increasing responsibility with Shire from May 2015 to September 2018. Prior to that, Ms. Heffron held a number of leadership roles in research and development and commercial at the global, regional, and affiliate level at GlaxoSmithKline and Eli Lilly and Company. Ms. Heffron earned a bachelor’s degree in pharmacy at University of Bradford and a M.B.A. from the University of Warwick.

EXECUTIVE COMPENSATION

Overview

Prior to the completion of the separation on November 4, 2021, we were managed and operated under bluebird bio. Accordingly, we did not pay any compensation to any of our executive officers or employees during the period between January 1, 2021 and the separation. Following the separation, we operate as a separate, publicly traded company. The compensation discussed below reflects decisions made for 2021 by the bluebird bio compensation committee prior to the separation as well as decisions made by our Compensation Committee following the separation.

At the time of our separation in November 2021, the overall labor market was experiencing the “great resignation” and seeing unprecedented changes as the workforce continued to navigate the global pandemic and impact of labor shortages. The biotechnology market continued to be highly competitive for talent, especially in the Cambridge, Massachusetts area where attrition was above 25% annually and new companies continued to crowd the sector. Specifically, the proliferation of start-up biotechnology companies resulted in active recruitment and generous inducement packages to attract executive talent to lead organizations. The compensation decisions we made were based on these unique market conditions and our need to attract executive talent, ensure a smooth separation of two complex businesses and retain the talent of seasoned executives to successfully launch 2seventy bio.

The following tables and discussion relate to the compensation paid to the following executive officers, who are referred to collectively as our “named executive officers”:

- Nick Leschly, who serves as our Chief Executive Officer and, prior to the separation, served as the Chief Executive Officer of bluebird bio;
- William D. Baird, who serves as our Chief Financial Officer and, prior to the separation, served as Chief Financial Officer of bluebird bio; and
- Nicola Heffron, who serves as our Chief Operating Officer and, prior to the separation, served as the Chief Operating Officer, Oncology of bluebird bio.

In connection with the separation, our Compensation Committee adopted a compensation philosophy and design for 2021 that is similar to that of bluebird bio as determined by the bluebird bio compensation committee prior to the separation.

Summary Compensation Table

The following table sets forth the total compensation awarded to, earned by and paid to our named executive officers during the fiscal years indicated. Compensation for periods prior to the separation on November 4, 2021 was paid by bluebird bio and compensation for periods after the separation was paid by 2seventy bio.

Name and principal position	Year	Salary (\$)	Bonus (\$)	Option awards (\$) ⁽¹⁾	Stock awards (\$) ⁽¹⁾	Nonequity incentive plan compensation (\$)	All other compensation (\$)	Total (\$)
Nick Leschly <i>President, Chief Executive Officer</i>	2021	750,500 ⁽²⁾	487,825 ⁽³⁾	1,494,095	3,533,862	-	12,000 ⁽⁴⁾	6,278,282
	2020	725,000 ⁽²⁾	-	2,999,893	2,505,354	-	11,400	6,241,647
William D. Baird, III <i>Chief Financial Officer</i>	2021	491,300	225,600 ⁽³⁾	415,027	1,215,276	-	93,928 ⁽⁵⁾	2,441,131
	2020	474,600	121,800	923,044	738,400	-	122,206	2,380,050
Nicola Heffron ⁽⁶⁾ <i>Chief Operating Officer</i>	2021	529,907	305,768 ^{(3) (7)}	456,529	1,234,212	-	46,183 ⁽⁸⁾	2,572,599

(1) The amounts reported in the “Option awards” and “Stock awards” columns above represent the aggregate grant date fair value of the bluebird bio stock options and restricted stock units granted to the named executive officers during 2020 and 2021, as computed in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, not including any estimates of forfeitures. See Note 14 of “Notes to Consolidated Financial Statements” in bluebird bio’s Annual Report on Form 10-K filed with the SEC on March 4, 2022 for a discussion of assumptions made in determining the aggregate grant date fair value of stock option and restricted stock unit awards. The restricted stock units awarded in February 2021 to Mr. Leschly are subject only to market conditions, and the grant date fair value of the restricted stock unit award is reflected in the table above. For the performance-based restricted stock unit awards granted to the named executive officers in August 2021, achievement of the performance criteria was deemed not probable on the grant date, as defined under applicable accounting guidance, and, accordingly, the expense related to such awards reported in the table above is \$0. The value of these awards assuming maximum achievement of the performance conditions is: \$1,313,382 for Mr. Leschly; \$859,776 for Mr. Baird; and \$843,162 for Ms. Heffron. Note that the amounts reported in these columns reflect the accounting cost for these stock options and restricted stock units, and do not correspond to the actual economic value that may be received by the named executive officers from the stock options and restricted stock units.

(2) Salary amounts reported in 2020 and 2021 do not reflect the voluntary salary reduction by Mr. Leschly. In May 2020, Mr. Leschly voluntarily elected to reduce his base salary by almost 100% during the 12-month period beginning on May 1, 2020 and, in exchange, received a grant of bluebird bio restricted stock units with a grant date fair value equal to 80% of the amount of his salary reduction. In May 2021, Mr. Leschly’s base salary was restored to \$750,500. The grant date fair value

- of such restricted stock unit award that is in excess of the salary reduction is reported in the “Stock awards” column for 2020. Mr. Leschly’s reduced base salary, excluding the value of the restricted stock unit awards, for the 12-month period beginning May 1, 2020 and ending April 30, 2021 was \$2,487 in the aggregate.
- (3) Amounts represent bonus payments under 2seventy bio’s annual incentive program earned in 2021 and paid during 2022, based on achievement of 2021 performance goals and overall corporate performance.
 - (4) Amount represents \$11,600 for the employer matching contribution to Mr. Leschly’s 401(k) plan and a \$400 employee recognition bonus.
 - (5) Amount represents \$11,600 for the employer matching contribution to Mr. Baird’s 401(k) plan as well as \$41,380 of relocation, lodging and travel expenses and a related tax gross-up of \$40,748 paid pursuant to the terms of Mr. Baird’s employment agreement, and a \$200 employee recognition bonus.
 - (6) Ms. Heffron’s compensation was originally denominated in Swiss Francs and the amount reported above was converted to U.S. dollars using an exchange rate of 1 Swiss Franc to 1.09242 U.S. dollars.
 - (7) Amount includes \$54,621, which represents an anniversary bonus paid in accordance with Ms. Heffron’s employment agreement.
 - (8) Amount includes \$11,798 for a child and education allowance, \$12,454 for healthcare benefits and \$21,712 for automobile and meal allowances, each payable pursuant to the terms of Ms. Heffron’s employment agreement. Ms. Heffron is based in Switzerland and such benefits are customary for our employees in Europe. In addition, the amount includes a \$218 employee recognition bonus.

Narrative Disclosure to the Summary Compensation Table

Our Compensation Committee reviews and approves the compensation of our executive officers and was primarily responsible for determining the compensation for the named executive officers following the separation. Our Compensation Committee typically reviews and discusses the compensation of other executive officers with the chief executive officer. Our Compensation Committee has the authority to engage the services of a consulting firm or other outside advisor to assist it in designing its executive compensation programs and in making compensation decisions. Following the separation, the Compensation Committee engaged Aon’s Human Capital Solutions practice, a division of Aon plc, or Aon, as its independent compensation consultant to advise on executive and board of directors compensation matters including: overall compensation program design, peer group development and updates, and collection of market data. We develop our compensation programs after reviewing publicly available compensation data and also subscribe to Aon’s various global annual and specialized life sciences and general industry surveys on an ongoing basis. Aon advised the Compensation Committee on all of the principal aspects of executive compensation for the periods following the separation. Aon consultants attend meetings of the Compensation Committee when requested to do so. Aon reports directly to the Compensation Committee and not to management, although it meets with management for purposes of gathering information for its analyses and recommendations. The Compensation Committee has assessed the independence of Aon consistent with SEC regulations and Nasdaq listing standards and has concluded that the engagement of Aon does not raise any conflict of interest.

Base Salaries

At the beginning of 2021, the bluebird bio Compensation Committee reviewed and approved the base salaries of the named executive officers. Following the separation in November 2021, our Compensation Committee reviewed the compensation for each of the named executive officers and determined that base salaries for each of the named executive officers would remain the same through fiscal year 2021. The table below sets forth the base salaries for each of the named executive officers:

Name	2021 Base Salary (\$)
Nick Leschly ⁽¹⁾	\$ 750,500
William D. Baird, III.....	\$ 491,300
Nicola Heffron ⁽²⁾	\$ 529,907

- (1) In May 2020, Mr. Leschly voluntarily elected to reduce his base salary by almost 100% during the 12-month period beginning on May 1, 2020 and received a grant of bluebird bio restricted stock units with a grant date fair value equal to 80% of the amount of his salary reduction. The amount reported in the table above reflects Mr. Leschly’s annualized base salary prior to reduction. In May 2021, Mr. Leschly’s base salary was restored to \$750,500. Mr. Leschly’s reduced base salary for the 12-month period beginning May 1, 2020 and ending April 30, 2021 was \$2,487.
- (2) Ms. Heffron’s base salary is denominated in Swiss Francs and the amount reported above was converted to U.S. dollars using an exchange rate of 1 Swiss Franc to 1.09242 U.S. dollars.

Bonuses

At the beginning of 2021, bluebird bio's compensation committee approved bluebird bio's annual incentive program for 2021. The 2021 annual incentive program consisted of the opportunity for eligible participants to earn cash incentive awards calculated as a percentage of pre-established bonus targets related to the successful separation from bluebird bio, oncology-specific patient treatment and pipeline advancements with new investigational new drug applications filed, severe genetic disease related performance goals related to advancing its portfolio, and people hiring and retention related goals. The chief executive officer's incentive award is based entirely on corporate performance relative to pre-established corporate goals, and the incentive award for each of the other named executive officers is based 80% on corporate performance relative to the pre-established corporate goals, and 20% on individual performance. The Compensation Committee, however, reserves the discretion to adjust upward or downward any cash incentive award as it deems appropriate. In light of the timing of the separation, annual incentive awards for 2seventy bio employees were determined based upon achievement of performance metrics related to both bluebird bio and 2seventy bio. In the fourth quarter of 2021, our Compensation Committee assessed corporate performance relative to the pre-established 2021 corporate goals for both bluebird bio and 2seventy bio. The Compensation Committee also took into consideration other relevant accomplishments that occurred during 2021, including the sale of our manufacturing operation, which resulted in a meaningful infusion of cash and reshaping of the cost structure while reducing the operational complexity of the organization going forward, and the shut down of the European operation of bluebird bio's Severe Genetic Disease business unit while managing the internal and external factors impacting the organization of bluebird bio and 2seventy bio.

The Compensation Committee determined that overall corporate performance was achieved at a 100% level based on an assessment of the pre-established 2021 corporate goals and the other relevant accomplishments referenced above that occurred during 2021. In addition, the Compensation Committee assessed individual performance of the named executive officers other than the chief executive officer. In recognition of their respective individual contributions to relevant accomplishments that occurred during 2021, the Compensation Committee determined that the individual performance of Mr. Baird was achieved at 110% of target level and the individual performance of Ms. Heffron was achieved at 130% of target level.

The table below shows each named executive officer's target incentive award under the 2021 annual incentive program as a percentage of the named executive officer's annual base salary in 2021, the target incentive award opportunity in dollars for 2021 and the actual incentive awards to our named executive officers for 2021 performance, which were paid in January 2022, as well as the actual 2021 incentive award payment as a percentage of the 2021 target incentive award opportunity.

Name	2021 Target Incentive Award (% of 2021 Base Salary)	2021 Target Incentive Award Opportunity (\$)	Actual Total 2021 Incentive Award Amount (\$)	2021 Actual Incentive Award Amount (% of 2021 Target Incentive Award Opportunity)
Nick Leschly	65 %	487,825	487,825	100 %
William D. Baird, III	45 %	221,085	225,600	102 %
Nicola Heffron	45 %	238,458	251,147	105 %

Equity-Based Compensation

bluebird bio's long-term incentive equity awards have generally been in the form of stock options and restricted stock units. The size of equity awards has varied among executive officers based on their positions and annual performance assessments. In connection with the annual review of the named executive officers' performance during 2021 and consistent with bluebird bio's compensation philosophy, in January 2021, bluebird bio's compensation committee approved the annual bluebird bio long-term equity incentive awards to the named executive officers. These awards were granted as of February 16, 2021 and were converted into 2seventy bio equity awards as of the separation as further described below. The annual long-term equity incentive awards granted by bluebird bio to the named executive officers in February 2021, with share numbers shown on an as-converted to 2seventy bio equity awards basis, are set forth in the table below:

Name	2021 Option Awards ⁽¹⁾		2021 Time-Based RSU Awards ⁽²⁾		2021 Performance-Based RSU Awards (based on relative total stockholder return) ⁽³⁾	
	Shares (#)	Grant date fair value (\$)	Shares (#)	Grant date fair value (\$)	Target Shares (#)	Grant date fair value (\$)
Nick Leschly	57,957	1,494,095	11,591	511,920	17,387	1,708,560
William D. Baird, III	16,098	415,027	8,049	355,500	—	—
Nicola Heffron	17,709	456,529	8,854	391,050	—	—

- (1) These option awards vest as follows: 25% vested on January 4, 2022, with the remainder of the shares vesting in equal monthly installments over the following three years through January 4, 2025, subject to continued service with us through each applicable vesting date.
- (2) These time-based RSU awards vest in four equal annual installments through January 4, 2025, subject to continued service with us through each applicable vesting date.
- (3) This award is earned based on total stockholder return over the three-year period from 2021 through 2023 compared to a peer group of companies in the Standard & Poor Biotechnology Select Industry Index having a market value between \$750 million and \$4.5 billion, which reflects a weighted average of bluebird bio and the projected size of 2seventy bio following the separation. The multiplier used to determine the number of earned restricted stock units could range between 50% and 200%, with a threshold achievement level at -25th percentile (as compared to the peer median) required to earn any restricted stock units, and a ceiling achievement level at the +50th percentile (as compared to the peer median). The restricted stock units, to the extent earned, vest in full on the third anniversary of the grant date, subject to Mr. Leschly's continued service with us through such vesting date.

In addition to the annual long-term incentive awards, in August 2021, bluebird bio's compensation committee approved the grant of retention long-term equity incentive awards to the named executive officers, which were converted into 2seventy bio equity awards as of the separation as further described below. The retention long-term equity incentive awards granted by bluebird bio to the named executive officers in August 2021, with share numbers shown on an as-converted to 2seventy bio equity awards basis, are set forth in the table below:

Name	2021 Time-Based RSU Awards ⁽¹⁾		2021 Performance-Based RSU Awards (based on clinical and manufacturing-related milestones) ⁽²⁾	
	Shares (#)	Grant date fair value (\$)	Target Shares (#)	Grant date fair value (\$)
Nick Leschly	33,038	1,313,382	33,038	-
William D. Baird, III	21,628	859,776	21,627	-
Nicola Heffron	21,210	843,162	21,209	-

- (1) These restricted stock unit awards vest 40% on August 2, 2022 and 60% on August 2, 2023, subject to continued service with us through each applicable vesting date.
- (2) These performance-based restricted stock units vests as follows: 40% upon achievement of certain clinical milestones and 60% upon achievement of a manufacturing-related milestone, in each case prior to December 31, 2023.
- (3) The expense the performance-based restricted stock unit awards is \$0, as shown in above table, as achievement of the performance criteria was deemed not probable on the grant date. The value of these awards assuming maximum achievement of the performance conditions is: \$1,313,382 for Mr. Leschly, \$859,776 for Mr. Baird and \$843,162 for Ms. Heffron.

Pursuant to the terms of the Employee Matters Agreement, outstanding bluebird bio equity awards held by 2seventy bio employees were adjusted in accordance with the following principles:

- bluebird bio equity awards granted prior to January 1, 2021 were converted into equity awards of both bluebird bio and 2seventy bio. The number of shares underlying the converted bluebird bio equity awards was determined by multiplying the number of shares underlying the converted bluebird bio equity award by a fraction, the numerator of which is the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately prior to the distribution date and the denominator of which is the sum of (1) the volume-weighted average trading price of our common stock (trading “regular way”) on the five trading days immediately following the distribution date multiplied by the distribution ratio and (2) the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately following the distribution date (resulting in a multiplier of 0.984550). The number of shares underlying the converted 2seventy bio equity awards was determined by multiplying the number of shares underlying the bluebird bio equity awards by a fraction, the numerator of which is the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately prior to the distribution date and the denominator of which is the sum of (1) the volume-weighted average trading price of our common stock (trading “regular way”) on the five trading days immediately following the distribution date multiplied by the distribution ratio and (2) the quotient obtained by dividing the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately following the distribution date by the distribution ratio (resulting in a multiplier of 0.328183).
- For 2seventy bio employees holding bluebird bio equity awards granted on or after January 1, 2021, such equity awards were converted into 2seventy bio equity awards. The number of shares of our common stock underlying such converted equity awards is equal to the number of shares of bluebird bio common stock subject to the equity award immediately prior to the distribution multiplied by a fraction, the numerator of which is the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately preceding the distribution date and the denominator of which is the volume-weighted average trading price of our common stock (trading “regular way”) on the five trading days immediately following the distribution date (resulting in a multiplier of 0.643979).
- Each bluebird bio equity award that converted into a 2seventy bio equity award is subject to substantially the same terms and vesting conditions as were applicable to the bluebird bio equity awards prior to the distribution.

To the extent any adjustments to outstanding equity awards resulted in fractional interests in shares, the fractional interests were rounded down to the nearest whole share. See the “*Outstanding Equity Awards at Fiscal Year-End*” table below for information on outstanding 2seventy equity awards held by the named executive officers as of December 31, 2021.

Employee Benefits

Other compensation to the named executive officers consisted primarily of the broad-based benefits provided to all full-time employees in the United States, including medical, dental and vision insurance, group life and disability insurance, an employee stock purchase plan and a 401(k) plan offered by both bluebird bio and 2seventy bio. Pursuant to 2seventy bio’s 401(k) plan, 2seventy bio employees, including the named executive officers, may elect to defer a portion of their current compensation up to the statutorily prescribed annual limit (which was \$19,500 in 2021, with additional salary deferrals not to exceed \$26,000 available to those employees 50 years of age or older), and to have the amount of this deferral contributed to 2seventy bio’s 401(k) plan. We make discretionary matching contributions and other employer contributions on behalf of eligible employees under our 401(k) plan. Prior to the separation, employees, including the named executive officers, were able to participate in bluebird bio’s 401(k) plan which operated under equivalent terms. For fiscal year 2021, bluebird bio matched a portion of eligible employee contributions equal to 100% of the first 4% of eligible contributions pursuant to the 401(k) plan’s matching formula.

Prior to the separation, bluebird bio did not view perquisites or other personal benefits as a significant component of its executive compensation program, and currently, we take the same view. Accordingly, neither bluebird bio nor 2seventy bio provide perquisites to the named executive officers, except in situations where it believed it was appropriate to assist an individual in the performance of his or her duties, to make him or her more efficient and effective, and for recruitment and retention purposes.

Employment Agreements With our Named Executive Officers

In connection with the separation, we entered into new employment agreements with our named executive officers, as described below.

Nick Leschly. We entered into an employment agreement, effective as of the closing of the separation, with Mr. Leschly for the position of president and chief executive officer. Mr. Leschly currently receives an annual base salary of \$780,520, which is subject to adjustment at the discretion of the Compensation Committee. Mr. Leschly is eligible for an annual cash incentive award targeted at 65% of his annual base salary. Mr. Leschly is eligible to participate in the 2seventy bio employee benefit plans, subject to the terms of those plans.

William D. Baird, III. We entered into an employment agreement, effective as of the closing of the separation, with Mr. Baird for the position of chief financial officer. Mr. Baird currently receives an annual base salary of \$506,100, which is subject to adjustment at the discretion of the Compensation Committee. Mr. Baird is eligible for an annual cash incentive award targeted at 45% of his annual base salary, payable at the discretion of the Compensation Committee. Mr. Baird is eligible to participate in the 2seventy bio employee benefit plans, subject to the terms of those plans.

Nicola Heffron. Ms. Heffron is employed as our chief operating officer through an employment agreement with Globalization Partners Switzerland SA, or Globalization Partners, a labor leasing company in her country of residence. Ms. Heffron entered into an employment agreement with Globalization Partners, effective December 1, 2021, which was subsequently amended December 8, 2021, March 7, 2022, and March 25, 2022, for the position of chief operating officer of 2seventy bio. Ms. Heffron currently receives an annual base salary of 536,748 CHF. Ms. Heffron is eligible for an annual cash incentive award targeted at 45% of her annual base salary, payable at the discretion of the Compensation Committee. We also entered into an additional letter agreement with Ms. Heffron, effective November 8, 2021, to supplement the termination and severance terms of her arrangement with Globalization Partners, which provides for the severance payments and benefits described below.

Involuntary termination of employment by Company without Cause or by Executive for Good Reason

Pursuant to their employment agreements entered into in connection with the separation, or for Ms. Heffron, the letter agreement entered into with her effective as of November 8, 2021, each named executive officer is eligible to receive certain payments and benefits in the event his or her employment is terminated by us without “cause” (as defined in the employment agreements) or in the event the named executive officer terminates the officer’s employment with “good reason” (as defined in the employment agreements). Upon the timely execution of a separation agreement, including a general release of claims, each named executive officer is eligible to receive the following payments and benefits:

- 12 months of base salary continuation (which amount shall be reduced by any “garden leave” amounts the named executive officer receives in any calendar year pursuant to the “restrictive covenants agreement” (as defined in the employment agreements, or letter agreement, as applicable)); and
- if the named executive officer elects to continue his or her group healthcare benefits, to the extent authorized by and consistent with COBRA, we will pay the named executive officer a monthly cash payment equal to the monthly employer contribution we would have made to provide him or her health insurance if he or she had remained employed by us until the earlier of (1) 12 months following the date of termination, or (2) the end of the named executive officer’s COBRA health continuation period.

Involuntary termination of employment in connection with a sale event

In addition, in the event that any of our named executive officers terminates his or her employment with us for good reason or his or her employment with us is terminated by us without cause in either case within 12 months following a “sale event” (as defined in the 2seventy bio, Inc. 2021 Stock Option and Incentive Plan, or the 2021 Plan), he or she will be entitled to receive the following payments and benefits (in lieu of the payments and benefits described above) upon the timely execution of a separation agreement, including a general release of claims:

- a lump sum cash payment equal to one times (or one and a half times in the case of Mr. Leschly) the sum of (1) the named executive officer’s then-current base salary (or base salary in effect immediately prior to the sale event, if higher) and (2) the named executive officer’s target annual cash incentive compensation (or the target bonus in effect immediately prior to the sale event, if higher, in the case of Mr. Leschly); provided, that these amounts shall be reduced by any “garden leave” amounts the named executive officer receives in any calendar year pursuant to the restrictive covenants agreement; and
- if he or she elects to continue group healthcare benefits, to the extent authorized by and consistent with COBRA, we will pay the named executive officer a monthly cash payment equal to the monthly employer contribution we would have made to provide him or her health insurance if he or she had remained

employed by us until the earlier of (1) 12 months (or 18 months in the case of Mr. Leschly) following the date of termination or (2) the end of the named executive officer's COBRA health continuation period; and

- all stock options and other stock-based awards granted to the named executive officer after the date of his or her employment agreement, or letter agreement with us, as applicable, that are subject to time-based vesting will become fully exercisable or non-forfeitable as of the later of (i) the "date of termination" (as defined in the employment agreements or letter agreement, as applicable) and (ii) the effective date of the "separation agreement and release" (as defined in the employment agreements or letter agreement, as applicable).

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding 2seventy bio equity awards held by our named executive officers as of December 31, 2021.

Name	Option awards ⁽¹⁾					Stock awards ⁽¹⁾			
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Equity incentive plan awards; number of securities underlying unexercised unearned options (#)	Option exercise price (\$)	Option expiration date	Number of shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested (\$)	Equity incentive plan awards: number of unearned shares, units or other rights that have not vested (#)	Equity incentive plan awards; market or payout value of unearned shares, units or other rights that have not vested (\$)
Nick Leschly	54,149	—	—	38.00	3/3/2024	—	—	—	—
	54,149	—	—	151.25	3/2/2025	—	—	—	—
	29,535	—	—	78.44	3/1/2026	—	—	—	—
	36,099	—	—	117.40	2/1/2027	—	—	—	—
	38,545	836 ⁽²⁾	—	318.73	2/1/2028	—	—	—	—
	23,913	8,904 ⁽³⁾	—	209.06	2/1/2029	—	—	—	—
	10,216	11,115 ⁽⁴⁾	—	114.67	3/2/2030	—	—	—	—
	—	57,957 ⁽⁵⁾	—	44.17	2/16/2031	—	—	—	—
	—	—	—	—	—	2,461 ⁽⁶⁾	63,075	—	—
	—	—	—	—	—	4,102 ⁽⁷⁾	105,134	—	—
	—	—	—	—	—	7,999 ⁽⁸⁾	205,014	—	—
	—	—	—	—	—	—	—	17,387 ⁽⁹⁾	445,629
	—	—	—	—	—	11,591 ⁽¹⁰⁾	297,077	—	—
—	—	—	—	—	33,038 ⁽¹¹⁾	846,764	33,038 ⁽¹²⁾	846,764	
William Baird, III	13,941	5,749 ⁽¹³⁾	—	243.27	3/1/2029	—	—	—	—
	3,136	3,427 ⁽⁴⁾	—	114.67	3/2/2030	—	—	—	—
	—	16,098 ⁽⁵⁾	—	44.17	2/16/2031	—	—	—	—
	—	—	—	—	—	2,461 ⁽¹⁴⁾	63,075	—	—
	—	—	—	—	—	2,461 ⁽⁸⁾	63,075	—	—
	—	—	—	—	—	8,049 ⁽¹⁰⁾	206,296	—	—
—	—	—	—	—	21,628 ⁽¹¹⁾	554,326	21,627 ⁽¹²⁾	554,300	
Nicola Heffron	5,261	6,225 ⁽¹⁵⁾	—	135.60	2/3/2030	—	—	—	—
	1,230	3,692 ⁽¹⁶⁾	—	71.23	12/1/2030	—	—	—	—
	—	17,709 ⁽⁵⁾	—	44.17	2/16/2031	—	—	—	—
	—	—	—	—	—	2,953 ⁽¹⁷⁾	75,685	—	—
	—	—	—	—	—	1,846 ⁽¹⁸⁾	47,313	—	—
	—	—	—	—	—	8,854 ⁽¹⁰⁾	226,928	—	—
	—	—	—	—	—	21,210 ⁽¹¹⁾	543,612	21,209 ⁽¹²⁾	543,587

(1) All unvested stock options and restricted stock awards were granted under the 2021 Plan. The market value of the restricted stock unit awards is based on the closing price of \$25.63 per share of the Company's common stock on December 31, 2021, as reported on the Nasdaq Global Select Market.

- (2) Represents an option to purchase shares of our common stock granted on February 1, 2018. The shares underlying this option vest as follows: 25% vested on January 4, 2019, with the remainder of the shares vesting in equal monthly installments over the following three years through January 4, 2022, subject to continued service with us through each applicable vesting date.
- (3) Represents an option to purchase shares of our common stock granted on February 1, 2019. The shares underlying this option vest as follows: 25% vested on January 4, 2020, with the remainder of the shares vesting in equal monthly installments over the following three years through January 4, 2023, subject to continued service with us through each applicable vesting date.
- (4) Represents options to purchase shares of our common stock granted on March 2, 2020. The shares underlying these options vest as follows: 25% vested on January 4, 2021, with the remainder of the shares vesting in equal monthly installments over the following three years through January 4, 2024, subject to continued service with us through each applicable vesting date.
- (5) Represents options to purchase shares of our common stock granted on February 16, 2021. The shares underlying these options vest as follows: 25% vested on January 4, 2022, with the remainder of the shares vesting in equal monthly installments over the following three years through January 4, 2025, subject to continued service with us through each applicable vesting date.
- (6) Represents a restricted stock unit award granted on February 1, 2018 that vests in four equal annual installments through January 4, 2022, subject to continued service with us through each applicable vesting date.
- (7) Represents a restricted stock unit award granted on February 1, 2019 that vests in four equal annual installments through January 4, 2023, subject to continued service with us through each applicable vesting date.
- (8) Represents restricted stock unit awards granted on March 2, 2020 that vest in four equal annual installments through January 4, 2024, subject to continued service with us through each applicable vesting date.
- (9) Represents a performance-based restricted stock unit award granted on February 16, 2021. The vesting of this performance-based restricted stock unit award is dependent upon achievement of the Company's total shareholder return ("TSR") measured against the TSRs of a pre-determined portfolio of companies. The performance period is from January 1, 2021 through to December 31, 2023, with the assessment of achievement of the performance condition to be conducted within 60 days of December 31, 2023.
- (10) Represents restricted stock unit awards granted on February 16, 2021 that vest in four equal annual installments through January 4, 2025, subject to continued service with us through each applicable vesting date.
- (11) Represents restricted stock unit awards granted on August 2, 2021 that vest 40% on August 2, 2022 and 60% on August 2, 2023.
- (12) Represents performance-based restricted stock unit awards granted on August 2, 2021 that vest 40% upon achievement of certain clinical milestones and 60% upon achievement of a manufacturing-related milestone prior to December 31, 2023. These awards shall be forfeited in the event that either milestone is not achieved before December 31, 2023.
- (13) Represents an option to purchase shares of our common stock granted on March 1, 2019. The shares underlying this option vest as follows: 25% vested on February 11, 2020, with the remainder of the shares vesting in equal monthly installments over the following three years through February 11, 2023, subject to continued service with us through each applicable vesting date.
- (14) Represents a restricted stock unit award granted on March 1, 2019 that vests in four equal annual installments through February 11, 2023, subject to continued service with us through each applicable vesting date.
- (15) Represents an option to purchase shares of our common stock granted on February 3, 2020. The shares underlying this option vest as follows: 25% vested on February 3, 2021, with the remainder of the shares vesting in equal monthly installments over the following three years through February 3, 2024, subject to continued service with us through each applicable vesting date.
- (16) Represents an option to purchase shares of our common stock granted on December 1, 2020. The shares underlying this option vest as follows: 25% vested on December 1, 2021, with the remainder of the shares vesting in equal monthly installments over the following three years through December 1, 2024, subject to continued service with us through each applicable vesting date.
- (17) Represents a restricted stock unit award granted on February 3, 2020 that vests in four equal annual installments through February 3, 2024, subject to continued service with us through each applicable vesting date.
- (18) Represents a restricted stock unit award granted on December 1, 2020 that vests in four equal annual installments through December 1, 2024, subject to continued service with us through each applicable vesting date.

Director Compensation

Our Compensation Committee is responsible for making recommendations to our board of directors on appropriate compensation levels and arrangements for our non-employee directors, ensuring they are consistent with our compensation policy and remain competitive with our peer companies. The Compensation Committee reviews our non-employee director compensation on an annual basis.

Our chief executive officer, Mr. Leschly, is not compensated for his service as a member of our board of directors. Mr. Leschly's compensation for his service as chief executive officer in the year ended December 31, 2021 is described in the section of this proxy statement entitled "Executive Compensation" above. For the year ended December 31, 2021, the non-employee members of the board of directors did not receive any cash or equity compensation from 2seventy bio. Prior to the separation, each of our directors who was a director of bluebird bio received compensation from bluebird bio under bluebird bio's non-employee director compensation policy. Our non-employee directors held the following aggregate number of shares of our common stock underlying outstanding stock options as of December 31, 2021: Ms. Glickman: 4,829; Dr. Ibrahim: 6,116; Mr. Lynch: 27,783; Dr. Maus: 4,829; Dr. Sellers: 6,828; and Ms. Torres: 4,695. Our non-employee directors held the following aggregate number

of restricted stock units of 2seventy bio as of December 31, 2021: Ms. Glickman: 3,002; Dr. Ibrahim: 3,450; Mr. Lynch: 2,803; Dr. Maus: 3,002; Dr. Sellers: 2,221; and Ms. Torres: 2,494.

Non-Employee Director Compensation Policy

On December 13, 2021, our board of directors adopted a non-employee director compensation policy, which is designed to enable us to attract and retain, on a long-term basis, highly qualified non-employee directors. Under the policy, each director who is not an employee is paid annual cash compensation as set forth below, effective as of January 1, 2022.

Board of Directors:		
Members	\$	45,000
Additional retainer for non-executive chair	\$	35,000
Audit Committee:		
Members (other than chair)	\$	9,000
Retainer for chair	\$	18,000
Compensation Committee:		
Members (other than chair)	\$	7,500
Retainer for chair	\$	15,000
Nominating and Corporate Governance Committee		
Members (other than chair)	\$	5,000
Retainer for chair	\$	10,000
Research and Development Committee:		
Members (other than chair)	\$	7,500
Retainer for chair	\$	15,000

The annual cash retainers are paid quarterly, pro-rated based on the number of actual days served by the director during such calendar quarter. In addition, the non-employee director compensation policy provides that, upon initial election to our board of directors, each non-employee director will be granted an initial equity award, or the Initial Grant, the form and value of which shall be determined by our Compensation Committee on an annual basis, subject to the maximum annual compensation limits set forth in the policy and such other limits as may be set forth in the 2021 Plan. The Initial Grant will vest in equal annual installments over three years from the date of grant, subject to continued service through the applicable vesting date.

Furthermore, on the date of each annual meeting of stockholders, each non-employee director who continues as a non-employee director following such meeting will be granted an equity award, or the Annual Grant, the form and value of which shall be determined by our Compensation Committee on an annual basis, subject to the maximum annual compensation limits set forth in the policy and such other limits as may be set forth in the 2021 Plan. The Annual Grant will vest in full upon the earlier of (i) the first anniversary of the date of grant or (ii) the date of the next annual meeting, generally subject to continued service through the applicable vesting date. All outstanding Initial Grants and Annual Grants will become fully vested and exercisable upon the effective time of a sale event.

We will reimburse all reasonable out-of-pocket expenses incurred by non-employee directors in attending meetings of our board of directors and committees thereof.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth the amount of common stock of bluebird beneficially owned, directly or indirectly, as of April 11, 2022, by (i) each current director of 2seventy, (ii) each named executive officer of 2seventy, (iii) all directors and executive officers of 2seventy as a group, and (iv) each person who is known to bluebird to beneficially own more than five percent (5%) of the outstanding shares of common stock of bluebird, as determined through SEC filings, and the percentage of the common stock outstanding represented by each such amount. All shares of common stock shown in the table reflect sole voting and investment power except as otherwise noted.

Beneficial ownership is determined by the rules of the SEC and includes voting or investment power of the securities. As of April 11, 2022, 2seventy had 37,618,103 shares of common stock outstanding. Shares of common stock subject to options to purchase, which are now exercisable or are exercisable within 60 days after April 11,

2022, or restricted stock units vesting within 60 days after April 11, 2022 are to be considered outstanding for purposes of computing the percentage ownership of the persons holding these options or other rights but are not to be considered outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the address for each person listed below is c/o 2seventy bio, Inc., 60 Binney Street, Cambridge, Massachusetts 02142.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% Stockholders		
Entities affiliated with EcoR1 Capital, LLC (1)	3,495,943	9.3%
Wellington Management Group LLP (2)	2,421,004	6.4%
State Street Corporation (3)	2,364,351	6.3%
Baker Bros Advisors LP (4)	2,062,744	5.5%
Directors and Named Executive Officers		
Nick Leschly (5)	788,314	2.1%
William D. Baird, III (6)	31,051	*
Philip Gregory, D. Phil. (7)	64,740	*
Nicola Heffron (8)	17,353	*
Daniel S. Lynch (9)	25,928	*
Sarah Glickman	-	*
Ramy Ibrahim, M.D. (10)	1,447	*
Denice Torres (11)	908	*
Marcela Maus, M.D., Ph.D.	-	*
William R. Sellers, M.D. (12)	3,713	*
All executive officers and directors as a group (10 persons)(13)	933,454	2.5%

*Represents holdings of less than 1%.

- (1) Affiliates of EcoR1 Capital, LLC own 3,495,943 shares of common stock. EcoR1 Capital, LLC is controlled Mr. Oleg Nodelman who has voting and investment control of all the shares reported. The address for EcoR1 Capital, LLC is 357 Tehama Street, Suite 3, San Francisco, California 94103.
- (2) Based solely on a Schedule 13G/A reporting beneficial ownership of 2seventy bio common stock as of January 31, 2022, filed with the SEC on February 10, 2022, Wellington Management Group LLP, Wellington Group Holdings LLP, and Wellington Investment Advisors Holdings LLP each has shared voting power with respect to 2,346,759 shares and shared dispositive power with respect to 2,421,004 shares, and Wellington Management Company LLP has shared voting power with respect to 2,346,759 shares and shared dispositive power with respect to 2,405,993 shares. The address of Wellington Management Company LLP is 280 Congress Street, Boston, Massachusetts 02210.
- (3) Based solely on a Schedule 13G reporting beneficial ownership of our common stock as of December 31, 2021, filed with the SEC on January 10, 2022, State Street Corporation has shared voting power with respect to 2,333,485 shares and shared dispositive power with respect to 2,364,351 shares, and SSGA Funds Management, Inc. has shared voting power with respect to 1,957,224 shares and shared dispositive power with respect to 1,962,024 shares. The address of State Street Corporation is One Lincoln Street, Boston, Massachusetts 02111.
- (4) Includes (a) (i) 1,907,436 shares of Common Stock and (ii) 702,276 shares of Common Stock underlying pre-funded warrants issued by 2seventy bio, in each case held by Baker Brothers Life Sciences, L.P., or BBLS, (b) (i) 155,308 shares of Common Stock and (ii) 55,299 shares of Common Stock underlying pre-funded warrants issued by 2seventy bio, in each case held by 667, L.P., or 667, and together with BBLS, the BBA Funds, disregarding for purposes of this beneficial ownership calculation the beneficial ownership limitation of 4.99% to which the exercise of the pre-funded warrants is subject. Baker Bros. Advisors LP, or BBA, is the investment adviser to the BBA Funds and has sole voting and investment power with respect to the securities held by the BBA Funds and thus may be deemed to beneficially own such securities. Baker Bros. Advisors (GP) LLC, or BBA-GP, is the sole general partner of BBA and thus may be deemed to beneficially own the securities held by the BBA Funds. The managing members of BBA-GP are Julian C. Baker and Felix J. Baker. The address for BBA, BBA-GP, Julian C. Baker and Felix J. Baker and the BBA Funds is 860 Washington Street, 3rd Floor, New York, NY 10014.
- (5) Includes 274,727 shares of common stock issuable to Mr. Leschly upon the exercise of options that are exercisable within 60 days following April 11, 2022.
- (6) Includes 25,636 shares of common stock issuable to Mr. Baird upon the exercise of options that are exercisable within 60 days following April 11, 2022.
- (7) Includes 55,001 shares of common stock issuable to Dr. Gregory upon the exercise of options that are exercisable within 60 days following April 11, 2022.
- (8) Includes 14,804 shares of common stock issuable to Ms. Heffron upon the exercise of options that are exercisable within 60 days following April 11, 2022.
- (9) Includes 23,276 shares of common stock issuable to Mr. Lynch upon the exercise of options that are exercisable within 60 days following April 11, 2022.
- (10) Includes 965 shares of common stock issuable to Dr. Ibrahim upon the exercise of options that are exercisable within 60 days following April 11, 2022.

- (11) Includes 492 shares of common stock issuable to Ms. Torres, upon the exercise of options that are exercisable within 60 days following April 11, 2022.
(12) Includes 2,732 shares of common stock issuable to Dr. Sellers upon the exercise of options that are exercisable within 60 days following April 11, 2022.
(13) Includes (i) 397,633 shares of common stock issuable upon the exercise of options held by executive officers and directors, as described in notes (5) through (12) above.

Equity compensation plan information

The following table presents aggregate summary information as of December 31, 2021, regarding our existing equity compensation plans.

Plan Category	Column (A)		Column (B)		Column (C)	
	Number of Securities to be Issued Upon Exercise of Outstanding Options, Restricted Stock Units and Other Rights		Weighted Average Exercise Price of Outstanding Options		Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column A)	
Equity Compensation Plans Approved by Stockholders (1)	2,569,716	(2)(3)	\$ 145.52	(3)(4)	2,358,787	(5)(6)
Equity Compensation Plans Not Approved by Stockholders	-		N/A		-	
Total	2,569,716		\$ 145.52		2,358,787	

- (1) Consists of the bluebird bio, Inc. 2013 Stock Option and Incentive Plan (the "2013 Plan"), the bluebird bio, Inc. 2013 Employee Stock Purchase Plan, the 2seventy bio, Inc. 2021 Stock Option and Incentive Plan (the "2021 Plan") and the 2seventy bio, Inc. 2021 Employee Stock Purchase Plan.
(2) Includes 1,079,932 shares subject to restricted stock units that will entitle the holder to one share of common stock for each unit that vests over the holder's period of continued service with the Company.
(3) Excludes purchase rights accruing under the 2013 and 2021 Employee Stock Purchase Plan.
(4) The calculation does not take into account the 1,079,932 shares of common stock subject to outstanding restricted stock units. Such shares will be issued at the time the restricted stock units vest, without any cash consideration payable for those shares.
(5) Consists of shares available for future issuance under the 2021 Employee Stock Purchase Plan and the 2021 Plan. As of December 31, 2021 233,302 shares of common stock were available for issuance under the 2021 Employee Stock Purchase Plan, and 2,125,485 shares of common stock were available for issuance under the 2021 Plan.
(6) Our 2021 Plan contains an "evergreen" provision, which allows for an annual increase in the number of shares of stock available for issuance under the plan on the first day of each year. The 2021 Plan provides that the number of shares reserved and available for issuance under the 2021 Plan will automatically increase by 5% of the outstanding number of shares of our common stock on the immediately preceding December 31 or such lesser number of shares as determined by our Compensation Committee, or the Annual Increase. The number of shares reserved under the 2021 Plan is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. Our ESPP contains an "evergreen" provision, which allows for an annual increase in the number of shares of stock available for issuance under the ESPP on the first day of each year. The ESPP provides that the number of shares reserved and available for issuance will automatically increase by the least of (i) 233,302 shares of common stock, (ii) 1% of the outstanding number of shares of common stock on the immediately preceding December 31, or (iii) such lesser number of shares of common stock as determined by the administrator of the ESPP.

Delinquent Section 16(a) Reports

Under Section 16(a) of the Exchange Act, as amended, our directors, certain of its officers, and beneficial owners of more than 10% of the outstanding shares of our common stock are required to file reports with the SEC concerning their ownership of and transactions in 2seventy common stock or other 2seventy securities; these persons are also required to furnish 2seventy with copies of these reports. Based upon the reports and related information furnished to us, we believe that all such filing requirements were complied with in a timely manner during 2021, except that each of Mr. Baird, Dr. Gregory, Ms. Heffron, Mr. Leschly, Dr. Ibrahim, Mr. Lvch, Dr. Sellers, Ms. Glickman, Ms. Torres and Dr. Maus filed one late Form 4 with respect to acquisition of securities in connection with the separation from bluebird bio, Inc.. These reports have been subsequently filed.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Procedures for related party transactions

We have adopted a related person transaction approval policy that governs the review of related person transactions at 2seventy. Pursuant to this policy, if we want to enter into a transaction with a related party or an affiliate of a related party, our Audit Committee will review the proposed transaction to determine, based on applicable rules of Nasdaq and the SEC, whether such transaction requires pre-approval by our Audit Committee or our board of directors. If pre-approval is required, the proposed transaction will be reviewed at the next regular or special meeting of our Audit Committee or our board of directors, as applicable. We may not enter into a related party transaction unless our Audit Committee has specifically confirmed in writing that either no further reviews are necessary or that all requisite corporate reviews have been obtained.

Transactions with related persons

The following is a description of transactions or series of transactions since January 1, 2021, to which we were or will be a party, in which:

the amount involved in the transaction exceeds, or will exceed, \$120,000; and

in which any of our executive officers, directors or holder of five percent or more of any class of our capital stock, including their immediate family members or affiliated entities, had or will have a direct or indirect material interest.

Compensation arrangements for our named executive officers and our directors are described under “Management — Director Compensation” and “Executive Compensation.”

Relationship with bluebird bio

Prior to the completion of the separation and distribution, all of our outstanding shares of common stock were owned by bluebird bio. Following the completion of the separation and distribution, bluebird bio no longer owns any shares of our common stock.

Following the completion of the separation and the distribution, we and bluebird bio have operated separately, each as an independent public company. In connection with the separation, we and bluebird bio entered into certain agreements pursuant to which the separation of our business from bluebird bio was effected and that govern our relationship with bluebird bio going forward. The following is a summary of the terms of the material agreements that we entered into with bluebird bio in connection with the separation, which have been filed as exhibits to the registration statement of which this prospectus is a part. These summaries set forth the terms of the agreements that we believe are material and are qualified in their entirety by reference to the full text of such agreements.

Agreements with bluebird bio

Separation Agreement

We entered into a separation agreement with bluebird bio prior to the distribution of our common stock to bluebird bio stockholders. The separation agreement set forth our agreements with bluebird bio regarding the principal actions to be taken in connection with the separation, including the distribution. The separation agreement identified assets to be transferred, liabilities to be assumed, and contracts to be assigned to each of 2seventy bio and bluebird bio as part of the separation, and provided for when and how these transfers, assumptions, and assignments have occurred.

Transfer of Assets and Assumption of Liabilities. The separation agreement identified assets that were transferred, liabilities that were assumed and contracts that were assigned to each of bluebird bio and us as part of an internal reorganization, and described when and how these transfers, assumptions, and assignments have occurred. The separation agreement provided for those transfers of assets and assumptions of liabilities that are necessary in connection with the separation so that we and bluebird bio retained the assets necessary to operate our respective businesses and retained or assumed the liabilities allocated in accordance with the separation. The separation agreement also provided for the settlement or extinguishment of certain liabilities and other obligations between us and bluebird bio.

Except as otherwise set forth in the separation agreement or any ancillary agreement, each party to the separation agreement assumed the liability for, and control of, all pending, threatened and future legal matters related to its own business or its assumed or retained liabilities. The allocation of liabilities with respect to taxes, except for payroll taxes and reporting and other tax matters expressly covered by the employee matters agreement, are solely covered by the tax matters agreement described below.

Further Assurances. Each party agreed to use commercially reasonable efforts to take or to cause to be taken all actions, and to do, or to cause to be done, all things reasonably necessary under applicable law or contractual obligations to consummate and make effective the transactions contemplated by the separation agreement and other transaction agreements.

Employee Non-Solicit and Non-Hire. Each of bluebird bio and 2seventy bio are subject to mutual 12-month employee non-solicitation and non-hire obligations, subject to customary exceptions.

Indemnification. The separation agreement provided for releases, with respect to pre-distribution claims, and cross-indemnities, with respect to post-distribution claims, that, except as otherwise provided in the separation agreement, are principally designed to place financial responsibility for the obligations and liabilities allocated to us under the separation agreement with us and financial responsibility for the obligations and liabilities allocated to bluebird bio under the separation agreement with bluebird bio. The separation agreement also specified procedures with respect to claims subject to indemnification and related matters. Indemnification with respect to taxes are governed by the tax matters agreement described below.

Term/Termination. The term of the separation agreement is indefinite and it may only be terminated with the prior written consent of both bluebird bio and 2seventy bio.

Other Matters Governed by the Separation Agreement. Other matters governed by the separation agreement include, without limitation, access to financial and other information, insurance, confidentiality, and access to and provision of records.

Transition Services Agreements

bluebird bio Transitional Services. Historically, prior to the separation, bluebird bio provided us significant corporate and shared services and resources related to corporate functions such as finance, human resources, internal audit, research and development, financial reporting, and information technology, which we refer to collectively as the “bluebird bio Services.” This transition services agreement became operative as of the completion of the separation and each of the bluebird bio Services will continue for an initial term of up to two years, unless earlier terminated or extended according to the terms of the transition services agreement. We will pay bluebird bio fees for the bluebird bio Services, to be mutually agreed upon by us and bluebird bio as provided under this transition services agreement, which fees will be based on bluebird bio’s cost of providing the bluebird bio Services.

2seventy bio Transitional Services. We also entered into a second transition services agreement whereby we provide certain services to bluebird bio, which we refer to collectively as the “2seventy bio Services.” This second transition services agreement became operative as of the completion of the separation and each of the 2seventy bio Services will continue for an initial term of up to two years, unless earlier terminated or extended according to the terms of the transition services agreement. bluebird bio will pay us fees for the 2seventy bio Services, to be mutually agreed upon by us and bluebird bio as provided under this transition services agreement, which fees will be based on our cost of providing the 2seventy bio Services.

Intellectual Property License Agreement

We entered into an intellectual property license agreement with bluebird bio pursuant to which each party has granted a license to certain intellectual property and technology. bluebird bio granted 2seventy bio a perpetual, worldwide, non-exclusive, royalty-free, fully paid-up license (or, as the case may be, sublicense) to certain intellectual property to allow 2seventy bio to use such intellectual property in connection with 2seventy bio’s ongoing and future research and development activities and product candidates. 2seventy bio granted to bluebird bio a perpetual, worldwide, non-exclusive, royalty-free, fully paid-up license (or, as the case may be, sublicense) to certain intellectual property for use in bluebird bio’s existing products and product candidates. Such licenses between the parties generally allow current or future uses of the intellectual property in connection with each party’s respective fields.

Tax Matters Agreement

We entered into a tax matters agreement with bluebird bio that governs bluebird bio’s and 2seventy bio’s respective rights, responsibilities and obligations with respect to taxes (including taxes arising in the ordinary course of business and taxes, if any, incurred as a result of any failure of the distribution and certain related transactions to qualify as tax-free for U.S. federal income tax purposes), tax attributes, the preparation and filing of tax returns, the control of audits and other tax proceedings, and assistance and cooperation in respect of tax matters.

In addition, the tax matters agreement imposes certain restrictions on us and our subsidiaries (including restrictions on share issuances, business combinations, sales of assets and similar transactions) that will be designed to preserve the tax-free status of the distribution and certain related transactions. The tax matters agreement provides special rules that allocate tax liabilities in the event the distribution, together with certain related transactions, is not tax-free. In general, under the terms of the tax matters agreement, if the distribution, together with certain related transactions, were to fail to qualify as a transaction that is generally tax-free, for U.S. federal income tax purposes, under Sections 355 and 368(a)(1)(D) of the Code, and if and to the extent that such failure results from a prohibited

change of control in bluebird bio under Section 355(e) of the Code or an acquisition of bluebird bio stock or assets or certain actions, omissions or failures to act, by bluebird bio, then bluebird bio will bear any resulting taxes, interest, penalties and other costs. If and to the extent that such failure results from a prohibited change of control in 2seventy bio under Section 355(e) of the Code or an acquisition of our stock or assets or certain actions by us, then we will indemnify bluebird bio for any resulting taxes, interest, penalties and other costs, including any reductions in bluebird bio's net operating loss carryforwards or other tax assets. If such failure does not result from a prohibited change of control in bluebird bio or 2seventy bio under Section 355(e) of the Code and both we and bluebird bio are responsible for such failure, liability will be shared according to relative fault. If neither we nor bluebird bio is responsible for such failure, bluebird bio will bear any resulting taxes, interest, penalties and other costs.

Employee Matters Agreement

We entered into an employee matters agreement with bluebird bio. The employee matters agreement allocates assets, liabilities and responsibilities relating to the employment, compensation, and employee benefits of bluebird bio and 2seventy bio employees, and other related matters in connection with the separation, including the treatment of outstanding incentive equity awards and certain retirement and welfare benefit obligations. The employee matters agreement generally provides that, unless otherwise specified, 2seventy bio will be responsible for liabilities associated with employees who transfer to 2seventy bio and employees whose employment terminated prior to the distribution but who primarily supported the 2seventy bio business, whether incurred prior to or after the distribution, and bluebird bio will be responsible for liabilities associated with other employees, including employees retained by bluebird bio.

2seventy bio 401(k) Plan

Pursuant to the employee matters agreement we have adopted a defined contribution 401(k) plan, which is substantially similar in all material respects to bluebird bio's 401(k) plan. The assets and liabilities under the bluebird bio 401(k) plan with respect to our employees were transferred to the 2seventy bio 401(k) plan.

2seventy bio Health and Welfare Plans

Pursuant to the employee matters agreement, we established health and welfare plans that generally correspond to the bluebird bio health and welfare plans in which our employees participated immediately prior to the distribution. Transferred employees will become eligible to participate in 2seventy bio's health and welfare plans as of January 1, 2022. bluebird bio will generally retain liability for claims incurred under bluebird bio's health and welfare plans for periods prior to the distribution.

2seventy bio Omnibus Plan; 2seventy bio Employee Stock Purchase Plan

Pursuant to the employee matters agreement we adopted an omnibus equity incentive plan and an employee stock purchase plan intended to meet the requirements of Section 423 of the Code, and take all actions that may be necessary to approve such plans in order to satisfy the requirements of the Code and the regulations of the Nasdaq Global Select Market.

Equity Compensation

The employee matters agreement provides that outstanding bluebird bio equity awards held by bluebird bio and our employees will be adjusted in accordance with the following principles:

For each award, the intent is to maintain, immediately following the distribution date, the economic value of the award immediately before the distribution date.

For both 2seventy bio and bluebird bio employees, bluebird equity awards granted prior to January 1, 2021 were converted into equity awards of both bluebird bio and 2seventy bio. The number of shares underlying the converted bluebird bio equity awards were determined by multiplying the number of shares underlying the existing bluebird bio equity award by a fraction, the numerator of which is the volume-weighted average trading price of bluebird bio common stock (trading "regular way") on the five trading days immediately prior to the distribution date and the denominator of which is the sum of (1) the volume-weighted average trading price of 2seventy bio common stock (trading "regular way") on the five trading days immediately following the distribution date multiplied by the distribution ratio and (2) the volume-weighted average trading price of bluebird bio common stock (trading "regular way") on the five trading days immediately following the distribution date. The number of shares underlying the converted 2seventy bio equity awards was determined by multiplying the number of shares underlying the existing bluebird bio equity awards by a fraction, the numerator of which is the volume-weighted average trading price of bluebird bio common stock (trading "regular way") on the five trading days immediately prior to the distribution date and the denominator of which is the sum of (1) the volume-weighted average trading price of 2seventy bio common stock (trading "regular way") on the five trading days immediately following the distribution date multiplied by the distribution ratio and (2) the quotient obtained by dividing the volume-weighted average trading price of bluebird bio common stock (trading "regular way") on the five trading days immediately following the distribution date by the distribution ratio.

For bluebird bio employees holding bluebird bio equity awards granted on or after January 1, 2021, such equity awards will continue as bluebird bio equity awards, subject to adjustment. The number of shares of bluebird bio common stock underlying such adjusted equity awards will be equal to the number of shares of bluebird bio common stock subject to the equity award immediately prior to the distribution multiplied by a fraction, the numerator of which is the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately prior to the distribution date and the denominator of which is the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately following the distribution date.

For 2seventy bio employees holding bluebird equity awards granted on or after January 1, 2021, such equity awards were converted into 2seventy bio equity awards. The number of shares of 2seventy common stock underlying such converted equity awards will be equal to the number of shares of bluebird bio common stock subject to the equity award immediately prior to the distribution multiplied by a fraction, the numerator of which is the volume-weighted average trading price of bluebird bio common stock (trading “regular way”) on the five trading days immediately preceding the distribution date and the denominator of which is the volume-weighted average trading price of 2seventy bio common stock (trading “regular way”) on the five trading days immediately following the distribution date.

To the extent any adjustments to outstanding equity awards result in fractional interests in shares, the fractional interests were rounded down to the nearest whole share. Each bluebird bio equity award that converted into a 2seventy bio equity award is subject to substantially the same terms and vesting conditions as were applicable to the bluebird bio equity awards prior to the distribution.

2021 Private Placement

On September 10, 2021, pursuant to a securities purchase agreement among bluebird bio and certain institutional investors (the “institutional investors”), bluebird bio completed a private placement exempt from the registration requirements of the Securities Act in which it issued and sold 2,272,727 shares of bluebird bio common stock at a purchase price of \$16.50 per share and pre-funded warrants to purchase 2,272,727 shares of bluebird bio common stock at a purchase price of \$16.49 per pre-funded warrant (representing the \$16.50 per share purchase price less the exercise price of \$0.01 per share). In connection with the distribution and pursuant to the terms of the securities purchase agreement, we issued to each institutional investor holding a bluebird bio pre-funded warrant a new pre-funded warrant for the number of shares of 2seventy bio common stock that the institutional investor would have been entitled to receive in connection with the distribution had the unexercised portion of such pre-funded warrant at the effective time of the distribution been fully exercised at the effective time of the distribution.

In connection with this financing, bluebird bio and the institutional investors entered into a registration rights agreement with respect to the institutional investors’ shares of bluebird bio common stock and any common stock issued or issuable upon exercise of the pre-funded warrants. Pursuant to the securities purchase agreement we assumed all of bluebird bio’s obligations under the registration rights agreement in connection with the shares of 2seventy bio common stock that the institutional investors received in the distribution with respect to the shares of bluebird bio common stock they held and any shares of 2seventy bio common stock that the institutional investors receive upon exercise of the pre-funded warrants. Pursuant to the registration rights agreement, following demand by any institutional investor at any time such institutional investor could reasonably be deemed to be an affiliate (as defined and used in Rule 144 as promulgated under the Securities Act) of 2seventy bio, we have agreed to (i) file with the SEC a Registration Statement on Form S-3 covering the resale of the shares of our common stock issued to it in the distribution in respect of the purchased shares of bluebird bio common stock or issuable upon exercise of the pre-funded warrants by the institutional investors as promptly as reasonably practicable following such demand, and in any event within 60 days after such demand, or (ii) effect one underwritten offering per calendar year, but no more than three underwritten offerings in total, and no more than two underwritten offerings or block trades in any twelve month period. We also assumed all of bluebird bio’s obligations under Article IV of the securities purchase agreement in connection with the shares of 2seventy bio common stock that the institutional investors received in the distribution with respect to the shares of bluebird bio common stock they held and any shares of our common stock that the institutional investors receive upon exercise of the pre-funded warrant we will issue to them.

Participation in our 2022 Private Placement

On March 17, 2022, we issued and sold an aggregate of 13,934,427 shares of Common Stock (the “Shares”) pursuant to share purchase agreements between us and the purchasers of the Shares, for a purchase price of \$12.20 per share, for aggregate gross proceeds to us of approximately \$170 million, before deducting offering commissions and estimated offering expenses payable by us (the “Private Placement”). Certain affiliates of 2seventy bio purchased Shares on the same terms and conditions of the other investors in the Private Placement. The following table sets forth the number of shares of our common stock purchased by directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Common Stock Purchased	Aggregate Cash Purchase Price
Entities affiliated with EcoR1 Capital, LLC (1)	2,049,180	\$ 24,999,996.00
Baker Bros Advisors LP (2)	1,229,508	\$ 14,999,997.60
Nick Leschly (3)	368,857	\$ 2,500,055.40
Total:	3,647,545	\$ 42,500,049.00

(1) EcoR1 Capital LLC is a holder of greater than five percent of our common stock.

(2) Consists of 1,135,960 shares of common stock purchased and received by Baker Brothers Life Sciences, L.P., (“BBLs”) and 93,548 shares of common stock purchased and received by 667, L.P. (“667” and together with BBLs, the “ BBA Funds”). Baker Bros. Advisors LP, or BBA, is the investment adviser to the BBA Funds and has sole voting and investment power with respect to the securities held by the BBA Funds and thus may be deemed to beneficially own such securities. Baker Bros. Advisors (GP) LLC, or BBA-GP, is the sole general partner of BBA and thus may be deemed to beneficially own the securities held by the BBA Funds. The BBA Funds are holders of greater than five percent of our common stock.

(3) Nick Leschly is our chief executive officer and a member of our Board. Mr. Leschly's acquisition of shares in the Private Placement was approved by our Board of Directors and is exempted from the "short-swing" liability provisions of Section 16(b) of the Exchange Act pursuant to Rule 16b-3 promulgated thereunder.

AUDIT COMMITTEE REPORT (1)

The Audit Committee has reviewed our audited financial statements for the fiscal year ended December 31, 2021 and has discussed these statements with management and representatives of Ernst & Young LLP, our independent registered public accounting firm. Our management is responsible for the preparation of our financial statements and for maintaining an adequate system of disclosure controls and procedures and internal control over financial reporting for that purpose. Ernst & Young LLP is responsible for performing an audit of 2seventy bio's financial statements in accordance with the standards of the Public Company Accounting Oversight Board (PCAOB) and issuing a report thereon. The Audit Committee is responsible for providing independent, objective oversight of our accounting functions and internal controls.

In connection with these responsibilities, the Audit Committee reviewed and discussed with management and the independent registered public accounting firm the audited consolidated and combined financial statements of 2seventy bio for the fiscal year ended December 31, 2021. The Audit Committee also discussed with the independent registered public accounting firm the matters required to be discussed pursuant to PCAOB and SEC rules. In addition, the Audit Committee received written disclosures and the letter from Ernst & Young LLP as required by the applicable requirements of the PCAOB regarding their communication with the Audit Committee concerning independence and has discussed with Ernst & Young LLP their independence.

Based on its discussions with management and our independent registered public accounting firm, and its review of the representations and information provided by management and our independent registered public accounting firm, the Audit Committee recommended to the Board that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, for filing with the SEC.

Respectfully submitted by the Audit Committee,

Sarah Glickman, Chair
Denice Torres
Daniel S. Lynch

(1) This Section is not "soliciting material," is not deemed filed with the SEC and is not to be incorporated by reference in any filing of the Company under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

**PROPOSAL 2
RATIFICATION OF THE SELECTION OF INDEPENDENT REGISTERED PUBLIC
ACCOUNTING FIRM**

Ernst & Young LLP, independent registered public accounting firm, has been selected by the Audit Committee as auditors for 2seventy for the fiscal year ending December 31, 2022. Ernst & Young LLP has served as our independent registered public accounting firm since 2021. A representative of Ernst & Young LLP is expected to be present at the Annual Meeting with the opportunity to make a statement if he or she desires and to respond to appropriate questions.

Our organizational documents do not require that the stockholders ratify the selection of Ernst & Young LLP as our independent registered public accounting firm. 2seventy bio requests such ratification as a matter of good corporate practice. The selection of Ernst & Young LLP as our independent registered public accounting firm will be ratified if the votes cast FOR exceed the votes cast AGAINST the proposal. Brokers, bankers and other nominees have discretionary voting power on this routine matter. Abstentions and broker non-votes will have no effect on the ratification. If the stockholders do not ratify the selection, the Audit Committee will reconsider whether to retain Ernst & Young LLP, but still may retain this firm. Even if the selection is ratified, the Audit Committee, in its discretion, may change the appointment at any time during the year if it determines that such a change would be in the best interests of the Company and its stockholders.

The Audit Committee, or a designated member thereof, pre-approves each audit and non-audit service rendered by Ernst & Young LLP to the Company consistent with our Audit and Non-Audit Services Pre-Approval Policy.

Independent Registered Public Accounting Firm Fees

The following is a summary and description of fees incurred by Ernst & Young LLP for the fiscal year ended December 31, 2021. In 2020, we were part of bluebird bio. Accordingly, the audit and other services performed by Ernst & Young related to the fiscal year ended December 31, 2020 were provided to and paid for by bluebird bio.

	Fiscal Year 2021	Percentage of 2021 Services Approved by Audit Committee
Audit fees (1)	\$ 898,000	100%
Audit-related fees (2)	-	100%
Tax fees (3)	\$ 13,900	100%
All other fees (4)	\$ 7,200	100%
Total fees	\$ 919,100	100%

- (1) Audit fees in 2021 include fees for the audit of our annual financial statements included in our annual report on Form 10-K and the review of our interim financial statements included in our quarterly report on Form 10-Q, in each case filed after our separation from bluebird bio.
(2) Audit-related fees are related to accounting consultations.
(3) Tax fees are related to tax return preparation, tax advisory services and international tax compliance.
(4) All other fees are related to licensing fees paid to Ernst & Young LLP for access to its proprietary accounting research database.

**THE BOARD UNANIMOUSLY RECOMMENDS THAT YOU VOTE
FOR**

**THE RATIFICATION OF THE SELECTION OF ERNST & YOUNG LLP AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC
ACCOUNTING FIRM
(PROPOSAL 2 ON YOUR PROXY CARD)**

STOCKHOLDER COMMUNICATIONS WITH THE BOARD

Stockholder Proposals and Director Nominations

Stockholders who wish to present proposals for inclusion in our proxy materials for the 2023 Annual Meeting of Stockholders may do so by following the procedures prescribed in Rule 14a-8 under the Securities Exchange Act and in our bylaws. Our Secretary must receive stockholder proposals intended to be included in our proxy statement and form of proxy relating to our 2023 Annual Meeting made under Rule 14a-8 by December 28, 2022.

If a stockholder wishes to propose a nomination of persons for election to our board of directors or present a proposal at an annual meeting but does not wish to have the proposal considered for inclusion in our proxy statement and proxy card, our bylaws establish an advance notice procedure for such nominations and proposals. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely notice in proper form to our corporate secretary of the stockholder's intention to bring such business before the meeting.

Under our current bylaws, proposals of business and nominations for directors other than those to be included in our proxy materials following the procedures described in Rule 14a-8 may be made by stockholders entitled to vote at the meeting if notice is timely given and if the notice contains the information required by the bylaws. To provide timely notice with respect to our 2023 Annual Meeting of Stockholders, notice must be delivered to our Secretary no earlier than February 8, 2023 (120 calendar days before the first anniversary of our 2022 Annual Meeting) and no later than March 10, 2023 (90 calendar days prior to the first anniversary of our 2022 Annual Meeting), unless the date of the 2023 Annual Meeting is advanced or delayed by more than thirty (30) days from the anniversary date of the 2022 Annual Meeting, in which event the our bylaws provide different notice requirements.

Any proposal of business or nomination should be mailed to: 2seventy bio, Inc., 60 Binney Street, Cambridge, Massachusetts 02142, Attention: Corporate Secretary.

Any stockholder recommendation for a director nominee must be submitted to 2seventy not less than 120 calendar days prior to the date on which our proxy statement was released to stockholders in connection with the previous year's annual meeting. To comply with the universal proxy rules (once effective), stockholders who intend to solicit proxies for the 2023 Annual Meeting of Stockholders in support of director nominees other than the Company's nominees must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act no later than April 9, 2023.

Other Stockholder Communications

Generally, stockholders who have questions or concerns should contact our Investor Relations department at investor@2seventybio.com. However, stockholders who wish to communicate directly with our Board as a whole may send written communication by mail to 2seventy bio, Inc., 60 Binney Street, Cambridge, Massachusetts 02142, Attention: Chairman of the Board. For a communication directed to an individual director in his or her capacity as a member of the board of directors, stockholders may send such communication to 2seventy bio, Inc., 60 Binney Street, Cambridge, Massachusetts 02142, Attention: [Name of Individual Director]. All such communications will be opened by our corporate secretary for the sole purpose of determining whether the contents represent a message to our directors. Any contents that are not in the nature of advertising, promotions of a product or service, or patently offensive material will be forwarded promptly to the addressee(s).

WHERE YOU CAN FIND MORE INFORMATION

2seventy files annual, quarterly and current reports, proxy statements and other information with the SEC. The Company's SEC filings are available to the public from commercial document retrieval services and at the website maintained by the SEC at <http://www.sec.gov>. You may also read and copy any document the Company files with the SEC on our website at <http://ir.2seventybio.com>.

You should rely on the information contained in this document to vote your shares at the Annual Meeting. 2seventy bio has not authorized anyone to provide you with information that is different from what is contained in this document. This document is dated April 26, 2022. You should not assume that the information contained in this document is accurate as of any date other than that date, and the mailing of this document to stockholders at any time after that date does not create an implication to the contrary. This proxy statement does not constitute a solicitation of a proxy in any jurisdiction where, or to or from any person to whom, it is unlawful to make such proxy solicitations in such jurisdiction.

HOUSEHOLDING OF PROXY MATERIALS

Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of our documents, including the annual report to stockholders and proxy statement, may have been sent to multiple stockholders in your household. We will promptly deliver a separate copy of either document to you upon written or oral request to 2seventy bio, Inc., 60 Binney Street, Cambridge, Massachusetts 02142, +1 (617) 675-7270, Attention: Teresa Jurgensen, Corporate Secretary. If you want to receive separate copies of the proxy statement or annual report to stockholders in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

OTHER BUSINESS

The Board knows of no business to be brought before the 2022 Annual Meeting which is not referred to in the accompanying Notice of Annual Meeting. Should any such matters be presented, the persons named in the proxy shall have the authority to take such action in regard to such matters as in their judgment seems advisable. If you hold shares through a broker, bank or other nominee as described above, they will not be able to vote your shares on any other business that comes before the 2022 Annual Meeting unless they receive instructions from you with respect to such matter.



2SEVENTY BIO, INC.
60 BINNEY STREET
CAMBRIDGE, MA 02142



SCAN TO
VIEW MATERIALS & VOTE



VOTE BY INTERNET

Before The Meeting - Go to www.proxyvote.com or scan the QR Barcode above

Use the Internet to transmit your voting instructions and for electronic delivery of information. Vote by 11:59 P.M. ET on June 7, 2022. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

During The Meeting - Go to www.virtualshareholdermeeting.com/TSVT2022

You may attend the meeting via the Internet and vote during the meeting. Have the information that is printed in the box marked by the arrow available and follow the instructions.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions. Vote by 11:59 P.M. ET on June 7, 2022. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS:

D82765-P70507

KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

2SEVENTY BIO, INC.		For All	Withhold All	For All Except	To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the number(s) of the nominee(s) on the line below.
The Board of Directors recommends you vote FOR the following:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.	Election of Class I Directors				_____
Nominees:					
01) Nick Leschly					
02) Ramy Ibrahim, M.D.					
The Board of Directors recommends you vote FOR the following proposal:		For	Against	Abstain	
2.	To ratify the selection of Ernst & Young LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2022.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
NOTE: The Board of Directors will consider and act upon such other business as may properly come before the meeting or any adjournment thereof.					
Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name by authorized officer.					
<input type="text"/>		<input type="text"/>		<input type="text"/>	
Signature [PLEASE SIGN WITHIN BOX]		Date		Signature (Joint Owners)	
<input type="text"/>		<input type="text"/>		<input type="text"/>	
Signature [PLEASE SIGN WITHIN BOX]		Date		Signature (Joint Owners)	

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Annual Report and Notice and Proxy Statement are available at www.proxyvote.com

D82766-P70507

**2SEVENTY BIO, INC.
Annual Meeting of Shareholders
June 8, 2022 8:30 AM
This proxy is solicited by the Board of Directors**

The shareholder(s) hereby appoint(s) William D. Baird and Teresa Jurgensen, or either of them, as proxies, each with the power to appoint his or her substitute, and hereby authorize(s) them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of Common Stock of 2SEVENTY BIO, INC. that the shareholder(s) is/are entitled to vote at the Annual Meeting of Shareholders to be held at 8:30 AM, EDT on June 8, 2022, at www.virtualshareholdermeeting.com/TSVT2022, and any adjournment or postponement thereof.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Continued and to be signed on reverse side