GENOCEA BIOSCIENCES, INC.

Form DEF 14A March 29, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of

the Securities Exchange Act of 1934

Filed by the Registrant ý

Filed by a Party other than the Registrant o

Check the appropriate box:

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

Genocea Biosciences, 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 the appropriate box):

- ý No fee required.
- o Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
- (1) Title of each class of securities to which transaction applies:
- (2) Aggregate number of securities to which transaction applies:
- Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):
- (4) Proposed maximum aggregate value of transaction:
- (5) Total fee paid:
- o Fee paid previously with preliminary materials.
 - Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for
- o which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
- (1) Amount Previously Paid:
- (2) Form, Schedule or Registration Statement No.:
- (3) Filing Party:
- (4) Date Filed:

Genocea Biosciences, Inc. 100 Acorn Park Drive, Cambridge, MA 02140

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

The 2019 Annual Meeting of Stockholders of Genocea Biosciences, Inc. (the "Company" or "Genocea") will be held on May 15, 2019, at 9:00 a.m. local time, at Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, MA 02199 (the "Annual Meeting") for the following purposes:

- 1. To elect Ms. Katrine Bosley and Mr. Michael Higgins as Class II directors, each for a three-year term;
- 2. To approve an amendment to the Company's restated certificate of incorporation to effect a reverse stock split (the "Reverse Stock Split Proposal");
- 3. In the event the shareholders approve the Reverse Stock Split Proposal, to approve an amendment to the Company's restated certificate of incorporation to decrease the total number of shares of common stock that the Company is authorized to issue from 250,000,000 shares to 85,000,000 shares;
- 4. To ratify the appointment of Ernst & Young LLP as the independent registered public accounting firm for the Company for the fiscal year ending December 31, 2019; and
- 5. To consider and act upon any other matters that properly come before the Annual Meeting or any adjournment or postponement thereof.

Each outstanding share of the Company's common stock (Nasdaq: GNCA) entitles the holder of record at the close of business on March 19, 2019, to receive notice of and to vote at the Annual Meeting or any adjournment or postponement of the Annual Meeting.

WHETHER OR NOT YOU EXPECT TO ATTEND THE ANNUAL MEETING, WE URGE YOU TO VOTE YOUR SHARES BY FOLLOWING THE INSTRUCTIONS TO THE IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS THAT YOU PREVIOUSLY RECEIVED AND SUBMIT YOUR PROXY BY INTERNET, TELEPHONE, OR BY SIGNING, DATING AND RETURNING THE PROXY CARD INCLUDED IN THESE MATERIALS. IF YOU CHOOSE TO ATTEND THE ANNUAL MEETING, YOU MAY STILL VOTE YOUR SHARES IN PERSON, EVEN THOUGH YOU HAVE PREVIOUSLY VOTED OR RETURNED YOUR PROXY BY ANY OF THE METHODS DESCRIBED IN OUR PROXY STATEMENT. IF YOUR SHARES ARE HELD IN A BANK OR BROKERAGE ACCOUNT, PLEASE REFER TO THE MATERIALS PROVIDED BY YOUR BANK OR BROKER FOR VOTING INSTRUCTIONS.

ALL STOCKHOLDERS ARE EXTENDED AN INVITATION TO ATTEND THE ANNUAL MEETING.

By Order of the Board of Directors

William Clark President and Chief Executive Officer March 29, 2019

Genocea Biosciences, Inc. 100 Acorn Park Drive, Cambridge, MA 02140

PROXY STATEMENT FOR ANNUAL MEETING OF STOCKHOLDERS To Be Held On May 15, 2019 at 9:00 am EDT

This proxy statement (the "Proxy Statement"), along with the accompanying Notice of 2019 Annual Meeting of Stockholders, contains information about the Annual Meeting, including any adjournments or postponements of the Annual Meeting. We are holding the Annual Meeting at 9:00 a.m. local time, at Ropes & Gray LLP, Prudential Tower, 800 Boylston Street, Boston, MA 02199.

On or about March 29, 2019, we made available this Proxy Statement and the attached Notice of 2019 Annual Meeting of Stockholders to all stockholders entitled to vote at the Annual Meeting, and we began sending the proxy card and the Important Notice Regarding the Availability of Proxy Materials to all stockholders entitled to vote at the Annual Meeting. Although not part of this Proxy Statement, we have also made available with this Proxy Statement our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 (the "Annual Report"), which includes our financial statements for the fiscal year ended December 31, 2018.

IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON May 15, 2019

This Proxy Statement and our Annual Report are available for viewing, printing and downloading at www.proxyvote.com. To view these materials, please have your 16-digit control number(s) available that appears on your proxy card.

Additionally, you can find a copy of our Annual Report on the website of the Securities and Exchange Commission ("SEC") at www.sec.gov, or in the "Financial Filings - Annual Reports and Proxies" tab of the "Investors & Media" section of our website at www.genocea.com. You may also obtain a printed copy of our Annual Report, free of charge, by sending a written request to: Genocea Biosciences, Inc., 100 Acorn Park Drive, Cambridge, Massachusetts 02140, Attention: Secretary. Exhibits, if any, will be provided upon written request and payment of an appropriate processing fee.

GENERAL INFORMATION

When are this Proxy Statement and the accompanying material scheduled to be sent to stockholders?

On or about March 29, 2019, we began sending the Important Notice Regarding the Availability of Proxy Materials to all stockholders entitled to vote at the Annual Meeting.

Who is soliciting my vote?

The Board of Directors of the Company is soliciting your vote for the 2019 Annual Meeting of Stockholders.

When is the record date for the Annual Meeting?

The Company's Board of Directors has fixed the record date for the Annual Meeting as of the close of business on March 19, 2019.

How many votes can be cast by all stockholders?

A total of 112,393,445 shares of common stock of the Company were outstanding on March 19, 2019 and are entitled to be voted at the Annual Meeting. Each share of common stock is entitled to one vote on each matter.

How do I vote?

If you are a stockholder of record and your shares are registered directly in your name, you may vote:

By Internet. Access the website at www.proxyvote.com and follow the instructions provided on the Important Notice Regarding Availability of Proxy Materials on the proxy card. Your shares will be voted in accordance with your instructions. You must specify how you want your shares voted, or your Internet vote cannot be completed and you will receive an error message.

By Telephone. Call 1-800-690-6903 toll-free and follow the instructions on the enclosed proxy card. Your shares will be voted in accordance with your instructions. You must specify how you want your shares voted, or your telephone vote cannot be completed.

By Mail. Complete and mail the enclosed proxy card to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY, 11717 in the enclosed postage prepaid envelope. Your proxy will be voted in accordance with your instructions. If you sign and return the enclosed proxy but do not specify how you want your shares voted, they will be voted (i) FOR the election as directors of the nominees named herein to the Company's Board of Directors, (ii) FOR the approval of the Reverse Stock Split Proposal; (iii) if the shareholders approve the Reverse Stock Split Proposal, FOR the approval of the amendment to the Company's restated certificate of incorporation to decrease the total number of shares of common stock that the Company is authorized to issue from 250,000,000 shares to 85,000,000 shares; (iv) FOR the ratification of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019, and (v) will be voted according to the discretion of the proxy holder named in the proxy card upon any other business that may properly be brought before the Annual Meeting and at all adjournments and postponements thereof.

In Person at the Annual Meeting. If you attend the Annual Meeting, be sure to bring a form of personal picture identification with you, and you may deliver your completed proxy card in person, or you may vote by completing a ballot, which will be available at the Annual Meeting.

If your shares of common stock are held in street name (held for your account by a broker or other nominee):

By Internet or By Telephone. You will receive instructions from your broker or other nominee if you are permitted to vote by Internet or telephone.

By Mail. You will receive instructions from your broker or other nominee explaining how to vote your shares.

In Person at the Annual Meeting. If you attend the Annual Meeting, in addition to picture identification, you should both bring an account statement or a letter from the record holder indicating that you owned the shares as of the record date, and contact the broker or other nominee who holds your shares to obtain a broker's proxy card and bring it with you to the Annual Meeting.

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

The Board of Directors recommends a vote:

Proposal 1: FOR ALL election of the two Class II directors.

Proposal 2: FOR approving the Reverse Stock Split Proposal

Proposal 3: if the shareholders approve the Reverse Stock Split Proposal, FOR approving the amendment to the Company's restated certificate of incorporation to decrease the total number of shares of common stock that the Company is authorized to issue from 250,000,000 shares to 85,000,000 shares.

Proposal 4: FOR ratification of the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year 2019.

Who pays the cost for soliciting proxies?

Genocea will bear the cost of solicitation of proxies. This includes the charges and expenses of brokerage firms and others for forwarding solicitation material to beneficial owners of our outstanding common stock. Genocea may solicit proxies by mail, personal interview, telephone, or via the Internet through its officers, directors and other management employees, who will receive no additional compensation for their services.

Can I change my vote?

You may revoke your proxy at any time before it is voted by notifying the Secretary in writing, by returning a signed proxy with a later date, by transmitting a subsequent vote over the Internet or by telephone prior to the close of the Internet voting facility or the telephone voting facility, or by attending the Annual Meeting and voting in person. If your stock is held in street name, you must contact your broker or nominee for instructions as to 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. Abstentions and "broker non-votes" (i.e., shares represented at the Annual Meeting held by brokers, bankers or other nominees as to which instructions have not been received from the beneficial owners or persons entitled to vote such shares and, with respect to one or more but not all issues, such brokers or nominees do not have discretionary voting power to vote such shares), if any, will be counted for purposes of determining whether a quorum is present for the transaction of business at the Annual Meeting.

What vote is required to approve each item?

Directors are elected by a plurality of votes cast (Proposal 1). A vote to withhold or a broker non-vote will have no direct effect on the outcome. A majority of the shares outstanding as of the record date is necessary for approval of the Reverse Stock Split (Proposal 2) and for the amendment to the Company's restated certificate of incorporation to decrease the total number of shares of common stock that the Company is authorized to issue from 250,000,000 shares to 85,000,000 shares (Proposal 3). Abstentions and broker non-votes will have the effect of a negative vote on Proposal 2 and Proposal 3. A majority of votes cast is necessary for ratification of the selection of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2019 (Proposal 4). A vote to abstain will have no direct effect on the outcome.

If there are insufficient votes to approve these proposals, your proxy may be voted by the persons named in the proxy card to adjourn the Annual Meeting in order to solicit additional proxies in favor of the approval of such proposals. If the Annual Meeting is adjourned or postponed for any purpose, at any subsequent reconvening of the Annual Meeting, your proxy will be voted in the same manner as it would have been voted at the original convening of the Annual Meeting unless you withdraw or revoke your proxy.

Could other matters be decided at the Annual Meeting?

Genocea does not know of any other matters that may be presented for action at the Annual Meeting. Should any other business come before the Annual 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 Annual Meeting is postponed or adjourned?

Your proxy may be voted at the postponed or adjourned Annual Meeting. You will still be able to change your proxy until it is voted.

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.

Who should I call if I have any additional questions?

If you hold your shares directly, please call Derek Meisner, Secretary, at 617-876-8191. If your shares are held in street name, please contact the telephone number provided on your voting instruction form or contact your broker or nominee holder directly.

PROPOSAL NO. 1—ELECTION OF DIRECTORS

In accordance with the Company's restated certificate of incorporation and amended and restated by-laws, the Board of Directors 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. Katrine Bosley and Michael Higgins are the Class II directors whose terms expire at the Annual Meeting. Both Ms. Bosley and Mr. Higgins have been nominated for and have agreed to stand for re-election to the Board of Directors to serve as a Class II director of the Company until the 2022 annual meeting of stockholders and until his or her successor is duly elected.

It is intended that, unless you give contrary instructions, shares represented by proxies will be voted for the election of the two nominees listed above as director nominees. Genocea has no reason to believe that any nominee will be unable to serve. In the event that one or more nominees is unexpectedly not available to serve, proxies may be voted for another person nominated as a substitute by the Board of Directors, or the Board of Directors may reduce the number of directors to be elected at the Annual Meeting. Information relating to each nominee for election as director and for each continuing director, including his or her period of service as a director of Genocea, principal occupation and other biographical material, is shown below.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR ALL OF THESE NOMINEES FOR CLASS II DIRECTOR (PROPOSAL 1 ON YOUR PROXY CARD)

DIRECTOR BIOGRAPHIES

Below sets forth information concerning our directors as of February 28, 2019. The biographical description of each director includes the specific experience, qualifications, attributes and skills that the Board of Directors would expect to consider if it were making a conclusion currently as to whether such person should serve as a director.

CLASS II DIRECTOR NOMINEES

Katrine Bosley, age 50, is a Class II director who has served as a member of our Board of Directors since March 2013 and as our chair from August 2013 until December 2018. Ms. Bosley served as the Chief Executive Officer of Editas Medicine Inc. ("Editas") from June 2014 through February 2019. Prior to Editas, Ms. Bosley was the Entrepreneur-in-Residence at The Broad Institute from September 2013 to May 2014. She served as Chief Executive Officer of Avila Therapeutics Inc. ("Avila"), from May 2009 to March 2012, when Avila was acquired by Celgene Corporation. Before Avila, she was Vice President, Strategic Operations at Adnexus Therapeutics Inc. ("Adnexus"), a BMS Company, and was Vice President, Business Development at Adnexus before that. She joined Adnexus from Biogen Idec where she held roles in business development, commercial operations, and portfolio strategy in the United States and Europe. In addition to serving as a director of our Company, Ms. Bosley currently serves as a director of Galapagos NV and Massachusetts Eye and Ear. She also is a member of the BIO Governing Board and Chair of the Emerging Companies Section of the Board. Ms. Bosley graduated from Cornell University with a B.A. in Biology. We believe that Ms. Bosley's experience as a chief executive officer of a biotechnology company and her breadth of experience in creating strategic and business development value qualifies her to serve as a member of our Board of Directors.

Michael Higgins, age 56, is a Class II director who has served as a member of our Board of Directors since February 2015. In January 2015, Mr. Higgins joined Polaris Partners as an Entrepreneur-in-Residence. Prior to joining Polaris Partners, Mr. Higgins served as Chief Operating Officer and Chief Financial Officer at Ironwood Pharmaceuticals ("Ironwood") from 2003 through 2014, playing a key role in Ironwood's evolution from a privately-funded discovery

organization through its initial public offering and the launch of its first commercial product. Under his leadership, Ironwood was able to raise more than one billion dollars to help support the development of the business during that period. Prior to his work at Ironwood, from 1997 through 2003, Mr. Higgins worked at Genzyme Corporation ("Genzyme") in a variety of leadership roles including Vice President, Corporate Finance and Vice President, Business Development. While at Genzyme, he was involved with multiple businesses including the Cell Therapy, Gene Therapy, and Orphan Disease business units. Previously, Mr. Higgins served as Chief Financial Officer of Procept, Inc., from 1992 to 1997, and led the company through its initial public offering. Mr. Higgins currently serves as a director of Pulmatrix, Inc. and Voyager Therapeutics. Mr. Higgins began his pharmaceutical career as a sales representative for Schering-Plough Corporation in 1986. Mr. Higgins earned his B.S. from Cornell University and holds an M.B.A. from the Amos Tuck School of Business at Dartmouth College. We believe that Mr. Higgins' financial and business expertise, including his diversified background as an executive officer in public pharmaceutical companies, qualifies him to serve as a member of our Board of Directors.

DIRECTORS NOT STANDING FOR ELECTION AT THE ANNUAL MEETING

Kenneth Bate, age 68, is a Class I director who has served as a member of our Board of Directors since September 2014 and our chair since December 2018. Mr. Bate has served as an independent consultant in the biotechnology field since 2012. From 2009 to 2012, Mr. Bate served as President and Chief Executive Officer of Archemix, Inc., a privately-held biotechnology company. From 2006 to 2009, Mr. Bate served in various positions at NitroMed, Inc., a pharmaceutical company, most recently as President and Chief Executive Officer. From 2002 to 2005, Mr. Bate served as Chief Financial Officer of Millennium Pharmaceuticals Inc., where he headed the commercial organization. Prior to joining Millennium Pharmaceuticals Inc., Mr. Bate co-founded JSB Partners, LLC, a banking and advisory services firm for biopharmaceutical and life sciences companies. From 1990 to 1996, he was with Biogen Inc., a biotechnology company, first as their Chief Financial Officer, and then as head of the commercial organization responsible for launching the multiple sclerosis business. Mr. Bate is currently a director of AVEO Pharmaceuticals, Catabasis Pharmaceuticals, Epizyme Inc., and Madrigal Pharmaceuticals. He holds an M.B.A. from The Wharton School of the University of Pennsylvania and a B.A. from Williams College. We believe that Mr. Bate's experience as a chief executive officer of multiple biotechnology companies, as well as his experience as a director of other companies, qualifies him to serve as a member of our Board of Directors.

Ali Behbahani, M.D., age 42, is a Class I director who has served as a member of our Board of Directors since February 2018. Since 2007, Dr. Behbahani has served in various positions on the healthcare team at New England Associates, most recently as General Partner. The healthcare team specializes in investments in the biopharmaceutical and medical device sectors. He is also currently a member of the board of directors of CRISPR Therapeutics, Adaptimmune and Nevro Corp. He has previously worked as a consultant in business development at The Medicines Company and held positions as a Venture Associate at Morgan Stanley Venture Partners from 2000 to 2002 and as a Healthcare Investment Banking Analyst at Lehman Brothers from 1998 to 2000. Dr. Behbahani conducted basic science research in the fields of viral fusion inhibition and structural proteomics at the National Institutes of Health and at Duke University. He holds an M.D. degree from The University of Pennsylvania School of Medicine and an M.B.A. from The University of Pennsylvania Wharton School. We believe Dr. Behbahani's experience in the biopharmaceutical industry, as well as his experience as a member on the boards of directors of multiple companies in the industry, qualifies him to serve as a member of our Board of Directors.

William Clark, age 50, is a Class III director who has served on our Board of Directors and as our President and Chief Executive Officer since February 2011. Previously he served as our Chief Business Officer from August 2010 to February 2011. Mr. Clark has served on our Board of Directors since February 2011. Prior to joining our Company, he served as Chief Business Officer at Vanda Pharmaceuticals, Inc. ("Vanda"), a biopharmaceutical company he co-founded in 2004. While at Vanda, he led the company's strategic and business development activities, and played a central role in multiple public and private financings. Prior to Vanda, Mr. Clark was a principal at Care Capital, LLC, a venture capital firm investing in biopharmaceutical companies, after serving in a variety of strategic and commercial roles at SmithKline Beecham (now GlaxoSmithKline). Mr. Clark holds a B.A. from Harvard University and an M.B.A. from The Wharton School at the University of Pennsylvania. We believe that Mr. Clark's operational and historical experience with our Company gained from serving as our Chief Executive Officer, President and member of our Board of Directors, combined with his prior experience at Vanda and in the venture capital industry focusing on biopharmaceutical companies, qualifies him to serve as a member of our Board of Directors.

Ronald Cooper, age 56, is a Class III director who has served as a member of our Board of Directors since June 2016. Mr. Cooper is President and CEO of Albireo Pharma ("Albireo"), a position that he was appointed to in June 2015. Mr. Cooper is a life sciences leader with a track record of growing and rejuvenating businesses, brands and organizations in the U.S. and Europe, ranging from entrepreneurial and resource-constrained, up to sales exceeding \$4.5 billion. Prior to Albireo, Mr. Cooper was with Bristol-Myers Squibb ("BMS") for over 25 years working in five different countries and holding positions of increasing responsibility in sales, marketing and general management,

culminating in President of Europe. In Europe, Mr. Cooper was responsible for over 30 countries with sales exceeding \$4.5 billion. While at BMS, Mr. Cooper was directly associated with several product successes, including Abilify®, Avapro®, Atripla®, Eliquis®, Orencia®, Pravachol®, Plavix®, Reyataz®, Sustiva®, Sprycel® and Yervoy®. Mr. Cooper has successfully completed over a dozen business development deals including the creation of the first single tablet HIV/AIDS regimen partnership. Mr. Cooper is a graduate of St. Francis Xavier University in Canada. We believe that Mr. Cooper's experience in the pharmaceutical industry, along with his background as an executive officer of a public company, qualifies him to serve as a member of our Board of Directors.

Howard Mayer, M.D., age 56, is a Class I director who has served as a member of our Board of Directors since March 2017. Dr. Mayer was Senior Vice President and Chief Medical Officer at Shire plc and is currently in a transitional role as Head of the Rare Diseases Therapeutic Area Unit at Takeda. Dr. Mayer joined Shire in 2012 and is responsible for global clinical development across hematology, immunology, oncology, genetic diseases, GI/metabolic, neuroscience and ophthalmology therapeutic areas. From 2009 to 2012 he served as Chief Medical Officer at EMD Serono, a division of Merck KGaA. Prior to

that, he held a variety of global roles at Pfizer Inc. ("Pfizer"), including Head of Clinical Development and Medical Affairs for Virology/Infectious Diseases. Prior to joining Pfizer, he served as Director of Infectious Diseases Clinical Research at BMS for five years. Dr. Mayer obtained his B.A. from the University of Pennsylvania and his M.D. from Albert Einstein College of Medicine in New York, which was followed by an internship and residency at Mount Sinai Hospital and an Infectious Diseases fellowship at Harvard Medical School. Since 2011 he has served on the board of Autism Speaks in New England. In 2011 and 2017, he was honored by PharmaVoice as one of the 100 Most Inspiring People in the Life Sciences Industry. We believe that Dr. Mayer's scientific expertise, which includes clinical development experiences in both infectious disease and oncology, qualifies him to serve as a member of our Board of Directors.

George Siber, M.D., age 74, is a Class III director who has served as a member of our Board of Directors since 2007. From 1996 to 2007, Dr. Siber served as Executive Vice President and Chief Scientific Officer of Wyeth Vaccines ("Wyeth"). While at Wyeth, Dr. Siber oversaw the development and approval of multiple widely-used childhood vaccines, including: Prevnar, a pneumococcal vaccine which has achieved multibillion dollar revenues; Acel-Imune, an acellular pertussis vaccine; and Meningitec, a meningococcal meningitis vaccine. Prior to Wyeth, Dr. Siber was Director of the Massachusetts Public Health Biologic Laboratories and a Harvard Medical School Associate Professor of Medicine at Dana Farber Cancer Institute. During this time, Dr. Siber led the research and manufacturing of multiple vaccines and immune globulins including Respigam, a human immune globulin against respiratory syncytial virus. Since 2007, Dr. Siber has served on the boards of directors of several vaccine companies, including Crucell, Selecta Biosciences, Vedantra Pharmaceuticals and Affinivax Inc., and as a consultant or scientific advisory board member of ClearPath Vaccines Company, of which he is currently the Chief Scientific Officer, PaxVax, Vaxess Technologies, Inc., the Bill & Melinda Gates Foundation, PATH, the Wellcome Trust, the European Commission (on vaccinations), the National Institutes of Health, or NIH, and the Korean FDA. Dr. Siber serves as a member of the Board of Trustees of the International Vaccine Institute. Dr. Siber holds an M.D. degree from McGill University in Canada, received post-doctoral training in Internal Medicine at Rush-Presbyterian Hospital in Chicago and Beth Israel Hospital in Boston and Infectious Disease and vaccinology training at Children's Hospital and Beth Israel Hospital, Harvard Medical School Boston. We believe that Dr. Siber's experience in life sciences and vaccine industries and his experience overseeing the development of multiple vaccines, qualifies him to serve as a member of our Board of Directors.

BOARD OF DIRECTORS AND ITS COMMITTEES

The following table describes which directors serve on each of the committees of the Board of Directors as of March 1, 2019.

Name	Nominating and Corporate Governance Committee	Compensation Committee	Audit Committee	
Kenneth Bate		X	(1)X	
Ali Behbahani, M.D.		X		
Katrine Bosley	X	(1)		
William Clark				
Ronald Cooper	X		X	
Michael Higgins			X	(1)
Howard Mayer,		X		
M.D.		Λ		
George Siber, M.D.	X			
(1) Chair of the committee.				

THE BOARD OF DIRECTORS AND ITS COMMITTEES

Director Independence

As required by the listing standards of The Nasdaq Capital Market ("Nasdaq"), the Board of Directors has affirmatively determined, upon the recommendation of the Nominating and Corporate Governance Committee, that each of our directors (other than William Clark, our President and Chief Executive Officer) is independent. To make this determination, our Board of Directors reviews all relevant transactions or relationships between each director and Genocea, its senior management and its independent registered public accounting firm. During this review, the Board of Directors considers whether there are any transactions or relationships between directors or any member of their immediate family (or any entity of which a director or an immediate family member is an executive officer, general partner or significant equity holder) and members of our senior management or their affiliates. The Board of Directors consults with Genocea's outside corporate counsel to ensure that the Board of Directors' determinations are consistent with all relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent Nasdaq listing standards, as in effect from time to time.

Board Meetings and Attendance

The Board of Directors held nine meetings during the year ended December 31, 2018. Each of the directors, other than Howard Mayer and George Siber, attended at least 75% of the meetings of the Board of Directors and the committees of the Board of Directors on which he or she served during the year ended December 31, 2018 (in each case, which were held during the period for which he or she was a director and/or a member of the applicable committee). Each director who is up for election at an annual meeting of stockholders or who has a term that continues after such annual meeting is expected to attend the Annual Meeting. All of our then existing directors on the Board of Directors attended our 2018 annual meeting.

Board Committees

The Board of Directors has standing Audit, Compensation and Nominating and Corporate Governance Committees, each of which is comprised solely of independent directors, and is described more fully below. The charters for the Audit, Compensation and Nominating and Corporate Governance Committees are all available on our website (http://ir.genocea.com/) under "Investors" at "Governance".

Audit Committee

Our Audit Committee is composed of Mr. Bate, Mr. Cooper, and Mr. Higgins, with Mr. Higgins serving as chair of the committee. Our Board of Directors has determined, upon the recommendation of the Nominating and Corporate Governance Committee, that each member of the Audit Committee meets the independence requirements of Rule 10A-3 under the Exchange Act of 1934, as amended (the "Exchange Act") and the applicable listing standards of Nasdaq. Our Board of Directors has determined that each of Mr. Bate, Mr. Cooper, and Mr. Higgins is an "audit committee financial expert" within the meaning of the SEC regulations and applicable listing standards of Nasdaq. Our Audit Committee operates pursuant to a written charter and it reviews and assesses the adequacy of its charter annually.

The Audit Committee's responsibilities include:

appointing, approving the compensation of, and assessing the qualifications, performance and independence of our independent registered public accounting firm by considering (i) evaluations of our independent registered public accounting firm by our management and internal auditors, (ii) our independent registered public accounting firm's

effectiveness of communications and working with the Audit Committee and our management and internal auditors, (iii) the length of time our independent registered public accounting firm has served as our independent auditors, (iv) the quality and depth of our independent registered public accounting firm's expertise and experience in the biotech and life sciences industries in light of the breadth, complexity and global reach of our business and (v) the advisability and potential impact of selecting a different independent registered public accounting firm; pre-approving audit and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;

reviewing the internal audit plan with the independent registered public accounting firm and members of management responsible for preparing our financial statements;

reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us; reviewing the adequacy of our internal control over financial reporting;

establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns; recommending, based upon the Audit Committee's review and discussions with management and the Company's independent registered public accounting firm, whether our audited financial statements shall be included in our Annual Report;

monitoring our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;

preparing the Audit Committee report required by the rules of the SEC to be included in our annual proxy statement; viewing all related party transactions for potential conflict of interest situations and approving all such transactions; and

reviewing and discussing with management and our independent registered public accounting firm our earnings releases and scripts.

All audit and non-audit services to be provided to us by our independent registered public accounting firm must be approved in advance by the Audit Committee. During the year ended December 31, 2018, the Audit Committee met four times. The report of the Audit Committee is included in this Proxy Statement under "Audit Committee Report".

Compensation Committee

Our Compensation Committee is composed of Mr. Bate, Dr. Behbahani, and Dr. Mayer, with Mr. Bate serving as chair of the committee. The Board of Directors has determined, upon the recommendation of the Nominating and Corporate Governance Committee, that each member of the Compensation Committee is "independent" within the meaning of the rules and regulations of Nasdaq and the SEC. In addition, each member qualifies as an "outside director" within the meaning of Section 162(m) of the Internal Revenue Code and is a "non-employee director" within the meaning of the SEC rules. Our Compensation Committee operates pursuant to a written charter and it reviews and assesses the adequacy of its charter periodically.

The Compensation Committee's responsibilities include:

annually reviewing and recommending to the Board of Directors for approval the corporate goals and objectives relevant to the compensation of our Chief Executive Officer;

evaluating the performance of our Chief Executive Officer in light of such corporate goals and objectives and recommending to the Board of Directors for approval the compensation of our Chief Executive Officer; reviewing and approving the compensation of our other executive officers;

appointing, compensating and overseeing the work of any compensation consultant, legal counsel or other advisor retained by the Compensation Committee;

conducting the independence assessment outlined in Nasdaq rules with respect to any compensation consultant, legal counsel or other advisor retained by the Compensation Committee;

annually reviewing and reassessing the adequacy of the committee charter in accordance with the listing requirements of Nasdag;

reviewing and establishing our overall management compensation philosophy and policy;

overseeing and administering our equity compensation and other incentive compensation programs;

reviewing and approving our equity and incentive policies and procedures for the grant of equity-based awards and approving the grant of such equity-based awards;

reviewing and making recommendations to the Board of Directors with respect to director compensation; and if applicable, producing the compensation committee report to be included