

REPLIGEN CORP
Form DEF 14A
April 11, 2016
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 14A

(Rule 14a-101)

Information Required in Proxy Statement

Schedule 14A Information

Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934

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

REPLIGEN CORPORATION

(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):

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(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) 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:

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(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

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REPLIGEN CORPORATION

Notice of Annual Meeting of Stockholders

May 11, 2016

To the Stockholders:

The Annual Meeting of our Stockholders will be held on Wednesday, May 11, 2016 at 8:00 a.m. at Repligen Corporation's headquarters located at 41 Seyon Street, Building 1, Suite 100, Waltham, Massachusetts 02453 (see directions attached as Appendix A to the proxy statement) for the following purposes:

1. To elect seven directors, nominated by the Board of Directors, as more fully described in the accompanying Proxy Statement;
2. To ratify the selection of Ernst & Young LLP as independent registered public accountants for the fiscal year ending December 31, 2016;
3. To consider and act upon an advisory vote on the compensation of our named executive officers; and
4. To consider and act upon any other business which may properly come before the meeting.

The Board of Directors has fixed the close of business on March 31, 2016 as the record date for the meeting. All stockholders of record on that date are entitled to notice of and to vote at the meeting.

Whether or not you plan to attend the meeting, please complete and return the enclosed proxy in the envelope provided *or* vote by telephone *or* the Internet pursuant to instructions provided with the proxy. Stockholders of record as of March 31, 2016 are encouraged and cordially invited to attend the Annual Meeting (see directions attached as Appendix A to the proxy statement).

By Order of the Board of Directors

Tony J. Hunt
Secretary

Waltham, Massachusetts

April 11, 2016

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REPLIGEN CORPORATION

PROXY STATEMENT

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GENERAL INFORMATION

This Proxy Statement is furnished in connection with the solicitation of proxies by the Board of Directors (the Board of Directors, or the Board) of Repligen Corporation (Repligen, or the Company), for use at the Annual Meeting of Stockholders, or the Annual Meeting, to be held on Wednesday, May 11, 2016 at the time and place set forth in the Notice of Annual Meeting, and at any adjournment or postponement thereof.

Repligen's Annual Report to Stockholders, containing financial statements for the fiscal year ended December 31, 2015, is being provided together with this proxy statement to all stockholders entitled to vote at the Annual Meeting. It is anticipated that this proxy statement and the accompanying proxy will be first sent or given to stockholders on or about April 11, 2016.

Voting

Stockholders may vote in person or by proxy by completing, signing, dating and returning the accompanying proxy card or by voting by telephone or via the Internet in accordance with the instructions listed on the proxy card. Execution of a proxy card will not in any way affect a stockholder's right to attend the Annual Meeting and vote in person.

Any proxy given pursuant to this solicitation may be revoked by the person giving it any time before the taking of the vote at the Annual Meeting. Proxies may be revoked by: (1) giving written notice of revocation to the Secretary of Repligen at any time before the taking of the vote at the Annual Meeting; (2) duly executing a later-dated proxy card relating to the same shares and delivering it to the Secretary of Repligen or by telephone or the Internet, in accordance with the instructions listed on the proxy card, before the taking of the vote at the Annual Meeting; or (3) attending the Annual Meeting and voting in person (although attendance at the Annual Meeting will not in and of itself constitute a revocation of a proxy). For those stockholders who submit a proxy by telephone or the Internet, the date on which the proxy is submitted in accordance with the instructions listed on the proxy card is the date of the proxy. Any written notice of revocation or subsequent proxy should be sent so as to be delivered to Repligen Corporation, Attention: Secretary, 41 Seyon Street, Building #1, Suite 100, Waltham, Massachusetts 02453, at or before the taking of the vote at the Annual Meeting.

Each of the persons named as attorneys-in-fact on the proxy cards is a director, officer and/or employee of Repligen. All properly executed proxy cards returned in time to be counted at the Annual Meeting will be voted as stated below under the heading Voting Procedures. Any stockholder submitting a proxy has the right to withhold authority to vote for any individual nominee to the Board of Directors by writing that nominee's number on the space provided on the proxy card, checking the box next to the name of such individual if voting by proxy via the Internet or, if using the telephone to vote by proxy, by following the verbal instructions for entering the two digit number appearing on the proxy card immediately before the name of such individual. Where a choice has been specified on the proxy with respect to a matter, the shares represented by the proxy will be voted in accordance with the specifications. Where no specification is indicated on the proxy card with respect to a matter, the shares represented by the proxy card will be voted FOR proposals 1, 2 and 3, as permitted by applicable regulations and by Repligen's corporate documents.

Other than (i) the election of directors, (ii) the ratification of Ernst & Young LLP and (iii) the advisory vote regarding the compensation of our named executive officers, the Board knows of no other matters to be presented at the Annual Meeting. If any other matter should be properly presented at the Annual Meeting upon which a vote may be taken, shares represented by all proxies received by the Board will be voted with respect thereto in accordance with the judgment of the persons named as attorneys-in-fact in the proxies.

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Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting to be Held on May 11, 2016

The Company's Annual Report for the Fiscal Year Ended December 31, 2015 and this Proxy Statement will be available at www.proxyvote.com.

Voting Procedures

The representation, in person or by proxy, of at least a majority of the outstanding shares of Repligen Common Stock entitled to vote at the Annual Meeting is necessary to constitute a quorum for the transaction of business. Shares represented by proxies pursuant to which votes have been withheld from any nominee for director, or which contain one or more abstentions or broker non-votes, are counted as present or represented for purposes of determining the presence or absence of a quorum for the Annual Meeting. A non-vote occurs when a broker or other nominee holding shares for a beneficial owner votes on one proposal, but does not vote on another proposal because the broker does not have discretionary voting power and has not received instructions from the beneficial owner.

Election of Directors. Directors are elected by a plurality of the votes cast, in person or by proxy, at the Annual Meeting. The seven nominees who receive the highest number of affirmative votes of the shares present or represented and voting on the election of directors at the Annual Meeting will be elected to the Board. Shares present or represented and not so marked as to withhold authority to vote for a particular nominee will be voted in favor of a particular nominee and will be counted toward such nominee's achievement of a plurality. Shares present at the Annual Meeting or represented by proxy where the stockholder properly withholds authority to vote for such nominee in accordance with the proxy instructions and broker non-votes will not be counted toward such nominee's achievement of plurality and will have no effect on the election of nominees.

Ratification of Independent Accountants. For the ratification of the appointment of Ernst & Young LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2016, an affirmative vote of a majority of the shares present, in person or represented by proxy, and voting on such matter is required for approval. Abstentions are included in the number of shares present or represented and voting but are not considered votes cast on the matter. Shares subject to broker non-votes are considered to be not entitled to vote for this particular matter and have the practical effect of reducing the number of affirmative votes required to achieve a majority by reducing the total number of shares from which the majority is calculated.

Advisory Vote on the Compensation of our Named Executive Officers. For the advisory vote on the compensation of our named executive officers, the affirmative vote of the majority of shares present, in person or represented by proxy, and voting on that matter is required for approval. Abstentions are included in the number of shares present or represented and voting but are not considered votes cast on the matter. Shares subject to broker non-votes are considered to be not entitled to vote for the particular matter and have the practical effect of reducing the number of affirmative votes required to achieve a majority for such matter by reducing the total number of shares from which the majority is calculated.

Other Matters. The Board knows of no other matters to be presented at the Annual Meeting. If any other matter should be properly presented at the Annual Meeting upon which a vote may be taken, the persons named on the enclosed proxy card will have discretionary authority to vote the shares represented by such proxies in accordance with their best judgment.

Solicitation of Proxies

The cost of solicitation will be borne by Repligen and, in addition to directly soliciting stockholders by mail, Repligen may request banks and brokers to solicit their customers who have stock of Repligen registered in the name of the nominee and, if so, will reimburse such banks and brokers for their reasonable out-of-pocket costs.

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Solicitation by officers and employees of Repligen may also be made of some stockholders in person or by mail or telephone following the original solicitation. Repligen may, if appropriate, retain any independent proxy solicitation firm to assist Repligen in soliciting proxies. If Repligen does retain a proxy solicitation firm, Repligen would pay such firm's customary fees and expenses.

Record Date and Voting Securities

Only stockholders of record as of March 31, 2016, or the Record Date, are entitled to notice of and to vote at the Annual Meeting and any adjournments or postponements thereof. As of the Record Date, the Company had 33,097,903 shares of common stock with a par value of \$0.01, or the Common Stock, outstanding and entitled to vote. Each outstanding share of Common Stock entitles the record holder to one vote.

Table of Contents**SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS, DIRECTORS AND MANAGEMENT**

The following table sets forth certain information regarding beneficial ownership of shares of Repligen's Common Stock as of March 23, 2016 (i) by each person who is known by the Company to beneficially own more than 5% of the outstanding shares of Common Stock; (ii) by each director or nominee of the Company; (iii) by each present or former executive officer of the Company named in the Summary Compensation Table set forth below under "Director and Executive Officer Compensation" and (iv) by all directors and executive officers of Repligen as a group. The business address of each director and executive officer is Repligen Corporation, 41 Seyon Street, Building #1, Suite 100, Waltham, Massachusetts 02453.

Beneficial Owner	Amount and Nature of Beneficial Ownership (1)	Percent of Class (2)
BlackRock, Inc. (3)	3,558,534	10.8%
FMR LLC (4)	2,518,868	7.6%
Invesco Ltd. (5)	1,994,389	6.0%
OppenheimerFunds, Inc. (6)	1,868,776	5.7%
Walter C. Herlihy (7)		*
Tony J. Hunt (8)	45,879	*
Howard Benjamin (9)	28,944	*
James R. Rusche (10)	182,864	*
Jon K. Snodgres (11)	7,674	*
Karen A. Dawes (12)	160,562	*
Nicolas M. Barthelemy (13)	11,011	*
Glenn L. Cooper (14)	100,019	*
John G. Cox (15)	21,490	*
Alfred L. Goldberg (16)	145,019	*
Glenn P. Muir		
Thomas F. Ryan, Jr. (17)	42,323	*
All directors, nominees and executive officers as a group (13 persons) (18)	745,785	2.3%

* Less than one percent

- (1) Beneficial ownership, as such term is used herein, is determined in accordance with Rule 13d-3 promulgated under the Securities Exchange Act of 1934, or the Exchange Act, and includes voting and/or investment power with respect to shares of Common Stock of Repligen. Unless otherwise indicated, the named person possesses sole voting and investment power with respect to the shares. The shares shown include known to us shares that such person has the right to acquire within 60 days of March 23, 2016.
- (2) Percentages of ownership are based upon 33,060,966 shares of Common Stock issued and outstanding as of March 23, 2016. Shares of Common Stock that may be acquired pursuant to options that are exercisable within 60 days of March 23, 2016 are deemed outstanding for computing the percentage ownership of the person holding such options, but are not deemed outstanding for the percentage ownership of any other person.
- (3) Based solely on a Schedule 13G/A filed on January 8, 2016 for the December 31, 2015 filing event. BlackRock, Inc.'s business address is 55 East 52nd Street, New York, NY 10055. BlackRock, Inc. has sole voting power with respect to 3,477,171 shares and sole dispositive power with respect to 3,558,534 shares.
- (4) Based solely on a Schedule 13G filed on February 12, 2016 for December 31, 2015 filing event. FMR LLC's business address is 245 Summer Street, Boston, MA 02210. FMR LLC has sole voting power with respect to 937 shares and sole dispositive power with respect to 2,518,868 shares.
- (5) Based solely on a Schedule 13G/A filed on February 8, 2016 for the December 31, 2015 filing event. Invesco Ltd.'s business address is 1555 Peachtree Street NE, Suite 1800, Atlanta, GA 30309. Invesco Ltd. has sole voting power with respect to 1,989,589 shares and sole dispositive power with respect to 1,994,389 shares.

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- (6) Based solely on a Schedule 13G filed on February 4, 2016 for the December 31, 2015 filing event. OppenheimerFunds, Inc.'s business address is 2 World Financial Center, 225 Liberty Street, New York, NY 10281. OppenheimerFunds, Inc. has sole voting power and sole dispositive power with respect to 1,868,776 shares.
- (7) Dr. Herlihy retired from the Company on May 21, 2015.
- (8) Includes 33,012 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 5,000 restricted stock units which will vest within 60 days of March 23, 2016.
- (9) Includes 16,818 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016.
- (10) Includes 5,000 shares held in a Uniform Trusts for Minors account by Mr. Rusche for his daughter, as to which he disclaims beneficial ownership. Includes 66,841 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016.
- (11) Includes 5,815 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016.
- (12) Includes 120,321 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 1,498 restricted stock units which will vest within 60 days of March 23, 2016.
- (13) Includes 9,992 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 1,019 restricted stock units which will vest within 60 days of March 23, 2016.
- (14) Includes 64,688 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 1,019 restricted stock units which will vest within 60 days of March 23, 2016.
- (15) Includes 19,632 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 1,858 restricted stock units which will vest within 60 days of March 23, 2016.
- (16) Includes 104,688 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 1,019 restricted stock units which will vest within 60 days of March 23, 2016.
- (17) Includes 21,992 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 1,019 restricted stock units which will vest within 60 days of March 23, 2016.
- (18) Includes 463,799 shares issuable pursuant to stock options which are exercisable within 60 days of March 23, 2016 and 12,432 restricted stock units which will vest within 60 days of March 23, 2016.

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SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires Repligen's directors, officers, and holders of more than ten percent of Repligen's Common Stock, or collectively, Reporting Persons, to file with the United States Securities and Exchange Commission, or the SEC, initial reports of ownership and reports of changes in ownership of Common Stock of Repligen. Such Reporting Persons are required by SEC regulations to furnish Repligen with copies of all Section 16(a) reports they file. Based on its review of the copies of such filings received by it with respect to the fiscal year ended December 31, 2015, the Company believes that all required persons complied with all Section 16(a) filing requirements, except that Messrs. Hunt, Snodgres and Rusche each did not timely file a Form 4 with respect to one transaction.

Table of Contents**ITEM 1****ELECTION OF DIRECTORS**

There are seven nominees for director, all of whom are current directors of Repligen that have been re-nominated by the Nominating and Corporate Governance Committee and the Board for election. The authorized number of directors is currently fixed at eight. Alfred L. Goldberg will not be nominated for reelection at this year's Annual Meeting. As a result, the Board has determined to fix the number of authorized directors at seven, effective at the conclusion of the Annual Meeting. The other directors of the Company will be elected to hold office until the 2017 Annual Meeting of Stockholders and until their successors have been duly elected and qualified, or until their earlier death, resignation or removal.

Nominee's Name	Year First Elected Director	Position(s) with the Company
Nicolas M. Barthelemy	2014	Director
Glenn L. Cooper	2009	Director
John G. Cox	2013	Director
Karen A. Dawes	2005	Director, Chairperson of the Board
Tony J. Hunt	2015	President, Chief Executive Officer and Director
Glenn P. Muir (1)	2015	Director
Thomas F. Ryan, Jr.	2003	Director

(1) Mr. Muir was appointed to the Board in September 2015.

Shares represented by all proxies received by the Board and not marked or voted so as to withhold authority to vote for any individual director or for any group of directors will be voted (unless one or more nominees are unable or unwilling to serve) for the election of the nominees named above. Proxies may not be voted for a greater number of persons than the number of nominees named. The Board knows of no reason why any nominee should be unable or unwilling to serve, but if any nominee should be unable or unwilling to serve, proxies will be voted or withheld in accordance with the judgment of the persons named as attorneys-in-fact on the proxy cards with respect to the directorship for which that nominee was unable or unwilling to serve.

Proposal 1 relates solely to the election of seven directors nominated by the Company and does not include any other matters relating to the election of directors, including without limitation, the election of directors nominated by any stockholders of the Company.

The Board of Directors unanimously recommends a vote FOR each of the nominees for election as directors of the Company. If authorized proxies are submitted without specifying an affirmative or negative vote on any proposal, the shares represented by such proxies will be voted in favor of the Board of Directors' recommendations.

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OCCUPATIONS OF DIRECTORS AND EXECUTIVE OFFICERS

Repligen's executive officers are appointed by, and serve at the discretion of, the Board of Directors. Each executive officer is a full-time employee of Repligen. The directors, including director nominees, and executive officers of Repligen as of March 23, 2016, are as follows:

Name	Age	Positions
Tony J. Hunt	52	President, Chief Executive Officer and Director
Howard Benjamin	56	Vice President, Business Development
James R. Rusche	61	Senior Vice President, Research and Development
Jon K. Snodgres	50	Chief Financial Officer
Nicolas M. Barthelemy (1)(3)	50	Director
Glenn L. Cooper (1)	63	Director
John G. Cox (2)	53	Director
Karen A. Dawes (3)	64	Director, Chairperson of the Board
Alfred L. Goldberg	73	Director
Glenn P. Muir (1)(2)	57	Director
Thomas F. Ryan, Jr. (2)(3)	74	Director

- (1) Member of the Compensation Committee.
- (2) Member of the Audit Committee.
- (3) Member of the Nominating and Corporate Governance Committee.

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BIOGRAPHICAL INFORMATION

The following paragraphs provide information about our directors and executive officers. The information presented includes information about each of our director's specific experience, qualifications, attributes and skills that led our board of directors to the conclusion that he or she should serve as a director.

Executive Officers

Tony J. Hunt was named President and Chief Executive Officer of Repligen in, and has served on our Board since, May 2015. He joined Repligen in May 2014 as Chief Operating Officer, overseeing commercial and manufacturing operations. Before coming to Repligen, Mr. Hunt was President of Bioproduction at Life Technologies, a global life sciences company which was acquired by Thermo Fisher Scientific in 2014. He joined Life Technologies in 2008, serving as General Manager of Bioproduction Chromatography and Pharma Analytics before being named President of Bioproduction in 2011. From 2000 to 2008, Mr. Hunt was with Applied Biosystems as Senior Director of Pharma Programs where he launched the Pharma Analytics business that in 2008 became a part of the Bioproduction platform at Life Technologies. Mr. Hunt received a B.S. in Microbiology and an M.S. in Biotechnology from University College in Galway, Ireland, and an M.B.A. from Boston University School of Management. Mr. Hunt brings to our Board of Directors his deep understanding of the bioprocessing market.

Jon K. Snodgres joined Repligen in July 2014 as Chief Financial Officer, where he oversees financial operations for the Company. Mr. Snodgres was previously with Maquet Cardiovascular, a medical device company where he served as CFO for five years. At Maquet, in addition to being responsible for the preparation and oversight of the company's financial statements, he was a key participant in growth planning and profit improvement strategies. Mr. Snodgres previously spent eight years with life sciences company Thermo Fisher Scientific in various roles, most recently as Vice President of Finance for the Laboratory Products Group. He began his career in finance at AlliedSignal/Honeywell International. Mr. Snodgres received a B.S. in Business Administration, Finance from Northern Arizona University.

Howard Benjamin, Ph.D. has served as Vice President, Business Development since joining the Company in January 2009. Previously, Dr. Benjamin worked at translational medicine start-ups Leap Technology from March 2007 to December 2008 and Growth Point Sciences from August 2005 to December 2006 in various roles including Vice President, Research and Development. From January 2000 to August 2005, Dr. Benjamin was Vice President, Corporate Development at Daiichi Asubio Medical Research Laboratories and from 1994 to 2000, Dr. Benjamin was Vice President, Discovery Research at Praecis Pharmaceuticals. Dr. Benjamin holds an S.B. in Biology from M.I.T. and a Ph.D. in Molecular Biology from University of California, Berkeley.

James R. Rusche, Ph.D. joined Repligen in March 1996 as Vice President, Research and Development in connection with Repligen's merger with Glycan Pharmaceuticals, Inc. In 2001, Dr. Rusche became Senior Vice President, Research and Development. From July 1994 to March 1996, Dr. Rusche was Vice President, Research and Development of Glycan Pharmaceuticals, Inc. From February 1985 to June 1994, he held numerous research positions at Repligen, including as Vice President, Discovery Research. Dr. Rusche holds a B.S. in Microbiology from the University of Wisconsin, LaCrosse and a Ph.D. in Immunology from the University of Florida.

Directors

Nicolas M. Barthelemy has served as Director of Repligen since June 2014. Mr. Barthelemy brings over 20 years of industry experience to the director role, and he currently serves as President and CEO of bioTheranostics, Inc. Prior to bioTheranostics, he served as President, Global Commercial Operations at Life Technologies, which was acquired by Thermo Fisher Scientific in February 2014. Prior to Life Technologies, Mr. Barthelemy was with Biogen for eight years, most recently as Vice President, Manufacturing and General Manager for the company's manufacturing organization at Research Triangle Park. He began his career with

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Merck & Co., Inc. as a Senior Project Engineer, Vaccine Technology. Mr. Barthelemy currently serves on the boards of directors of bioTheranostics and Essen Bioscience. Mr. Barthelemy received an M.S. in Chemical Engineering from the University of California, Berkeley, and an engineering degree from Ecole Supérieure de Physique et Chimie Industrielles, Paris. Mr. Barthelemy's qualifications to sit on the Company's Board of Directors include his extensive experience in the bioprocessing field, including large scale biologics manufacturing and commercialization of consumables used in bioprocessing.

Glenn L. Cooper, M.D. has served as a director of Repligen since August 2009. Dr. Cooper served as Executive Chairman of Coronado BioSciences, Inc. from 2010 to 2012. Prior to that, Dr. Cooper served as the Chairman and Chief Executive Officer of Indevus Pharmaceuticals, Inc., a specialty pharmaceutical company focused on urology and endocrinology, from 2000 to 2009 and as Chief Executive Officer and Director from 1993 to 2000. Prior to joining Indevus in 1993, Dr. Cooper held numerous executive level positions including President and Chief Executive Officer of Progenitor, Inc., Executive Vice President and Chief Operating Officer of Sphinx Pharmaceuticals Corporation, and various clinical and regulatory positions with Eli Lilly and Company. Dr. Cooper has participated in the development, approval and commercialization of numerous drugs including Prozac®, Axid®, Lorabid®, Ceclor®, SANCTURA®, SANCTURA XR®, Supprelin-LA® and Vantas®. Dr. Cooper received an M.D. from Tufts University School of Medicine, performed his postdoctoral training in Internal Medicine and Infectious Diseases at the New England Deaconess Hospital and the Massachusetts General Hospital and received a B.A. from Harvard College. Dr. Cooper also serves as the Chairman of the Board of Directors of Lascaux Media, LLC, a privately held company. Dr. Cooper's qualifications to sit on the Board of Directors of the Company include his leadership roles at pharmaceutical companies.

John G. Cox has served as a director of Repligen since November 2013. Mr. Cox is currently Executive Vice President of Pharmaceutical Operations & Technology at Biogen Inc., a position he has held since June 2010. Mr. Cox has also served as Senior Vice President of Technical Operations, Senior Vice President of Global Manufacturing, Vice President of Manufacturing & General Manager of Biogen's operations in Research Triangle Park, North Carolina, and Director of Manufacturing. Mr. Cox joined Biogen in 2003 as Director of Manufacturing Sciences. Before joining Biogen from 2000 to 2003, Mr. Cox held a number of senior operational roles at Diosynth where he worked in technology transfer, validation and purification. Prior to that, Mr. Cox focused on the same areas at Wyeth LLC from 1993 to 2000. Mr. Cox received a B.S. in cell biology from California State University and an M.A. in Business Administration in Finance degree from the University of Michigan. Mr. Cox's qualifications to sit on the Company's Board of Directors include his extensive experience of biopharmaceutical manufacturing.

Karen A. Dawes, Chairperson of the Board, has served as a director of Repligen since September 2005. She is currently President of Knowledgeable Decisions, LLC, a management consulting firm. Ms. Dawes served from 1999 to 2003 as Senior Vice President and U.S. Business Group Head for Bayer Corporation's U.S. Pharmaceuticals Group. Prior to joining Bayer, she was Senior Vice President, Global Strategic Marketing, at Wyeth, a pharmaceutical company (formerly known as American Home Products), where she held responsibility for worldwide strategic marketing. Ms. Dawes also served as Vice President, Commercial Operations for Genetics Institute, Inc., which was acquired by Wyeth in January 1997, designing and implementing that company's initial commercialization strategy to launch BeneFIX® and Neumega®. Ms. Dawes began her pharmaceuticals industry career at Pfizer, Inc. where, from 1984 to 1994, she held a number of positions in Marketing, serving most recently as Vice President, Marketing of the Pratt Division. At Pfizer, she directed launches of Glucotrol®/Glucotrol XL®, Zolofit®, and Cardura®. Ms. Dawes also serves as a Director of Symbiomix Therapeutics, LLC and Depomed, Inc. Ms. Dawes received a B.A. and M.A. in English from Simmons College and an M.B.A. from Harvard University Graduate School of Business. Ms. Dawes' qualifications to sit on the Company's Board of Directors include her extensive strategic experience in both a managerial and consulting capacity with pharmaceutical companies as well as her considerable commercial background.

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Glenn P. Muir has served as a director of Repligen and a member of its Audit Committee since October 2015. Mr. Muir brings over 30 years of experience to the director role, including twenty-six years with Hologic, Inc., a large multi-national medical device and diagnostics company where he most recently served as Chief Financial Officer and Executive Vice President, Finance and Administration. Mr. Muir retired in May 2014 from Hologic, where he helped steer the company's evolution from a venture-backed single product company to a publicly traded diversified organization with over 5,000 employees and \$2.5 billion in revenue. He joined Hologic in 1988 and served as Chief Financial Officer since 1992 and Executive Vice President since 2000. Prior to Hologic, Mr. Muir was with Metallon Engineered Materials Co., a private company where from 1986-1988 he held the role of Vice President, Finance. Previously, from 1981-1984, he was a Senior Auditor with Arthur Andersen & Co. Mr. Muir also serves on the boards of medical device company ReWalk Robotics Ltd., genomic tool company RainDance Technologies, Inc. and life science company G1 Therapeutics, Inc. Mr. Muir is a Certified Public Accountant with a Bachelors of Business Administration from the University of Massachusetts, Amherst. He also earned an M.S from Bentley University and an M.B.A. from Harvard University. Mr. Muir's qualifications to sit on Repligen's Board of Directors include his extensive experience with integrating strategic acquisitions and leading the financial operations for a global manufacturing and commercial organization.

Thomas F. Ryan Jr. has served as a director of Repligen since September 2003 and is currently a private investor. Mr. Ryan served as the President and Chief Operating Officer of the American Stock Exchange from October 1995 to April 1999. Prior to 1995, he held a variety of positions at the investment banking firm of Kidder, Peabody & Co., Inc., serving as the firm's Chairman in 1995. He holds a B.A. from Boston College and is a graduate of the Boston Latin School. Mr. Ryan is a director for the New York State Independent System Operator and a director for BNY Mellon Asset Management Mutual Funds Board. Mr. Ryan's qualifications to sit on the Company's Board of Directors include his years of experience in the areas of securities trading and investment banking.

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CERTAIN RELATIONSHIPS AND RELATED PERSONS TRANSACTIONS

No family relationship exists among the officers and directors of Repligen. The Audit Committee conducts an appropriate review of all related party transactions for potential conflict of interest situations on an ongoing basis, and the approval of the Audit Committee is required for all such transactions. The term related party transactions shall refer to transactions required to be disclosed by the Company pursuant to Item 404 of Regulation S-K promulgated by the SEC. There were no related party transactions during the fiscal year ended December 31, 2015.

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CORPORATE GOVERNANCE AND BOARD MATTERS

Independence of Members of the Board of Directors

The Board of Directors has determined that each of the directors who has served during the fiscal year ended December 31, 2015 and each of the nominees for director at the Annual Meeting, with the exception of Mr. Hunt, has no material relationship with the Company and is independent within the meaning of the director independence standards of The NASDAQ Stock Market LLC, or NASDAQ. Furthermore, the Board of Directors has determined that each member of the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee of the Board of Directors is independent within the meaning of NASDAQ's director independence standards and that each member of the Audit Committee meets the heightened director independence standards of the SEC for audit committee members.

Board Leadership Structure

The Board is led by its Chairperson, Karen Dawes, who is an independent director. Ms. Dawes was appointed as Co-Chairperson in July 2011 and became the Chairperson in December 2011. The Board of Directors believes that separating the roles of Chief Executive Officer and Chairperson of the Board is the most appropriate structure for the Company at this time. Having an independent Chairperson ensures that the Chief Executive Officer is accountable for managing the Company in the best interests of stockholders while, at the same time, acknowledging that managing the Board of Directors is a separate and time intensive responsibility. The Board of Directors also believes that having an independent Chairperson can serve to curb conflicts of interests, promote oversight of risk and manage the relationship between the Board of Directors and the Chief Executive Officer.

Executive Sessions

The Board of Directors intends to hold executive sessions of the independent directors at least two times per year preceding or following regularly scheduled in-person meetings of the Board of Directors. Executive sessions do not include any employee directors of the Company, and the Chairperson of the Board is responsible for chairing the executive sessions.

Policies Governing Director Nominations

Director Qualifications

The Nominating and Corporate Governance Committee is responsible for reviewing, from time to time, the appropriate qualities, skills and characteristics desired of Board members in the context of the current make-up of the Board of Directors and selecting or recommending nominees for election as Directors to the Board. This assessment includes consideration of the following minimum qualifications that the Nominating and Corporate Governance Committee believes must be met by all directors:

Directors must be of high ethical character, have no conflict of interest and share the values of the Company as reflected in the Company's Code of Business Conduct and Ethics, or the Code of Business Conduct;

Directors must have reputations, both personal and professional, consistent with the image and reputation of the Company;

Directors must have the ability to exercise sound business judgment;

Directors must have substantial business or professional experience and be able to offer advice and guidance to the Company's management based on that experience; and

A director must have (at a minimum) a bachelor's degree or equivalent degree from an accredited college or university.

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The Nominating and Corporate Governance Committee also considers numerous other qualities, skills and characteristics when evaluating director nominees, such as:

An understanding of and experience in biotechnology and pharmaceutical industries;

An understanding of and experience in accounting oversight and governance, finance and marketing; and

Leadership experience with public companies or other significant organizations.

These factors and others are considered useful by the Board and are reviewed in the context of an assessment of the perceived needs of the Board at a particular point in time.

Neither the Nominating and Corporate Governance Committee nor the Board of Directors has a specific policy with regard to the consideration of diversity in identifying director nominees although they may consider the diversity of background and experience of a director nominee in the context of the overall composition of the Board of Directors at that time. This consideration may focus on diversity of knowledge, skills, experience, geographic location, age, gender, and ethnicity. Generally, the Nominating and Corporate Governance Committee seeks director nominees with the talents and backgrounds that provide the Board of Directors with an appropriate mix of experience, knowledge and skills that will best serve the Company's needs and objectives.

Process for Identifying and Evaluating Director Nominees

The Board of Directors is responsible for selecting and nominating nominees for election as directors but delegates the selection and nomination process to the Nominating and Corporate Governance Committee, with the expectation that other members of the Board of Directors or members of management will be requested to take part in the process as appropriate.

Generally, the Nominating and Corporate Governance Committee identifies candidates for director nominees in consultation with management, through the use of search firms or other advisers, 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, the 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 may gather information about the candidates through interviews, questionnaires, background checks, or any other means that the Nominating and Corporate Governance Committee deems to be helpful in the evaluation process. The Nominating and Corporate Governance Committee 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 the Board of Directors. 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 of Directors. The Nominating and Corporate Governance Committee also recommends candidates for the Board of Directors' appointment to the committees of the Board of Directors.

Procedures for Recommendation of Nominees by Stockholders

The Nominating and Corporate Governance Committee will consider director candidates who are recommended by the stockholders of the Company. Stockholders, in submitting recommendations to the Nominating and Corporate Governance Committee for director candidates, shall follow the following procedures:

Such recommendation for nomination should be in writing and include the following:

Name and address of the stockholder making the recommendation, as they appear on the Company's books and records, and of such record holder's beneficial owner;

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Number of shares of capital stock of the Company that are owned beneficially and held of record by such stockholder and such beneficial owner;

Name and address of the individual recommended for consideration as a director nominee, or a director Nominee;

The principal occupation of the director Nominee;

The total number of shares of capital stock of the Company that will be voted for the director Nominee by the stockholder making the recommendation;

All other information relating to the director Nominee that would be required to be disclosed in solicitations of proxies for the election of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including the recommended candidate's written consent to being named in the proxy statement as a nominee and to serving as a director if approved by the Board of Directors and elected); and

Assuming this treatment of the securities is respected and subject to the discussion in "United States Federal Tax Considerations" in the accompanying product supplement, the following U.S. federal income tax consequences should result under current law:

Any coupon payments on the securities should be taxable as ordinary income to you at the time received or accrued in accordance with your regular method of accounting for U.S. federal income tax purposes.

Upon a sale or exchange of a security (including retirement at maturity), you should recognize capital gain or loss equal to the difference between the amount realized and your tax basis in the security. For this purpose, the amount realized does not include any coupon paid on retirement and may not include sale proceeds attributable to an accrued coupon, which may be treated as a coupon payment. Such gain or loss should be long-term capital gain or loss if you held the security for more than one year.

We do not plan to request a ruling from the IRS regarding the treatment of the securities, and the IRS or a court might not agree with the treatment described herein. In addition, the U.S. Treasury Department and the IRS have released a notice requesting comments on the U.S. federal income tax treatment of "prepaid forward contracts." While it is not clear whether the securities would be viewed as similar to the typical prepaid forward contract described in the notice, it is possible that any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the securities, including the character and timing of income or loss, possibly with retroactive effect. You should consult your tax adviser regarding possible alternative tax treatments of the securities and potential consequences of the IRS notice.

Withholding Tax on Non-U.S. Holders. Because significant aspects of the tax treatment of the securities are uncertain, persons having withholding responsibility in respect of the securities may withhold on any coupon payment paid to Non-U.S. Holders (as defined in the accompanying product supplement), generally at a rate of 30%. To the extent that we have (or an affiliate of ours has) withholding responsibility in respect of the securities, we intend to so withhold. In order to claim an exemption from, or a reduction in, the 30% withholding, you may need to comply with certification requirements to establish that you are not a U.S. person and are eligible for such an exemption or reduction under an applicable tax treaty. You should consult your tax adviser regarding the tax treatment of the securities, including the possibility of obtaining a refund of any amounts withheld and the certification requirement described above.

Moreover, as discussed under “United States Federal Tax Considerations – Tax Consequences to Non-U.S. Holders – Possible Withholding Under Section 871(m) of the Code” in the accompanying product supplement, Section 871(m) of the Code and Treasury regulations promulgated thereunder (“Section 871(m)”) generally impose a 30% withholding tax on dividend equivalents paid or deemed paid to Non-U.S. Holders with respect to certain financial instruments linked to U.S. equities (“U.S. Underlying Equities”) or indices that include U.S. Underlying Equities. Section 871(m) generally applies to instruments that substantially replicate the economic performance of one or more U.S. Underlying Equities, as determined based on tests set forth in the applicable Treasury regulations (a “Specified Security”). However, the regulations, as modified by an IRS notice, exempt financial instruments issued prior to January 1, 2021 that do not have a “delta” of one. Based on the terms of the securities and representations provided by us, our counsel is of the opinion that the securities should not be treated as transactions that have a “delta” of one within the meaning of the regulations with respect to any U.S. Underlying Equity and, therefore, should not be Specified Securities subject to withholding tax under Section 871(m).

A determination that the securities are not subject to Section 871(m) is not binding on the IRS, and the IRS may disagree with this treatment. Moreover, Section 871(m) is complex and its application may depend on your particular circumstances. For example, if you enter into other transactions relating to a U.S. Underlying Equity, you could be subject to withholding tax or income tax liability under Section 871(m) even if the securities are not Specified Securities subject to Section 871(m) as a general matter. You should consult your tax adviser regarding the potential application of Section 871(m) to the securities.

We will not be required to pay any additional amounts with respect to amounts withheld.

You should read the section entitled “United States Federal Tax Considerations” in the accompanying product supplement. The preceding discussion, when read in combination with that section, constitutes the full opinion of Davis Polk & Wardwell LLP regarding the material U.S. federal tax consequences of owning and disposing of the securities.

You should also consult your tax adviser regarding all aspects of the U.S. federal income and estate tax consequences of an investment in the securities and any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

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Citigroup Global Markets Holdings Inc.

Supplemental Plan of Distribution

CGMI, an affiliate of Citigroup Global Markets Holdings Inc. and the underwriter of the sale of the securities, is acting as principal and will receive an underwriting fee of up to \$38.75 for each security sold in this offering. The actual underwriting fee will be equal to the selling concession provided to selected dealers, as described in this paragraph. From this underwriting fee, CGMI will pay selected dealers not affiliated with CGMI a variable selling concession of up to \$38.75 for each security they sell. For the avoidance of doubt, the fees and selling concessions described in this pricing supplement will not be rebated if the securities are automatically redeemed prior to maturity.

See “Plan of Distribution; Conflicts of Interest” in the accompanying product supplement and “Plan of Distribution” in each of the accompanying prospectus supplement and prospectus for additional information.

Valuation of the Securities

CGMI calculated the estimated value of the securities set forth on the cover page of this pricing supplement based on proprietary pricing models. CGMI’s proprietary pricing models generated an estimated value for the securities by estimating the value of a hypothetical package of financial instruments that would replicate the payout on the securities, which consists of a fixed-income bond (the “bond component”) and one or more derivative instruments underlying the economic terms of the securities (the “derivative component”). CGMI calculated the estimated value of the bond component using a discount rate based on our internal funding rate. CGMI calculated the estimated value of the derivative component based on a proprietary derivative-pricing model, which generated a theoretical price for the instruments that constitute the derivative component based on various inputs, including the factors described under “Summary Risk Factors—The value of the securities prior to maturity will fluctuate based on many unpredictable factors” in this pricing supplement, but not including our or Citigroup Inc.’s creditworthiness. These inputs may be market-observable or may be based on assumptions made by CGMI in its discretionary judgment.

For a period of approximately four months following issuance of the securities, the price, if any, at which CGMI would be willing to buy the securities from investors, and the value that will be indicated for the securities on any brokerage account statements prepared by CGMI or its affiliates (which value CGMI may also publish through one or more financial information vendors), will reflect a temporary upward adjustment from the price or value that would otherwise be determined. This temporary upward adjustment represents a portion of the hedging profit expected to be realized by CGMI or its affiliates over the term of the securities. The amount of this temporary upward adjustment will decline to zero on a straight-line basis over the four-month temporary adjustment period. However, CGMI is not obligated to buy the securities from investors at any time. See “Summary Risk Factors—The securities will not be listed on any securities exchange and you may not be able to sell them prior to maturity.”

Certain Selling Restrictions

Hong Kong Special Administrative Region

The contents of this pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus have not been reviewed by any regulatory authority in the Hong Kong Special Administrative Region of the People's Republic of China ("Hong Kong"). Investors are advised to exercise caution in relation to the offer. If investors are in any doubt about any of the contents of this pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus, they should obtain independent professional advice.

The securities have not been offered or sold and will not be offered or sold in Hong Kong by means of any document, other than

- (i) to persons whose ordinary business is to buy or sell shares or debentures (whether as principal or agent); or
- (ii) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the "Securities and Futures Ordinance") and any rules made under that Ordinance; or
- (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and

There is no advertisement, invitation or document relating to the securities which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Non-insured Product: These securities are not insured by any governmental agency. These securities are not bank deposits and are not covered by the Hong Kong Deposit Protection Scheme.

Singapore

This pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus have not been registered as a prospectus with the Monetary Authority of Singapore, and the securities will be offered pursuant to exemptions under the Securities and Futures Act, Chapter 289 of Singapore (the “Securities and Futures Act”). Accordingly, the securities may not be offered or sold or made the subject of an invitation for subscription or purchase nor may this pricing supplement or any other document or material in connection with the offer or sale or invitation for subscription or purchase of any securities be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (a) to an institutional investor pursuant to

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Section 274 of the Securities and Futures Act, (b) to a relevant person under Section 275(1) of the Securities and Futures Act or to any person pursuant to Section 275(1A) of the Securities and Futures Act and in accordance with the conditions specified in Section 275 of the Securities and Futures Act, or (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the Securities and Futures Act. Where the securities are subscribed or purchased under Section 275 of the Securities and Futures Act by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the Securities and Futures Act)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

(b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an individual who is an accredited investor, securities (as defined in Section 239(1) of the Securities and Futures Act) of that corporation or the beneficiaries' rights and interests (howsoever described) in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the relevant securities pursuant to an offer under Section 275 of the Securities and Futures Act except:

(i) to an institutional investor or to a relevant person defined in Section 275(2) of the Securities and Futures Act or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the Securities and Futures Act; or

(ii) where no consideration is or will be given for the transfer; or

(iii) where the transfer is by operation of law; or

(iv) pursuant to Section 276(7) of the Securities and Futures Act; or

(v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Any securities referred to herein may not be registered with any regulator, regulatory body or similar organization or institution in any jurisdiction.

The securities are Specified Investment Products (as defined in the Notice on Recommendations on Investment Products and Notice on the Sale of Investment Product issued by the Monetary Authority of Singapore on 28 July 2011) that is neither listed nor quoted on a securities market or a futures market.

Non-insured Product: These securities are not insured by any governmental agency. These securities are not bank deposits. These securities are not insured products subject to the provisions of the Deposit Insurance and Policy Owners' Protection Schemes Act 2011 of Singapore and are not eligible for deposit insurance coverage under the Deposit Insurance Scheme.

Validity of the Securities

In the opinion of Davis Polk & Wardwell LLP, as special products counsel to Citigroup Global Markets Holdings Inc., when the securities offered by this pricing supplement have been executed and issued by Citigroup Global Markets Holdings Inc. and authenticated by the trustee pursuant to the indenture, and delivered against payment therefor, such securities and the related guarantee of Citigroup Inc. will be valid and binding obligations of Citigroup Global Markets Holdings Inc. and Citigroup Inc., respectively, enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith), provided that such counsel expresses no opinion as to the effect of fraudulent conveyance, fraudulent transfer or similar provision of applicable law on the conclusions expressed above. This opinion is given as of the date of this pricing supplement and is limited to the laws of the State of New York, except that such counsel expresses no opinion as to the application of state securities or Blue Sky laws to the securities.

In giving this opinion, Davis Polk & Wardwell LLP has assumed the legal conclusions expressed in the opinions set forth below of Scott L. Flood, General Counsel and Secretary of Citigroup Global Markets Holdings Inc., and Barbara Politi, Assistant General Counsel—Capital Markets of Citigroup Inc. In addition, this opinion is subject to the assumptions set forth in the letter of Davis Polk & Wardwell LLP dated April 7, 2017, which has been filed as an exhibit to a Current Report on Form 8-K filed by Citigroup Inc. on April 7, 2017, that the indenture has been duly authorized, executed and delivered by, and is a valid, binding and enforceable agreement of, the trustee and that none of the terms of the securities nor the issuance and delivery of the securities and the related guarantee, nor the compliance by Citigroup Global Markets Holdings Inc. and Citigroup Inc. with the terms of the securities and the related guarantee respectively, will result in a violation of any provision of any instrument or agreement then binding upon Citigroup Global Markets Holdings Inc. or Citigroup Inc., as applicable, or any restriction imposed by any court or governmental body having jurisdiction over Citigroup Global Markets Holdings Inc. or Citigroup Inc., as applicable.

In the opinion of Scott L. Flood, Secretary and General Counsel of Citigroup Global Markets Holdings Inc., (i) the terms of the securities offered by this pricing supplement have been duly established under the indenture and the Board of Directors (or a duly authorized committee thereof) of Citigroup Global Markets Holdings Inc. has duly authorized the issuance and sale of such securities and such authorization has not been modified or rescinded; (ii) Citigroup Global Markets Holdings Inc. is validly existing and in good standing under the laws of the State of New York; (iii) the indenture has been duly authorized, executed and delivered by Citigroup Global Markets Holdings Inc.; and (iv) the execution and delivery of such indenture and of the securities offered by this pricing supplement by Citigroup Global Markets Holdings Inc., and the performance

by Citigroup Global Markets Holdings Inc. of its obligations thereunder,

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are within its corporate powers and do not contravene its certificate of incorporation or bylaws or other constitutive documents. This opinion is given as of the date of this pricing supplement and is limited to the laws of the State of New York.

Scott L. Flood, or other internal attorneys with whom he has consulted, has examined and is familiar with originals, or copies certified or otherwise identified to his satisfaction, of such corporate records of Citigroup Global Markets Holdings Inc., certificates or documents as he has deemed appropriate as a basis for the opinions expressed above. In such examination, he or such persons has assumed the legal capacity of all natural persons, the genuineness of all signatures (other than those of officers of Citigroup Global Markets Holdings Inc.), the authenticity of all documents submitted to him or such persons as originals, the conformity to original documents of all documents submitted to him or such persons as certified or photostatic copies and the authenticity of the originals of such copies.

In the opinion of Barbara Politi, Assistant General Counsel—Capital Markets of Citigroup Inc., (i) the Board of Directors (or a duly authorized committee thereof) of Citigroup Inc. has duly authorized the guarantee of such securities by Citigroup Inc. and such authorization has not been modified or rescinded; (ii) Citigroup Inc. is validly existing and in good standing under the laws of the State of Delaware; (iii) the indenture has been duly authorized, executed and delivered by Citigroup Inc.; and (iv) the execution and delivery of such indenture, and the performance by Citigroup Inc. of its obligations thereunder, are within its corporate powers and do not contravene its certificate of incorporation or bylaws or other constitutive documents. This opinion is given as of the date of this pricing supplement and is limited to the General Corporation Law of the State of Delaware.

Barbara Politi, or other internal attorneys with whom she has consulted, has examined and is familiar with originals, or copies certified or otherwise identified to her satisfaction, of such corporate records of Citigroup Inc., certificates or documents as she has deemed appropriate as a basis for the opinions expressed above. In such examination, she or such persons has assumed the legal capacity of all natural persons, the genuineness of all signatures (other than those of officers of Citigroup Inc.), the authenticity of all documents submitted to her or such persons as originals, the conformity to original documents of all documents submitted to her or such persons as certified or photostatic copies and the authenticity of the originals of such copies.

Contact

Clients may contact their local brokerage representative. Third-party distributors may contact Citi Structured Investment Sales at (212) 723-7005.

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