

MARINA BIOTECH, INC.
17870 Castleton Street, Suite 250
City of Industry, California 91748

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS
To Be Held Tuesday, May 16, 2017 at 3:00 P.M. (Pacific Time)

TO THE STOCKHOLDERS OF MARINA BIOTECH, INC.:

Notice is hereby given that the Annual Meeting of Stockholders (the "Annual Meeting") of Marina Biotech, Inc. will be held on Tuesday, May 16, 2017, at 3:00 P.M. Pacific Time, at 940 South Coast Drive, Suite 100, Costa Mesa, CA 92626, for the purposes of considering and acting on the following items:

1. To elect five (5) persons to our Board of Directors, each to hold office until the 2018 annual meeting of stockholders and until their respective successors shall have been duly elected or appointed and qualify;
2. To consider and vote on a proposal to amend our amended and restated certificate of incorporation to effect a reverse stock split, at any time within two (2) years following the Annual Meeting, and in such ratio between a one-for-two and one-for-ten reverse stock split, to be determined by our Board of Directors, to be in the best interest of Marina Biotech, Inc.;
3. To consider and vote on a proposal to amend our 2014 Long-Term Incentive Plan to increase the number of shares available for issuance thereunder from 5,000,000 to 10,000,000 (without giving effect to Proposal 2);
4. To ratify the appointment of Squar Milner LLP as our independent registered public accounting firm for the fiscal year ending December 31, 2017; and
5. To hold an advisory vote on executive compensation.

The enclosed Proxy Statement includes information relating to these proposals. Additional purposes of the Annual Meeting are to transact such other business as may properly come before the Annual Meeting or any adjournment or postponement thereof.

Only holders of record of our common stock, our series C convertible preferred stock and our series D convertible preferred stock as of the close of business on March 23, 2017 are entitled to notice of and to vote at the Annual Meeting. The holders of at least a majority of our outstanding shares of voting stock entitled to vote and present in person or by proxy are required for a quorum. You may vote electronically through the Internet or by telephone. The instructions on your proxy card describe how to use these convenient services. Of course, if you prefer, you can vote by mail by completing your proxy card and returning it to us in the enclosed envelope.

By Order of the Board of Directors,

/s/ Joseph W. Ramelli

Joseph W. Ramelli
Chief Executive Officer

April 21, 2017
City of Industry, CA

OUR BOARD OF DIRECTORS APPRECIATES AND ENCOURAGES YOUR PARTICIPATION IN OUR ANNUAL MEETING. WHETHER OR NOT YOU PLAN TO ATTEND THE ANNUAL MEETING, IT IS IMPORTANT THAT YOUR SHARES BE REPRESENTED. ACCORDINGLY, PLEASE AUTHORIZE A PROXY TO VOTE YOUR SHARES BY INTERNET, TELEPHONE OR MAIL. IF YOU ATTEND THE ANNUAL MEETING, YOU MAY WITHDRAW YOUR PROXY, IF YOU WISH, AND VOTE IN PERSON. YOUR PROXY IS REVOCABLE IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN THIS PROXY STATEMENT.

MARINA BIOTECH, INC.
17870 Castleton Street, Suite 250
City of Industry, California 91748

PROXY STATEMENT FOR
ANNUAL MEETING OF STOCKHOLDERS
To be held Tuesday, May 16, 2017 at 3:00 P.M. (Pacific Time)

ANNUAL MEETING AND PROXY SOLICITATION INFORMATION

General

This Proxy Statement is furnished in connection with the solicitation of proxies by the board of directors (the “Board of Directors”) of Marina Biotech, Inc., a Delaware corporation, for use at the Annual Meeting of Stockholders to be held on Tuesday, May 16, 2017, at 3:00 P.M. Pacific Time, at 940 South Coast Drive, Suite 100, Costa Mesa, CA 92626, and at any postponements or adjournments thereof (the “Annual Meeting”). This Proxy Statement, the Notice of Annual Meeting of Stockholders and the accompanying proxy card are being mailed to stockholders on or about April 24, 2017.

Important Notice Regarding the Internet Availability of Proxy Materials for the Annual Meeting of Stockholders to Be Held on May 16, 2017: The Proxy Statement and the Annual Report to Shareholders are available at www.marinabio.com. We encourage you to review all of the important information contained in the proxy materials contained herein or accessed via our website before voting.

Recent Change of Control

As described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 that we filed with the Securities and Exchange Commission on March 31, 2017, on November 15, 2016, we completed the merger (the “Merger”) of our wholly-owned subsidiary, IThena Acquisition Corporation (“Merger Sub”), with and into IThenaPharma Inc. (“IThena” or “IThenaPharma”). As a result of the Merger, Merger Sub merged with and into IThenaPharma, with IThenaPharma surviving as a wholly-owned subsidiary of our company. Immediately following the completion of the Merger, the holders of IThena common stock immediately prior to the completion of the Merger owned approximately 65% of the issued and outstanding shares of the common stock of our company. IThenaPharma is deemed to be the accounting acquirer in the Merger, and thus the historical financial statements of IThenaPharma will be treated as the historical financial statements of our company and will be reflected in our quarterly and annual reports for periods ending after the effective time of the Merger.

Solicitation and Voting Procedures

Solicitation. The solicitation of proxies will be conducted by mail, and we will bear all attendant costs. These costs will include the expense of preparing and mailing proxy materials for the Annual Meeting and reimbursements paid to brokerage firms and others for their expenses incurred in forwarding solicitation materials regarding the Annual Meeting to beneficial owners of our common stock, par value \$0.006 per share. We may conduct further solicitation personally, telephonically, electronically or by facsimile through our officers, directors and regular employees, none of whom would receive additional compensation for assisting with the solicitation. We do not intend, but reserve the right, to use the services of a third party solicitation firm to assist us in soliciting proxies.

Voting. Stockholders of record may authorize the proxies named in the enclosed proxy card to vote their shares of common stock in the following manner:

- by mail, by marking the enclosed proxy card, signing and dating it, and returning it in the postage-paid envelope provided;
- by telephone, by dialing the toll-free telephone number 1-800-690-6903 from within the United States or Canada and following the instructions. Stockholders voting by telephone need not return the proxy card; and
- through the Internet, by accessing the World Wide Website address www.voteproxy.com. Stockholders voting by the Internet need not return the proxy card.

Revocability of Proxies. Any proxy given pursuant to this solicitation may be revoked by the person giving it at any time before it is exercised in the same manner in which it was given, or by delivering to Joseph W. Ramelli, Chief Executive Officer, Marina Biotech, Inc., 17870 Castleton Street, Suite 250, City of Industry, California 91748, a written notice of revocation or a properly executed proxy bearing a later date, or by attending the Annual Meeting and giving notice of your intention to vote in person.

Voting Procedure. The presence at the Annual Meeting of a majority of our outstanding shares of voting stock entitled to vote and represented either in person or by proxy, will constitute a quorum for the transaction of business at the Annual Meeting. The close of business on March 23, 2017 has been fixed as the record date (the “Record Date”) for determining the holders of shares of our common stock, our series C convertible preferred stock and our series D convertible preferred stock entitled to notice of and to vote at the Annual Meeting. Each share of common stock outstanding on the Record Date is entitled to one vote on all matters. The holders of our series C convertible preferred stock and our series D convertible preferred stock shall be entitled to vote their shares of preferred stock on all matters on an “as-converted” basis, subject to the beneficial ownership limitations set forth in the certificate of designations for our series C convertible preferred stock and our series D convertible preferred stock, as applicable. As of the Record Date, there were 97,187,131 shares of common stock outstanding. Under Delaware law, stockholders will not have appraisal or similar rights in connection with any proposal set forth in this Proxy Statement.

Stockholder votes will be tabulated by the persons appointed by the Board of Directors to act as inspectors of election for the Annual Meeting. Shares represented by a properly executed and delivered proxy will be voted at the Annual Meeting and, when instructions have been given by the stockholder, will be voted in accordance with those instructions. If no instructions are given, the shares will be voted FOR Proposal Nos. 1, 2, 3, 4 and 5.

Abstentions and broker non-votes will each be counted as present for the purpose of determining whether a quorum is present at the Annual Meeting. Abstentions will have no effect on the outcome of the election of directors (Proposal No. 1), but will be counted as a vote AGAINST the proposal to effect a reverse split of our common stock (Proposal No. 3), AGAINST the proposal to amend our 2014 Long-Term Incentive Plan to increase the number of shares available for issuance thereunder from 5,000,000 to 10,000,000 (Proposal No. 4), AGAINST the ratification of Squar Milner LLP as our independent registered public accounting firm (Proposal No. 4) and AGAINST the approval of the advisory vote to approve the compensation of our named executive officers (Proposal No. 5).

Broker non-votes will have no effect on the outcome of the election of directors (Proposal No. 1), the approval of the increase in the number of shares available for issuance under our 2014 Long-Term Incentive Plan (Proposal No. 3), the ratification of Squar Milner LLP as our independent registered public accounting firm (Proposal No. 4) or the approval of the advisory vote to approve the compensation of our named executive officers (Proposal No. 5), but will be considered as a vote AGAINST the proposal to effect a reverse stock split of our common stock.

A broker non-vote occurs when a broker submits a proxy card with respect to shares of common stock held in a fiduciary capacity (typically referred to as being held in “street name”), but declines to vote on a particular matter because the broker has not received voting instructions from the beneficial owner. Under the rules of the New York Stock Exchange, a broker may have the discretion to vote such shares on routine matters, but not on non-routine matters. Routine matters include the ratification of independent registered public accounting firms, but do not include the election of directors, the adoption of employee benefit plans and advisory votes regarding executive compensation. Thus, brokers will generally have the discretion to vote the proxy for Proposal No. 4, but will not have discretion to cast a vote on Proposal Nos. 1, 2, 3 and 5.

On each matter properly presented for consideration at the Annual Meeting, stockholders will be entitled to one vote for each share of common stock held. Stockholders do not have cumulative voting rights in the election of directors.

Vote Required. For the election of directors (Proposal No. 1), the nominees who receive a plurality of votes from the shares present in person or by proxy and entitled to vote at the Annual Meeting will be elected. For the approval of the proposed amendment to our 2014 Long-Term Incentive Plan (Proposal No. 3), the ratification of our independent registered public accounting firm (Proposal No. 4) and the approval of the advisory vote to approve the compensation of our named executive officers (Proposal No. 5), the vote of a majority of the shares present in person or by proxy and entitled to vote on the matter at the Annual Meeting is required. Because your vote with respect to Proposal No. 5 is advisory, it will not be binding upon our Board of Directors. For the approval of the proposal to our certificate of incorporation to effect a reverse split of our common stock (Proposal No. 2), the affirmative vote of a majority of the shares entitled to vote on the matter at the Annual Meeting is required.

If any other matters are properly presented for consideration at the Annual Meeting, the persons named in the enclosed proxy will have discretion to vote on those matters in accordance with their best judgment.

Householding. Some banks, brokers and other nominee record holders may be participating in the practice of “householding” proxy statements and annual reports. This means that only one copy of this Proxy Statement or our annual report may have been sent to multiple shareholders in your household. We will promptly deliver a separate copy of either document to you if you call or write us at the following address or phone number: Marina Biotech, Inc., 17870 Castleton Street, Suite 250, City of Industry, California 91748, phone: (626) 964-5788, Attention: Joseph W. Ramelli, Chief Executive Officer. If you want to receive separate copies of our annual report and Proxy Statement in the future, or if you are receiving multiple copies and would like to receive only one copy for your household, you should contact your bank, broker or other nominee record holder, or you may contact us at the above address and phone number.

**PROPOSAL NO. 1
ELECTION OF DIRECTORS**

General

Our Amended and Restated Bylaws (the “Bylaws”) provide that the Board of Directors shall consist of not less than four (4) members and not more than eleven (11) members, as fixed by the Board of Directors. Currently, the Board of Directors consists of five (5) members.

At the Annual Meeting, five (5) directors are to be elected by the holders of the common stock to serve until the 2018 annual meeting of our stockholders and until such directors’ respective successors are elected or appointed and qualify or until any such director’s earlier resignation or removal. The Board of Directors has nominated each of the persons listed below for election to the Board of Directors at the Annual Meeting. Each of the director nominees is currently a member of our Board of Directors.

Name	Age	Position	Director Since
Vuong Trieu	53	Chairman of the Board of Directors	November 2016
Philippe P. Calais, Ph.D.	58	Director	January 2017
Stefan C. Loren, Ph.D.	53	Lead Independent Director	August 2012
Philip C. Ranker	57	Director	January 2014
Donald A. Williams	58	Director	September 2014

In the event any nominee is unable or unwilling to serve as a director at the time of the Annual Meeting, the proxies may be voted for the balance of those nominees named and for any substitute nominee designated by the current Board of Directors or the proxy holders to fill such vacancy or for the balance of those nominees named without the nomination of a substitute, or the size of the Board of Directors may be reduced in accordance with our Bylaws.

Nominees

The following information is submitted concerning the nominees for election as directors based upon information received by us from such persons:

Vuong Trieu – Dr. Trieu has served as a director of our company, and as the Chairman of our Board of Directors, since November 2016. Dr. Trieu currently serves as the Chairman of the Board and the Chief Executive Officer at Autotelic Inc. (since May 2014), as the Chairman of the Board and the Chief Regulatory Officer at each of Glucotelic Inc. (since November 2016), Osteotelic Inc. (since July 2016), Oncotelic Inc. (since October 2015) and Stocosil (since February 2015), and as the Chairman of the Board and the Chief Operating Officer at LipoMedics Inc. (since August 2015). He previously served as Chairman of the Board and President of IThenaPharma Inc. from August 2014 until that entity’s merger with Marina Biotech in November 2016, as the Chief Scientific Officer of Sorrento Therapeutics, Inc. from September 2013 until May 2014, as the President and Chief Executive Officer at IgDraSol Inc. from January 2012 until August 2013, as the President and Chief Executive Officer at Biomiga Diagnostics from 2011 until August 2013, and as the Director of Biology / Pharmacology at Abraxis BioScience from November 2002 until July 2011. He also served as a member of the Board of Directors of Sorrento Therapeutics, Inc. from September 2013 until August 2014. Dr. Trieu received a Ph.D. in microbiology / molecular biology from the University of Oklahoma.

Philippe P. Calais, Ph.D. – Dr. Calais has served as a director of our company since January 2017. Dr. Calais has over 30 years of biopharmaceutical and pharmaceutical industry experience in North America and Europe. Prior to becoming CEO of Isarna Therapeutics, a developer of oligonucleotide therapeutics, he managed several biopharmaceutical companies in Canada and in Europe and headed a large technology transfer organization, focusing on corporate strategic positioning, company deployment and sales optimization strategies. His management expertise, combined with extensive experience with large pharma companies, such as ICI Pharmaceuticals and Roche, covers the full scope of the drug chain — from discovery to clinical development, commercialization as well as partnership and franchise strategic marketing for several therapeutic areas. He has successfully raised significant financing internationally for private and publicly traded biotechs. A French citizen residing in Germany, he has a degree and doctorate in pharmacy from France.

Stefan C. Loren, Ph.D. – Dr. Loren has served as a director of Marina Biotech since August 2012. Dr. Loren is currently the founder at Loren Capital Strategy LLC, a health care-focused fund management firm. He was previously managing director at Westwicke Partners, a healthcare-focused consulting firm, from 2008 through February 2014. Dr. Loren has over 20 years of experience as a research and investment professional in the healthcare space, including roles at Perceptive Advisors, MTB Investment Advisors, Legg Mason, and Abbott Laboratories. Prior to industry, Dr. Loren served as a researcher at The Scripps Research Institute working with Nobel Laureate K. Barry Sharpless on novel synthetic routes to chiral drugs. His scientific work has been featured in Scientific American, Time, Newsweek and Discover, as well as other periodicals and journals. Dr. Loren has served as a director of GenVec, Inc. since September 2013 and as a director of Collectar Biosciences, Inc. since June 2015, and within the past five years, he has served on the board of directors of Orchid Cellmark Inc. and Polymedix, Inc. Dr. Loren received a doctorate degree in organic chemistry from the University of California at Berkeley and a bachelor’s degree in chemistry from the University of California San Diego.

Philip C. Ranker – Mr. Ranker has served as a director of Marina Biotech since January 2014. Currently, Mr. Ranker serves as chief financial officer at Bioness, Inc. Previously he served as chief accounting officer of Marina Biotech from September 7, 2011 until September 30, 2011, and then served as interim chief financial officer and secretary of Marina Biotech from October 1, 2011 until December 31, 2013. Before that, Mr. Ranker served as chief financial officer of Suneva Medical, Inc. from 2009 to 2011, and as vice president of finance at Amylin Pharmaceuticals, Inc. from 2008 to 2009. Prior to Amylin, Mr. Ranker held various positions with Nastech Pharmaceutical Company Inc. (the predecessor to Marina Biotech) from 2004 to 2008, including vice president of finance from August 2004 until September 2005, and chief financial officer and secretary from September 2005 until January 2008. From September 2001 to August 2004, Mr. Ranker served as director of finance for ICOS Corporation. Prior to working at ICOS, Mr. Ranker served in various positions in corporate accounting, managed care contracting and research and development, including senior finance director, at Aventis Pharmaceutical and its predecessor companies during his nearly 15 years with the organization. From February 2006 until 2010, Mr. Ranker also served as a member of the board of directors and as the chair of the audit committee of ImaRx Therapeutics, Inc., which executed an initial public offering during his tenure. Prior to Aventis, Mr. Ranker was employed by Peat Marwick (currently KPMG) as a Certified Public Accountant. Mr. Ranker holds a B.S. in accounting from the University of Kansas.

Donald A. Williams – Mr. Williams has served as a director of Marina Biotech since September 2014. Mr. Williams is a 35-year veteran of the public accounting industry, retiring in 2014. Mr. Williams spent 18 years as an Ernst & Young (EY) Partner and the seven years as a partner with Grant Thornton (GT). Mr. Williams' career focused on private and public companies in the technology and life sciences sectors. During the last seven years at GT, he served as the National Leader of Grant Thornton's life sciences practice and the managing partner of the San Diego Office. He was the lead partner for both EY and GT on multiple initial public offerings; secondary offerings; private and public debt financings; as well as numerous mergers and acquisitions. From 2001 to 2014, Mr. Williams served on the board of directors and is past president and chairman of the San Diego Venture Group and has served on the board of directors of various charitable organizations in the communities in which he has lived. Beginning in 2015, Mr. Williams has served as a director of Proove Biosciences, Inc. and of Alphatec Holdings, Inc. (and its wholly-owned operating subsidiary, Alphatec Spine, Inc.). Beginning in 2016, Mr. Williams has served as a director of Akari Therapeutics PLC, and beginning in March 2017 Mr. Williams has served as a director of ImpediMed Limited. Mr. Williams is a graduate of Southern Illinois University with a B.S. degree.

Vote Required and Board of Directors' Recommendation

Assuming a quorum is present, the affirmative vote of a plurality of the votes cast at the Annual Meeting, either in person or by proxy, is required for the election of a director. For purposes of the election of directors, abstentions and broker non-votes will have no effect on the result of the vote.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS
VOTE "FOR" ALL OF THE NOMINEES NAMED IN PROPOSAL NO. 1.**

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

The following table sets forth certain information regarding the ownership of our common stock as of April 10, 2017 (the “Determination Date”) by: (i) each current director of our company and each director nominee; (ii) each of our Named Executive Officers; (iii) all current executive officers and directors of our company as a group; and (iv) all those known by us to be beneficial owners of more than five percent (5%) of our common stock.

Beneficial ownership and percentage ownership are determined in accordance with the rules of the SEC. Under these rules, beneficial ownership generally includes any shares as to which the individual or entity has sole or shared voting power or investment power and includes any shares that an individual or entity has the right to acquire beneficial ownership of within 60 days of the Determination Date, through the exercise of any option, warrant or similar right (such instruments being deemed to be “presently exercisable”). In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of our common stock that could be issued upon the exercise of presently exercisable options and warrants are considered to be outstanding. These shares, however, are not considered outstanding as of the Determination Date when computing the percentage ownership of each other person.

To our knowledge, except as indicated in the footnotes to the following table, and subject to state community property laws where applicable, all beneficial owners named in the following table have sole voting and investment power with respect to all shares shown as beneficially owned by them. Percentage of ownership is based on 97,099,877 shares of common stock outstanding as of the Determination Date. Unless otherwise indicated, the business address of each person in the table below is c/o Marina Biotech, Inc., 17870 Castleton Street, Suite 250, City of Industry, CA 91748. No shares identified below are subject to a pledge.

<u>Name</u>	<u>Number of Shares</u>	<u>Percent of Shares Outstanding (%)</u>
Officers and Directors:		
J. Michael French, former Director, President and CEO	1,593,283(1)	1.6%
Stefan Loren, Ph.D., Director	398,835(2)	*
Joseph W. Ramelli, CEO.....	654,153(3)	*
Philip C. Ranker, Director	1,116,553(4)	1.1%
Donald A. Williams, Director.....	213,500(5)	*
Vuong Trieu, Chairman.....	42,304,692(6)	42.7%
Philippe P. Calais, Ph.D., Director	40,500(7)	*
Mihir Munsif, COO.....	5,255,354(12)	5.4%
Larn Hwang, CSO.....	0	*
All directors and executive officers as a group (8 persons)	49,983,587(8)	50.0%
Five Percent (5%) Holders:		
Autotelic LLC	23,123,558(9)	23.8%
Autotelic Inc.	5,255,354(10)	5.4%
Pyng Soon.....	5,255,354(11)	5.4%
Lynne Murphy	5,255,354(13)	5.4%

* Beneficial ownership of less than 1.0% is omitted.

- (1) Includes presently exercisable options to purchase 771,000 shares of common stock. Pursuant to a settlement agreement, certain securities beneficially owned by Mr. French are held in constructive trust by Mr. French for the benefit of Mr. French and his former spouse.
- (2) Includes presently exercisable options to purchase 213,500 shares of common stock and presently exercisable warrants to purchase 4,032 shares of common stock.
- (3) Includes presently exercisable options to purchase 213,500 shares of common stock.
- (4) Includes presently exercisable options to purchase 216,000 shares of common stock.
- (5) Consists of presently exercisable options to purchase 213,500 shares of common stock.
- (6) Includes presently exercisable options to purchase 40,500 shares of common stock. Also includes 23,123,558 shares held by Autotelic LLC, of which entity Dr. Trieu serves as Chief Executive Officer, 5,255,354 shares held by Autotelic Inc., of which entity Dr. Trieu serves as Chairman of the Board, 862,068 shares held by LipoMedics Inc., of which entity Dr. Trieu serves as Chairman of the Board and Chief Operating Officer, and 1,928,571 shares of common stock issuable to Dr. Trieu upon the conversion of a promissory note held by Dr. Trieu (at an assumed conversion price of \$0.28).
- (7) Consists of presently exercisable options to purchase 40,500 shares of common stock.

- (8) Includes presently exercisable options to purchase 937,500 shares of common stock, presently exercisable warrants to purchase 4,032 shares of common stock, and 1,928,571 shares of common stock issuable to Dr. Trieu upon the conversion of a promissory note held by Dr. Trieu (at an assumed conversion price of \$0.28).
- (9) Information based on a Schedule 13D filed with the Securities and Exchange Commission on November 23, 2017.
- (10) Information based on a Schedule 13D filed with the Securities and Exchange Commission on November 23, 2017.
- (11) Information based on a Schedule 13G filed with the Securities and Exchange Commission on November 23, 2017.
- (12) Information based on a Schedule 13G filed with the Securities and Exchange Commission on November 23, 2017.
- (13) Information based on a Schedule 13G filed with the Securities and Exchange Commission on November 22, 2017.

Biographical Information Concerning Executive Officers

Biographical information concerning our executive officers is set forth below.

Joseph W. Ramelli – Mr. Ramelli has served as our Chief Executive Officer since December 8, 2016. Previously he served as interim Chief Executive Officer and Chairman of the Board of Directors of Marina Biotech from June 10, 2016 until December 8, 2016, and as a director of Marina Biotech from August 2012 until December 8, 2016. Mr. Ramelli worked as a consultant for several investment funds providing in-depth due diligence and investment recommendations. He has over 20 years of experience in the investment industry, having worked as both an institutional equity trader and as an equity analyst at Eos Funds, Robert W. Duggan & Associates and Seneca Capital Management. Mr. Ramelli graduated with honors from the University of California at Santa Barbara, with a B.A. in business economics.

Larn Hwang, Ph.D. – Dr. Hwang has served as our Chief Scientific Officer since February 2017. Dr. Hwang, age 54, has served as the Chief Executive Officer of Oncotelic, Inc. since October 2015 and as the Chief Scientific Officer of Autotelic Inc. since October 2013. Dr. Hwang is a veteran in the drug development industry, with broad expertise in drug discovery and biomarker development, as well as clinical and regulatory operations. Dr. Hwang was a founder of IgDraSol, Inc. (which merged with Sorrento Therapeutics in 2013, where she later served as VP of Regulatory and Clinical Operations from September 2013 to May 2014) and served as its Chief Operating Officer from April 2012 to August 2013, and she was a founder of Biomiga Diagnostics and served as its Chief Operating Officer from 2011 to August 2013. Prior to that, she served as Head of Cell Biology at Abraxis BioScience from November 2005 to June 2011 and as Senior Principal Scientist at Celgene Corporation from February 2011 to June 2011. Dr. Hwang has also held a position with Johnson & Johnson. Dr. Hwang received a Ph.D. in Molecular Microbiology from The University of Texas Southwestern Medical Center at Dallas.

Mihir Munsif – Mr. Munsif has served as our Chief Operating Officer since February 2017. Mr. Munsif, age 54, has served as the Senior Vice President at Autotelic Inc. since November 2016, as the Senior Vice President of Portfolio Management of LipoMedics, Inc. since June 2016 and as the Senior Vice President of Portfolio Management of Oncotelic, Inc. since October 2015. Previously he served as the Chief Operating Officer of IThenaPharma Inc. from September 2014 until August 2016. Prior to that, he served as Product Life Cycle Management and Supply Chain Consulting at Accenture from March 2013 until September 2014 and as Product Life Cycle Management and Supply Chain Management Operations at Herbalife from April 2009 until March 2013. Mr. Munsif received a M.S. in Industrial Engineering from the University of Oklahoma and a B.S. in Chemical Engineering from Manipal Institute of Technology.

Director’s Qualifications

In selecting a particular candidate to serve on our Board of Directors, we consider the needs of our company based on particular experiences, qualifications, attributes and skills that we believe would be advantageous for our Board members to have and would qualify such candidate to serve on our Board given our business profile and the environment in which we operate. The table below sets forth such experiences, qualifications, attributes and skills, and identifies the ones that each director and director nominee possesses.

<u>Attributes</u>	<u>Dr. Loren</u>	<u>Mr. Ranker</u>	<u>Mr. Williams</u>	<u>Dr. Trieu</u>	<u>Dr. Calais</u>
Financial Experience	X	X	X	X	X
Public Board Experience	X	X	X	X	
Industry Experience	X	X	X	X	X
Scientific Experience.....	X			X	X
Commercial Experience		X	X	X	X
Corporate Governance Experience....	X	X	X	X	X
Capital Markets Experience.....	X	X	X	X	
Management Experience	X	X	X	X	X

Arrangements Regarding Director Nominations

Pursuant to the Merger Agreement, and in connection with the Merger, Dr. Trieu was appointed to our Board, to serve until our 2017 annual meeting of stockholders or until his earlier death, resignation or removal. At such time, Dr. Trieu was also appointed to serve as Chairman of the Board.

Dr. Calais was identified to serve as a member of our Board by Dr. Trieu, in his capacity as the representative of the former stockholders of IThenaPharma, pursuant to the Merger Agreement. Dr. Trieu served as the President of IThenaPharma immediately prior to the closing of the Merger.

Family Relationships

There are no familial relationships between any of our executive officers and directors. However, Falguni Trieu, our Director of Business Development, is the spouse of Vuong Trieu, the Chairman of our Board of Directors.

Director or Officer Involvement in Certain Legal Proceedings

Our directors and executive officers were not involved in any legal proceedings as described in Item 401(f) of Regulation S-K in the past ten years.

Independence of the Board of Directors

The Board of Directors utilizes NASDAQ's standards for determining the independence of its members. In applying these standards, the Board considers commercial, industrial, banking, consulting, legal, accounting, charitable and familial relationships, among others, in assessing the independence of directors, and must disclose any basis for determining that a relationship is not material. The Board has determined that four (4) of its current members, namely Philippe Calais, Ph.D., Stephen Loren, Ph.D., Philip C. Ranker and Donald A. Williams, are independent directors within the meaning of the NASDAQ independence standards. In making these independence determinations, the Board did not exclude from consideration as immaterial any relationship potentially compromising the independence of any of the above directors.

Meetings of the Board of Directors

The Board of Directors held twenty-four meetings during 2016. During 2016, all directors attended more than 75% of the aggregate number of meetings of the Board of Directors that were held during the time that they served as members of the Board of Directors. We do not have a formal policy regarding attendance by members of the Board of Directors at the annual meeting of stockholders, but we strongly encourage all members of the Board of Directors to attend our annual meetings and expect such attendance except in the event of extraordinary circumstances. All of our directors attended our annual meeting of stockholders for the 2015 fiscal year.

Committees of the Board of Directors

The Board of Directors has established and currently maintains the following two standing committees: the Audit Committee and the Compensation Committee. The Board of Directors has adopted written charters for each of these committees, which we make available free of charge on or through our Internet website, along with other items related to corporate governance matters, including our Code of Business Conduct and Ethics applicable to all employees, officers and directors. We maintain our Internet website at www.marinabio.com. You can access our committee charters and code of conduct on our website by first clicking "About Marina Biotech" and then "Corporate Governance."

We intend to disclose on our Internet website any amendments to or waivers from our Code of Business Conduct and Ethics, as well as any amendments to the charters of any of our standing committees. Any stockholder also may obtain copies of these documents, free of charge, by sending a request in writing to: Marina Biotech, Inc., 17870 Castleton Street, Suite 250, City of Industry, CA 91748.

Currently, the Audit Committee consists of Mr. Williams (Chair), Mr. Ranker and Dr. Calais, and the Compensation Committee consists of Dr. Loren (Chair), Mr. Williams and Mr. Ranker. During the 2016 fiscal year, the Audit Committee held four meetings, and the Compensation Committee did not hold any meetings. All members of each standing committee during 2016 attended at least 75% of the meetings that were held during the periods when they served as members of such committee.

Audit Committee. Among other functions, the Audit Committee authorizes and approves the engagement of the independent registered public accounting firm, reviews the results and scope of the audit and other services provided by the independent registered public accounting firm, reviews our financial statements, reviews and evaluates our internal control functions, approves or establishes pre-approval policies and procedures for all professional audit and permissible non-audit services provided by the independent registered public accounting firm and reviews and approves any proposed related party transactions. The Board of Directors has determined that each of the current members of the Audit Committee is an independent director within the meaning of the NASDAQ independence standards and Rule 10A-3 promulgated by the SEC under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). In addition, the Board of Directors has determined that each of the current members of the Audit Committee qualifies as an Audit Committee Financial Expert under applicable SEC Rules and satisfies the NASDAQ standards of financial literacy and financial or accounting expertise or experience.

Compensation Committee. The Compensation Committee’s functions include reviewing and approving the compensation and benefits for our executive officers, administering our equity compensation plans and making recommendations to the Board of Directors regarding these matters. Neither the Compensation Committee nor the Board of Directors retained any consultants to assist in the review and approval of the compensation and benefits for the executive officers of our company during 2016. The Board of Directors has determined that each current member of the Compensation Committee is an independent director within the meaning of the NASDAQ independence standards.

Selection of Board Candidates

In selecting candidates for the Board of Directors, the Board begins by determining whether the incumbent directors whose terms expire at the annual meeting of stockholders desire and are qualified to continue their service on the Board of Directors. If there are positions on the Board of Directors for which the Board will not be re-nominating an incumbent director, or if there is a vacancy on the Board of Directors, the Board will solicit recommendations for nominees from persons whom the Board believes are likely to be familiar with qualified candidates, including members of our Board of Directors and our senior management. The Board may also engage a search firm to assist in the identification of qualified candidates. The Board will review and evaluate those candidates whom it believes merit serious consideration, taking into account all available information concerning the candidate, the existing composition and mix of talent and expertise on the Board of Directors and other factors that it deems relevant. In conducting its review and evaluation, the committee may solicit the views of management and other members of the Board of Directors, and may conduct interviews of proposed candidates.

The Board generally requires that all candidates for the Board of Directors be of the highest personal and professional integrity and have demonstrated exceptional ability and judgment. The Board will consider whether such candidate will be effective, in conjunction with the other members of the Board of Directors, in collectively serving the long-term interests of our stockholders. In addition, the Board requires that all candidates have no interests that materially conflict with our interests and those of our stockholders, have meaningful management, advisory or policy making experience, have a general appreciation of the major business issues facing us and have adequate time to devote to service on the Board of Directors.

The Board will consider stockholder recommendations for nominees to fill director positions, provided that the Board will not entertain stockholder nominations from stockholders who do not meet the eligibility criteria for submission of stockholder proposals under Rule 14a-8 of Regulation 14A under the Exchange Act. Stockholders may submit written recommendations for nominees to the Board of Directors, together with appropriate biographical information and qualifications of such nominees as required by our Bylaws, to our Corporate Secretary following the same procedures as described in “Stockholder Communications” in this Proxy Statement. In order for the Board to consider a nominee for directorship submitted by a stockholder, such recommendation must be received by the Corporate Secretary by the time period set forth in our most recent proxy statement for the submission of stockholder proposals under Rule 14a-8 of Regulation 14A under the Exchange Act. The Corporate Secretary shall then deliver any such communications to the Chairman of the Board. The Board will evaluate stockholder recommendations for candidates for the Board of Directors using the same criteria as for other candidates, except that the Board may consider, as one of the factors in its evaluation of stockholder recommended candidates, the size and duration of the interest of the recommending stockholder or stockholder group in our equity.

Board Leadership Structure and Role in Risk Oversight

Although we have not adopted a formal policy on whether the Chairman of the Board and Chief Executive Officer positions should be separate or combined, given our company’s recent operational history and the recent Merger with IThenaPharma, we have determined that it is in the best interests of our company and its stockholders that these roles be separate. Mr. Ramelli, who has served as an executive officer of Marina Biotech since June 2016, and who served as a director of Marina Biotech from August 2012 until December 2016, currently serves as our Chief Executive Officer. Given his long involvement with Marina Biotech as a director and as an executive officer, Mr. Ramelli is intimately familiar with the business operations and strategic direction of Marina Biotech, including with respect to the period prior to the Merger. Dr. Trieu, who previously served as president of IThenaPharma, and who (directly or indirectly) controlled a majority of the outstanding shares of the common stock of IThenaPharma, serves as the Chairman of our Board of Directors. Through his positions with IThenaPharma, Dr. Trieu is intimately familiar with the business operations and strategic direction of IThenaPharma.

At the same time, we also believe it is important that our independent directors have a strong voice in the leadership of our company. As a result, we believe it is beneficial to our company and its stockholders that one of the independent directors of our Board serve in the capacity of Lead Independent Director. Dr. Loren currently serves as Lead Independent Director. We believe that the use of a Lead Independent Director is beneficial because the Lead Independent Director can provide the Chairman and the CEO with guidance and feedback on their performance in those roles, as well as provide a more effective channel for the independent members of the Board to express their views on management. To further strengthen the voice of our independent directors, we provide that such directors meet on a regular basis, and we have provided that all of the members of the Audit Committee and the Compensation Committee are independent.

The Board of Directors continually evaluates our leadership structure and could in the future decide to combine the Chairman and CEO positions, or to eliminate the Lead Independent Director position, if it believes that doing so would serve the best interests of our company.

Our Board of Directors and the Audit Committee thereof is responsible for overseeing the risk management processes on behalf of our company. The Board and, to the extent applicable, the Audit Committee, receive and review periodic reports from management, auditors, legal counsel and others, as considered appropriate regarding our company's assessment of risks. Where applicable, the Audit Committee reports regularly to the full Board of Directors with respect to risk management processes. The Audit Committee and the full Board of Directors focus on the most significant risks facing our company and our company's general risk management strategy, and also ensure that risks undertaken by our company are consistent with the Board's appetite for risk. While the Board oversees the risk management of our company, management is responsible for day-to-day risk management processes. We believe this division of responsibilities is the most effective approach for addressing the risks facing our company and that our Board leadership structure supports this approach.

Stockholder Communications

All stockholder communications must: (i) be addressed to our Chief Executive Officer at our address; (ii) be in writing either in print or electronic format; (iii) be signed by the stockholder sending the communication; (iv) indicate whether the communication is intended for the entire Board of Directors, a committee thereof, or the independent directors; (v) if the communication relates to a stockholder proposal or director nominee, identify the number of shares held by the stockholder, the length of time such shares have been held, and the stockholder's intention to hold or dispose of such shares, provided that we will not entertain shareholder proposals or shareholder nominations from shareholders who do not meet the eligibility and procedural criteria for submission of shareholder proposals under Commission Rule 14a-8 of Regulation 14A under the Exchange Act; and (vi) if the communication relates to a director nominee being recommended by the stockholder, must include appropriate biographical information of the candidate as is required by our Bylaws.

Upon receipt of a stockholder communication that is compliant with the requirements identified above, the Chief Executive Officer shall promptly deliver such communication to the appropriate member(s) of the Board of Directors or committee member(s) identified by the stockholder as the intended recipient of such communication by forwarding the communication to either the chairman of the Board of Directors with a copy to the CEO, the chairman of the applicable committee, or to each of the independent directors, as the case may be.

The Chief Executive Officer may, in his or her sole discretion and acting in good faith, provide copies of any such stockholder communication to any one or more of our directors and executive officers, except that in processing any stockholder communication addressed to the independent directors, the Chief Executive Officer may not copy any member of management in forwarding such communications. In addition, the Chief Executive Officer may, in his or her sole discretion and acting in good faith, not forward certain items if they are deemed of a commercial or frivolous nature or otherwise inappropriate for consideration by the intended recipient and any such correspondence may be forwarded elsewhere in our company for review and possible response.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Approval for Related Party Transactions

It is our practice and policy to comply with all applicable laws, rules and regulations regarding related-person transactions. Our Code of Business Conduct and Ethics requires that all employees, including officers and directors, disclose to the CEO the nature of any company business that is conducted with any related party of such employee, officer or director (including any immediate family member of such employee, officer or director, and any entity owned or controlled by such persons). If the transaction involves an officer or director of our company, the CEO must bring the transaction to the attention of the Audit Committee or, in the absence of an Audit Committee the full Board, which must review and approve the transaction in writing in advance. In considering such transactions, the Audit Committee (or the full Board, as applicable) takes into account the relevant available facts and circumstances.

Related Party Transactions

Transactions with Vuong Trieu, Ph.D.

We have entered into the following transactions with Dr. Trieu, the Chairman of our Board of Directors, and/or entities that are controlled by him, that require disclosure under Item 404(a) of Regulation S-K promulgated under the Exchange Act: (A) Marina and Dr. Trieu are parties to the Line Letter dated November 15, 2016 pursuant to which Dr. Trieu offered to us an unsecured line of credit in an amount not to exceed \$540,000 to be used for current operating expenses; (B) Dr. Trieu is the Chief Executive Officer of Autotelic LLC, with which entity Marina entered into a License Agreement dated November 15, 2016; (C) Dr. Trieu is the Chairman of the Board of Directors of Autotelic Inc., with which entity Marina entered into a Master Services Agreement dated November 15, 2016, and which entity offered to us an unsecured line of credit in an amount not to exceed \$500,000 in April 2017; and (D) Dr. Trieu is the Chairman of the Board of Directors and Chief Operating Officer of LipoMedics Inc. (“LipoMedics”), with which entity we entered into a License Agreement and a Stock Purchase Agreement, each dated February 6, 2017. Each of the foregoing agreements is described immediately below. Immediately following the completion of the Merger, Autotelic LLC owned approximately 25.8% of the issued and outstanding shares of our common stock and Autotelic Inc. owned approximately 5.9% of the issued and outstanding shares of our common stock.

Line Letter with Dr. Trieu

On November 15, 2016, Marina entered into a Line Letter with Dr. Trieu for an unsecured line of credit in an amount not to exceed \$540,000, to be used for current operating expenses. Dr. Trieu will consider requests for advances under the Line Letter until April 30, 2017. Dr. Trieu shall have the right at any time for any reason in his sole and absolute discretion to terminate the line of credit available under the Line Letter or to reduce the maximum amount available thereunder without notice; provided, that Dr. Trieu agreed that he shall not demand the repayment of any advances that are made under the Line Letter prior to the earlier of: (i) May 15, 2017; and (ii) the date on which (x) we make a general assignment for the benefit of our creditors, (y) we apply for or consents to the appointment of a receiver, a custodian, a trustee or liquidator of all or a substantial part of our assets or (z) we cease operations. Advances made under the Line Letter shall bear interest at the rate of five percent (5%) per annum, shall be evidenced by the Demand Promissory Note issued to Dr. Trieu, and shall be due and payable upon demand by Dr. Trieu.

Dr. Trieu shall have the right, exercisable by delivery of written notice thereof (the “Election Notice”), to either: (i) receive repayment for the entire unpaid principal amount advanced under the Line Letter and the accrued and unpaid interest thereon on the date of the delivery of the Election Notice (the “Outstanding Balance”) or (ii) convert the Outstanding Balance into such number of shares of our common stock as is equal to the quotient obtained by dividing (x) the Outstanding Balance by (y) \$0.10 (such price, the “Conversion Price”, and the number of shares of common stock to be issued pursuant to the foregoing formula, the “Conversion Shares”); provided, that in no event shall the Conversion Price be lower than the lower of (x) \$0.28 per share or (y) the lowest exercise price of any securities that have been issued by us in a capital raising transaction (and that would otherwise reduce the exercise price of any other outstanding warrants issued by us) during the period between November 15, 2016 and the date of the delivery of the Election Notice.

Autotelic LLC License Agreement

On November 15, 2016, Marina entered into a License Agreement with Autotelic LLC pursuant to which (A) Marina licensed to Autotelic LLC certain patent rights, data and know-how relating to FAP and nasal insulin, for human therapeutics other than for oncology-related therapies and indications, and (B) Autotelic LLC licensed to Marina certain patent rights, data and know-how relating to IT-102 and IT-103, in connection with individualized therapy for pain using a non-steroidal anti-inflammatory drug and an anti-hypertensive without inducing intolerable edema, and treatment of certain aspects of proliferative disease, but not including rights to IT-102/IT-103 for TDM guided dosing for all indications using an Autotelic Inc. TDM Device. Marina also granted a right of first refusal to Autotelic LLC with respect to any license by Marina of the rights licensed by or to Marina under the License Agreement in any cancer indication outside of gastrointestinal cancers.

The License Agreement shall immediately terminate, all rights granted by a licensor under the License Agreement shall immediately revert forthwith to the applicable licensor, all benefits which have accrued under the License Agreement shall automatically be transferred to the applicable licensor, and all rights, title and interest in the licensed intellectual property shall immediately revert back to the applicable licensor if: (i) the applicable licensee makes a general assignment for the benefit of its creditors prior to the two (2) year anniversary of the date of the License Agreement; (ii) the applicable licensee applies for or consents to the appointment of a receiver, a custodian, a trustee or liquidator of all or a substantial part of its intellectual property prior to the two (2) year anniversary of the date of the License Agreement; (iii) prior to the two (2) year anniversary of the date of the License Agreement, and without the consent of the applicable licensor, the applicable licensee effects a Change of Control Transaction (as defined in the License Agreement); (iv) the applicable licensee ceases operations; or (v) the applicable licensee fails to take any material steps, as reasonably determined by the applicable licensor, to develop the licensed intellectual property prior to the one (1) year anniversary of the date of the License Agreement (each of the foregoing items (i) through (v), a “Termination Event”). Upon the occurrence of any Termination Event, the applicable licensee shall immediately discontinue all use of the licensed intellectual property.

Master Services Agreement

On November 15, 2016, Marina entered into a Master Services Agreement with Autotelic Inc. pursuant to which Autotelic Inc. agreed to provide certain business functions and services from time to time during regular business hours at Marina's request (the "Master Services Agreement"). The Master Services Agreement has a term of ten years, though either party can terminate it by giving to the other party ninety (90) days' prior written notice of such termination (provided that the final day of the term shall be on the last day of the calendar month in which the noticed termination date falls). The resources available to us through Autotelic Inc. include, without limitation, regulatory, clinical, preclinical, manufacturing, formulation, legal, accounting and information technology.

As partial consideration for the services to be performed by Autotelic Inc. under the Master Services Agreement, during the period prior to the date on which we have completed an equity offering of either common or preferred stock in which the gross proceeds therefrom is no less than \$10 million, we shall issue to Autotelic Inc. warrants to purchase shares of our common stock, with the number of shares of common stock for which such warrants are exercisable, and the exercise price for such warrants, being based on the closing price of our common stock; provided, that in no event shall such price be lower than the lower of (x) \$0.28 per share or (y) the lowest exercise price of any warrants that have been issued by us in a capital raising transaction (and that would otherwise reduce the exercise price of any other outstanding warrants issued by us) during the period beginning on November 15, 2016 and ending on the date of the issuance of such warrants.

Line Letter with Autotelic Inc.

On April 4, 2017, we entered into a Line Letter with Autotelic Inc. for an unsecured line of credit in an amount not to exceed \$500,000, to be used for current operating expenses. Autotelic Inc. will consider requests for advances under the Line Letter until September 1, 2017. Autotelic Inc. shall have the right at any time for any reason in its sole and absolute discretion to terminate the line of credit available under the Line Letter or to reduce the maximum amount available thereunder without notice; provided, that Autotelic Inc. agreed that it shall not demand the repayment of any advances that are made under the Line Letter prior to the earlier of: (i) October 4, 2017; and (ii) the date on which (x) we make a general assignment for the benefit of our creditors, (y) we apply for or consents to the appointment of a receiver, a custodian, a trustee or liquidator of all or a substantial part of our assets or (z) we cease operations. Advances made under the Line Letter shall bear interest at the rate of five percent (5%) per annum, shall be evidenced by the Demand Promissory Note issued to Autotelic Inc., and shall be due and payable upon demand by Autotelic Inc.

Arrangements with LipoMedics

On February 6, 2017, we entered into a License Agreement with LipoMedics pursuant to which, among other things, we provided to LipoMedics a license to our SMARTICLES platform for the delivery of nanoparticles including small molecules, peptides, proteins and biologics. This represents the first time that our SMARTICLES technologies have been licensed in connection with nanoparticles delivering small molecules, peptides, proteins and biologics. On the same date, we also entered into a Stock Purchase Agreement with LipoMedics pursuant to which we issued to LipoMedics an aggregate of 862,068 shares of our common stock for a total purchase price of \$250,000.

Under the terms of the License Agreement, we could receive up to \$90 million in success-based milestones. In addition, if LipoMedics determines to pursue further development and commercialization of products under the License Agreement, LipoMedics agreed, in connection therewith, to purchase shares of our common stock for an aggregate purchase price of \$500,000, with the purchase price for each share of common stock being the greater of \$0.29 or the volume weighted average price of our common stock for the thirty (30) trading days immediately preceding the date on which LipoMedics notifies us that it intends to pursue further development or commercialization of a licensed product. LipoMedics may terminate the License Agreement by giving thirty (30) days' prior written notice to us.

Transactions with Larn Hwang, Ph.D.

Dr. Hwang, who was appointed to serve as our Chief Scientific Officer in February 2017, also serves as the Chief Scientific Officer of Autotelic Inc., which entity owns 5,255,354 shares of our common stock, which it acquired pursuant to the Merger Agreement. Further, Marina and Autotelic Inc. are parties to the Master Services Agreement dated November 15, 2016 that was entered into in connection with the Merger Agreement, and on April 4, 2017 we entered into a Line Letter with Autotelic Inc. for an unsecured line of credit in an amount not to exceed \$500,000, each of which is described above.

Transactions with Mihir Munsif

Each of Mr. Munsif, who was appointed to serve as our Chief Operating Officer in February 2017, and Autotelic Inc., of which entity Mr. Munsif serves as Senior Vice President, owns 5,255,354 shares of our common stock, which shares were acquired pursuant to the Merger Agreement. In addition, Marina and Autotelic Inc. are parties to the Master Services Agreement dated November 15, 2016 that was entered into in connection with the Merger Agreement, and on April 4, 2017 we entered into a Line Letter with Autotelic Inc. for an unsecured line of credit in an amount not to exceed \$500,000, each of which is described above. In addition, on February 6, 2017, we entered into a License Agreement and a Stock Purchase Agreement with LipoMedics, of which entity Mr. Munsif serves as Senior Vice President of Portfolio Management, which agreements are described above.

Related Party Transactions Regarding IThenaPharma

IThenaPharma had entered into a Master Services Agreement (“MSA”) with a related party, Autotelic Inc., effective January 1, 2015. Prior to the Merger, Autotelic Inc. owned less than 10% of IThenaPharma. Pursuant to the MSA, Autotelic Inc. provided business functions and services to IThenaPharma, and in consideration for such functions and services, Autotelic Inc. charged IThenaPharma for expenses paid on its behalf. The MSA includes personnel costs allocated based on amount of time incurred and other services such as consultant fees, clinical studies, conferences and other operating expenses incurred on behalf of IThenaPharma.

As per the MSA, IThenaPharma paid Autotelic Inc. cash in an amount equal to the actual labor cost, plus warrants for shares of IThenaPharma’s common stock with a strike price equal to the fair market value of IThenaPharma’s common stock at the time said warrants are issued (calculated based on the Black-Scholes model). IThenaPharma also paid Autotelic Inc. for the services provided by third party contractors plus 20% mark up.

In accordance with the MSA, Autotelic Inc. billed IThenaPharma for personnel and service expenses Autotelic Inc. incurred on behalf of IThenaPharma. Personnel costs charged by Autotelic Inc. were \$166,550 and \$236,594 for the years ended on December 31, 2016 and 2015, respectively.

For the years ended December 31, 2016 and 2015, Autotelic Inc. billed IThenaPharma a total of \$344,563 and \$332,866, respectively. Of the total expenses billed by Autotelic Inc., \$232,610 and \$278,716 was paid in cash, \$83,166 and \$59,525 was recorded as due to related party, and IThenaPharma issued warrants for the remaining amount due of \$47,791 and \$36,470, respectively.

In December 2015, IThenaPharma issued 47,374, 40,132 and 30,214 warrants to Autotelic Inc. for shares of IThenaPharma common stock with a strike price at \$2.76, which represented a 100% markup of the personnel service from January 1 to March 31, 2015, April 1 to June 30, 2015, and July 1 to September 30, 2015, respectively. In February 2016, IThenaPharma issued 21,453 warrants to Autotelic Inc. for shares of IThenaPharma common stock with a strike price at \$2.76, which represented a 100% markup of the personnel service from October 1 to December 31, 2015. As noted below, the warrants were cancelled as part of the acquisition by Autotelic Inc. from IThenaPharma of the technology asset (IT-101).

In July 2016, IThenaPharma issued convertible promissory notes with an aggregate principal balance of \$50,000 to related-party investors. Borrowings under each of these convertible notes bore interest at 3% per annum and these notes mature on June 30, 2018. As noted below, the notes were assumed by Autotelic Inc. on November 15, 2016 as part of its acquisition of the technology asset (IT-101).

On November 15, 2016, simultaneously with the Merger, Autotelic Inc. acquired a technology asset (IT-101) from IThenaPharma, and IThenaPharma’s investment of \$479 in foreign entity from IThenaPharma. In exchange for these assets, Autotelic Inc. agreed to cancel all of the warrants to purchase shares of IThenaPharma common stock that it held as a result of the MSA, it received all of IThenaPharma’s then cash balance as payment against the liabilities and it agreed to assume the remaining debts and liabilities of IThenaPharma, including accounts payable of \$71,560, accrued expenses of \$11,470, amounts due to related party of \$5,375, other liabilities of \$118,759, convertible note payable of \$50,000, and accrued interest payable of \$567.

PROPOSAL NO. 2

APPROVAL OF AN AMENDMENT TO OUR CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT AT THE DISCRETION OF THE BOARD OF DIRECTORS

We are seeking your approval of an amendment to our amended and restated certificate of incorporation to authorize our Board of Directors to effect a reverse stock split of our outstanding common stock in the range of one-for-two to one-for-ten, without further approval of our shareholders, upon a determination by our Board of Directors that such a reverse stock split is in the best interests of our company and our shareholders, at any time within two (2) years following the Annual Meeting. We currently anticipate that we will implement a reverse split, if this Proposal No. 2 is authorized by our stockholders, during the second or third fiscal quarter of 2017.

Our common stock is presently listed on the OTCQB Tier of the OTC Markets. We believe that a reverse stock split may help facilitate a future listing of our common stock on a national securities exchange, such one of the various tiers of NASDAQ, although we cannot assure you that such a listing will ever occur.

In addition to potentially listing our common stock on a national securities exchange, we believe that it may be in our best interests to increase the per-share price of our common stock through a reverse stock split in order to enhance the desirability and marketability of our common stock to the financial community and to attract different investors in future financings and in regular market trading. Such considerations are particularly important to a company, such as ours, that anticipates engaging in equity financing transactions in the near future.

Many institutional investors have policies prohibiting them from holding lower-priced stocks in their own portfolios, which reduces the number of potential buyers of our common stock. In addition, analysts at many leading brokerage firms are reluctant to recommend lower-priced stocks to their clients or monitor the activity of lower-priced stocks. A variety of brokerage house policies and practices also tend to discourage individual brokers within those firms from dealing in lower-priced stocks. Some of those policies and practices pertain to the payment of brokers' commissions and to time-consuming procedures that function to make the handling of lower-priced stocks unattractive to brokers from an economic standpoint. We believe that if the reverse stock split has the effect of increasing the trading price of our common stock, even if we do not list our common stock on a national securities exchange, the investment community may find our common stock to be more attractive, which could promote greater liquidity for our existing shareholders and could facilitate anticipated equity financing initiatives.

As a result of the foregoing considerations, the Board of Directors has determined that it may be in our best interest to effect a reverse stock split in the near future in an effort to increase the per-share price of our common stock and to create additional "headroom" for potential future equity financing transactions, if any. As such, we are asking our shareholders to approve an amendment to our amended and restated certificate of incorporation authorizing a reverse stock split in the range of one-for-two to one-for-ten and granting the Board of Directors the discretion to effect the reverse stock split within this range at any time within two (2) years following the Annual Meeting, and at such ratio that it determines appropriate. Further discussion of the reasons for, and possible consequences of, the reverse stock split can be found below in the subsections titled "Reasons for the Reverse Stock Split" and "Possible Effects of the Reverse Stock Split."

If this proposal is approved, the Board of Directors will have the authority, but not the obligation, in its sole discretion and without any further action on the part of the shareholders, to effect, at any time within two (2) years following the Annual Meeting that it believes to be most advantageous to us and to our shareholders, a reverse stock split in the range of one-for-two to one-for-ten.

This proposal would give the Board the authority to implement one, but not more than one, reverse stock split. A reverse stock split would be effected by the filing of an amendment to our amended and restated certificate of incorporation with the Secretary of State of the State of Delaware. The Board of Directors will have the ability to decline to file the amendment to our amended and restated certificate of incorporation without further shareholder action if it subsequently determines that a reverse stock split is no longer in our best interest.

If the reverse stock split is effected by the Board of Directors, the number of shares of common stock owned by each shareholder will be reduced by the same proportion as the reduction in the total number of shares of common stock outstanding, so that the percentage of the outstanding common stock owned by each shareholder after the reverse stock split will remain approximately the same as the percentage owned before the reverse stock split. The proportions may not be exactly the same due to the treatment of fractional shares that may result from the reverse stock split. The proposed reverse stock split will reduce the number of shares of outstanding common stock; however, it will not have the effect of reducing the number of shares of authorized common stock. Therefore: (i) assuming we effected a one-for-two reverse stock split on the Record Date for this Annual Meeting, following such reverse stock split we would continue to have 180 million shares of authorized common stock but there would only be approximately (x) 48.6 million shares of common stock issued and outstanding and (y) 67.1 million shares of common stock issued and outstanding on a fully diluted basis after giving effect to the exercise of all outstanding options and warrants and the conversion of all outstanding shares of preferred stock; and (ii) assuming we effected a one-for-ten reverse stock split on the Record Date for this Annual Meeting, following such reverse stock split we would continue to have 180 million shares of authorized common stock but there would only be approximately (A) 9.7 million shares of common stock issued and outstanding (B) and 13.4 million shares of common stock issued and outstanding on a fully diluted basis after giving effect to the exercise of all outstanding options and warrants and the conversion of all outstanding shares of preferred stock. As a result of these factors, the reverse stock split would in effect create “headroom” in the form of more available authorized but unissued shares of common stock. Assuming passage of this Proposal No. 2, we anticipate that we will utilize such additional “headroom” for the issuance of common stock upon the exercise and/or conversion of outstanding options, warrants, preferred stock and convertible notes, in connection with the granting of future awards under our equity incentive plans, and in connection with potential future equity financing transactions, if any. As of the date of this proxy statement, we do not have any plans, agreements, arrangements or understandings, whether written or oral, relating to the issuance of the additional authorized shares of our common stock that will become available as a result of the reverse split in any equity financing transactions.

Any reverse stock split that we implement following approval of this Proposal No. 2 will not affect any shareholder’s individual proportionate voting power, except to a minor extent due to the handling of fractional shares.

We have granted equity awards to our employees as authorized by our equity incentive plans. The terms of each of the foregoing plans provide for appropriate adjustment in the number and class of shares reserved for granting of awards and in the number, class and prices of shares covered by the awards granted pursuant to such plans but not yet exercised. If the reverse split is implemented, the Board of Directors or the applicable plan administrator will take the above-mentioned appropriate action(s). We will also make appropriate adjustments to any outstanding stock options granted outside of the aforementioned plans to reflect the reverse stock split. In addition, our outstanding warrants to purchase shares of common stock contain appropriate adjustments to the exercise price of such warrants and the number of shares of common stock issuable upon exercise thereof to reflect the reverse stock split. Further, the terms of our outstanding shares of preferred stock contain appropriate adjustments to the conversion price of such shares of preferred stock and the number of shares of common stock issuable upon conversion thereof to reflect the reverse stock split.

As our common stock is registered under the Exchange Act, we are subject to the reporting and other requirements of the Exchange Act. The reverse split, if implemented, will not affect the registration of our common stock under the Exchange Act or our reporting or other requirements thereunder.

Reasons for the Reverse Stock Split

Facilitating the future listing of our common stock on a national securities exchange, of which there can be no assurance, and creating additional “headroom” for potential future equity financing transactions, if any, and other corporate purposes, are the primary reasons for the reverse stock split. As noted above, as of the date of this proxy statement, we do not have any plans, agreements, arrangements or understandings, whether written or oral, relating to the issuance of the additional authorized shares of our common stock that will become available as a result of the reverse split in any equity financing transactions.

In addition, we believe that it may be advantageous to increase the per-share price of our stock through a reverse stock split to appeal to a broader range of investors in potential future financing transactions. A reverse stock split would result in a recapitalization intended to increase the per share value of our common stock. However, even if we effect the reverse stock split, there can be no assurance of either an immediate or a sustainable increase in the per share trading price of our common stock.

Our Board of Directors believes that a reverse stock split would also be beneficial for the following reasons:

- It could heighten the interest of the financial community in our company and potentially broaden the pool of investors that may consider investing in our company by increasing the trading price of our common stock and decreasing the number of outstanding shares of our common stock;

- It could help to attract institutional investors who have internal policies that either prohibit them from purchasing stocks below a certain minimum price or tend to discourage individual brokers from recommending such stocks to their customers; and
- It may also encourage investors who had previously been dissuaded from purchasing our common stock because commissions on lower-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks.

Text of the Proposed Amendment

If the Board determines to effect the reverse stock split following the approval of the proposal by our shareholders, we propose to amend our amended and restated certificate of incorporation by adding a paragraph to Article FOURTH, paragraph (a), substantially as follows:

“Effective at __:__ EDT on _____, 20__ (the “Effective Time”), every () shares of the Common Stock of the Corporation issued and outstanding will be exchanged and combined, automatically, without further action, into one (1) share of the Common Stock of the Corporation. At the Effective Time, there shall be no change in the number of authorized shares of Common Stock, including the number authorized for each class of shares, which the Corporation shall have the authority to issue. Any fraction of a share of Common Stock that would otherwise have resulted from the foregoing combination shall be converted into the right to receive a cash payment from the Corporation for such fractional shares. The cash payment from the Corporation will be determined by multiplying (x) the fractional amount of the share of Common Stock by (y) \$ ____.”

Possible Effects of the Reverse Stock Split

Once the reverse stock split is implemented, our common shareholders will own a fewer number of shares than they currently own. Although the Board expects that the reduction in outstanding shares of common stock will result in an increase in the per share price of our common stock, there is no assurance that such a result will occur. Similarly, there is no assurance that the reverse stock split will result in a permanent increase in the per share price, which can be dependent on several factors.

Should the per share price of our common stock decline upon implementation of the reverse stock split, the percentage decline may be greater than would occur in the absence of the reverse split.

The anticipated resulting increase in per-share price of our common stock is expected to encourage interest in our common stock and possibly promote greater liquidity for our shareholders and expand our equity financing opportunities. However, such liquidity could also be adversely affected by the reduced number of shares that would be outstanding after the reverse stock split.

The reverse stock split could be viewed negatively by the market and, consequently, could lead to a decrease in our overall market capitalization. It is often the case that the reverse-split adjusted stock price and market capitalization of companies that effect a reverse stock split decline, which has occurred with respect to our common stock in connection with prior reverse stock splits that we have implemented.

The number of shares held by each individual shareholder will be reduced if the reverse stock split is implemented. This will increase the number of shareholders who hold less than a “round lot,” or 100 shares. Typically, the transaction costs to shareholders selling “odd lots” are higher on a per share basis. Consequently, the reverse stock split could increase the transaction costs to existing shareholders in the event they wish to sell all or a portion of their shares.

Procedures for Effecting the Reverse Stock Split and Filing an Amendment to Our Amended and Restated Certificate of Incorporation

If our shareholders approve the reverse stock split and our Board of Directors subsequently determines that it is in our best interests to effect a reverse stock split, the amendment to our amended and restated certificate of incorporation will become effective upon the filing of an amendment to our amended and restated certificate of incorporation with the Secretary of State of the State of Delaware. The actual timing of any such filing will be made by the Board at such time as the Board believes to be most advantageous to us and to our shareholders within two (2) years following the Annual Meeting.

Payment for Fractional Shares

No fractional shares of common stock would be issued as a result of the reverse stock split, if any. Instead, each shareholder otherwise entitled to a fractional share would be entitled, upon surrender of the applicable stock certificate(s), to receive a cash payment (without interest) in lieu of such fractional share.

Exchange of Pre-Reverse Stock Split Shares with Post-Reverse Stock Split Shares

If we implement a reverse stock split, our transfer agent will act as our exchange agent to act for holders of common stock in implementing the exchange of their pre-reverse stock split shares for post-reverse stock split shares.

Registered Book Entry Shareholder. Holders of common stock holding all of their shares electronically in book-entry form with our transfer agent do not need to take any action (the exchange will be automatic) to receive post-reverse stock split shares or cash payment in lieu of any fractional share interest (as described above under “Payment for Fractional Shares”), if applicable.

Registered Certificated Shareholder. Some of our shareholders hold their shares in certificate form or a combination of certificate and book-entry form. If any of your shares are held in certificate form, you will receive a transmittal letter from our transfer agent as soon as practicable after the effective date of the reverse stock split. The letter of transmittal will contain instructions on how to surrender your certificate(s) representing your pre-reverse stock split shares to the transfer agent. Upon receipt of your pre-reverse stock split certificate(s), you will be issued the appropriate number of shares electronically in book-entry form under the Direct Registration System (“DRS”), and if you are entitled to a payment in lieu of any fractional share interest, payment will be made as described above under “Payment for Fractional Shares.” No new shares in book-entry form will be issued and no payment in lieu of any fractional share interest will be made to you until you surrender your outstanding pre-reverse stock split certificate(s), together with the properly completed and executed letter of transmittal, to the transfer agent. At any time after receipt of your DRS statement, you may request a stock certificate representing your ownership interest.

SHAREHOLDERS SHOULD NOT DESTROY ANY STOCK CERTIFICATES AND SHOULD NOT SUBMIT ANY CERTIFICATES UNTIL REQUESTED TO DO SO.

Accounting Adjustments

We anticipate that adjustments to our financial statements to reflect the reverse stock split, if any, will be minimal. Our stockholders’ equity, in the aggregate, will remain unchanged. Our historical earnings per share data would also be restated to reflect the reverse stock split.

Certain Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following summary of the federal income tax consequences of a reverse stock split, if any, is for general information only, and it is not intended to be, nor should it be construed to be, legal or tax advice to any particular shareholder. The summary does not address shareholders subject to special rules, such as persons who acquired shares of our common stock in compensatory transactions, certain financial institutions, tax-exempt entities, regulated investment companies, insurance companies, partnerships or other pass-through entities, persons who are not U.S. citizens or taxed as U.S. resident aliens, persons subject to the alternative minimum tax, traders in securities that elect to use a mark-to-market method of accounting, individual retirement accounts or tax-deferred accounts, dealers in securities or currencies, persons holding shares in connection with a hedging transaction, “straddle,” conversion transaction or a synthetic security or other integrated transaction, and shareholders whose “functional currency” is not the U.S. dollar. The following summary also assumes that shares of our common stock both before and after the reverse stock split are held as a “capital asset” as defined by the Internal Revenue Code of 1986, as amended (the “Code”), which is generally property held for investment. This summary is based on current law, including the Code, administrative pronouncements, judicial decisions, existing and proposed Treasury Regulations, and interpretations of the foregoing, all as of the Record Date. All of the foregoing authorities are subject to change (possibly with retroactive effect) and any such change may result in U.S. federal income tax consequences to a stockholder that are materially different from those described below. This summary does not address tax considerations under state, local, foreign and other laws.

Federal Income Tax Consequences to the Company. No gain or loss will be recognized by us as a result of a reverse stock split.

Federal Income Tax Consequences to the Shareholders. The reverse stock split is intended to constitute a reorganization within the meaning of section 368 of the Code. Provided the reverse stock split does qualify as a reorganization, a shareholder generally will not recognize gain or loss for U.S. federal income tax purposes on the reverse stock split (except with respect to any cash received in lieu of a fractional share as described below). The aggregate adjusted basis of the post-reverse stock split shares will be the same as the aggregate adjusted basis of the pre-reverse stock split shares exchanged therefore (excluding any portion of the shareholder's basis allocated to fractional share interests), and the holding period(s) of the post-reverse stock split shares received will include the shareholder's respective holding period(s) for the pre-reverse stock split shares exchanged.

Because the cash payment for fractional share interests represents a mere mechanical rounding off incident to the reverse stock split, a shareholder who receives cash for fractional shares should generally recognize gain or loss, as the case may be, for U.S. federal income tax purposes measured by the difference between the amount of cash received and the tax basis of such shareholder's pre-reverse stock split shares corresponding to the fractional share interest. Such gain or loss will be capital gain or loss, and any such capital gain or loss will generally be long-term capital gain or loss to the extent such shareholder's holding period exceeds 12 months. The deductibility of capital losses may be subject to certain limitations.

Backup Withholding. A non-corporate shareholder may be subject to backup withholding at a 28% rate on cash payments received pursuant to the reverse stock split unless such shareholder provides a correct taxpayer identification number to his or her broker or to us and otherwise complies with applicable requirements of the backup withholding rules. Backup withholding is not an additional U.S. federal income tax. Rather, any amount withheld under these rules will be creditable against the shareholder's U.S. federal income tax liability, provided the required information is furnished to the Internal Revenue Service.

Our view regarding the tax consequences of the reverse stock split is not binding on the Internal Revenue Service or the courts. ACCORDINGLY, EACH SHAREHOLDER SHOULD CONSULT HIS OR HER TAX ADVISOR TO DETERMINE THE PARTICULAR TAX CONSEQUENCES TO HIM OR HER OF A REVERSE STOCK SPLIT, INCLUDING THE APPLICATION AND EFFECT OF FEDERAL, STATE, LOCAL AND/OR FOREIGN INCOME TAX AND OTHER LAWS.

Vote Required and Board of Directors' Recommendation

Assuming a quorum is present, the affirmative vote of a majority of the votes entitled to be cast by holders of our common stock, either in person or by proxy, is required for approval of Proposal No. 2. For purposes of approval of Proposal No. 2, abstentions and broker non-votes will have the same effect as a vote against this proposal.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS
VOTE "FOR" PROPOSAL NO. 2.**

PROPOSAL NO. 3

APPROVAL OF AN AMENDMENT TO OUR 2014 LONG-TERM INCENTIVE PLAN TO INCREASE THE NUMBER OF SHARES AVAILABLE THEREUNDER FROM 5,000,000 TO 10,000,000

Our Board of Directors unanimously adopted, subject to stockholder approval at the Annual Meeting, an amendment to the Marina Biotech, Inc. 2014 Long-Term Incentive Plan (the "2014 Plan") to increase the number of shares of common stock authorized for issuance thereunder from 5,000,000 shares to 10,000,000 shares (without giving effect to the proposed reverse split). As part of this process, the Board of Directors reviewed the number of shares available under the 2014 Plan, and determined that the approximately 2.6 million shares available for grant thereunder represented an insufficient number of shares to enable us to provide sufficient future grants of stock options or other stock awards, as we seek to expand our business operations following the November 2016 merger with IThenaPharma. As a result, we believe that the amendment is necessary and in the best interests of our company and its long-term strategic growth to permit us to continue to attract, retain and motivate officers, employees, non-employee directors and consultants.

Assuming approval of this Proposal No. 3, the number of shares of common stock available under the 2014 Plan would represent approximately 10.3% of the shares of common stock outstanding on the Record Date, or approximately 7.6% assuming the conversion in full of all of our outstanding shares of convertible preferred stock and exercise in full of all of our outstanding options and warrants as of such date.

The purpose of the 2014 Plan is to further and promote the interests of our company, its subsidiaries and its stockholders by enabling our company and its subsidiaries to attract, retain and motivate employees, directors and consultants or those who will become employees, directors or consultants of the company and/or its subsidiaries, and to align the interests of those individuals and our stockholders. To do this, the 2014 Plan offers performance-based incentive awards and equity-based opportunities providing employees, directors and consultants with a proprietary interest in maximizing the growth, profitability and overall success of our company and/or its subsidiaries.

Potentially all of our employees, officers and directors are eligible to participate in the 2014 Plan. Because participation in, and the types of awards that may be made under, the 2014 Plan are subject to the discretion of the Compensation Committee (or the Board, as applicable), we cannot determine the dollar value or number of shares of common stock that will in the future be received by or allocated to any participant or groups of participants, including our directors, executive officers and other employees. As of April 7, 2017, there were three executive officers and four non-employee directors of our company who were eligible to participate in the 2014 Plan. During the 2016 fiscal year, we granted options to purchase up to an aggregate of 35,000 shares of common stock to our Named Executive Officers as a group (excluding options granted to Mr. Ramelli in January 2016 in his capacity as a non-employee director), all of which were granted to Mr. Ramelli. During the 2016 fiscal year we also granted options to purchase up to an aggregate of 257,000 shares to our non-employee directors as a group, and zero options to our employees (other than executive officers) as a group. As of April 17, 2017, the closing price of our common stock on the OTCQB Tier of the OTC Markers was \$0.34 per share.

The following is a brief description of the 2014 Plan. The full text of the 2014 Plan is attached as Annex A to the Proxy Statement for Marina Biotech's 2014 Annual Meeting of Stockholders held on September 15, 2014, and the following description is qualified in its entirety by reference thereto. We urge you to read the 2014 Plan document carefully for a complete statement of the provisions summarized herein.

It is the judgment of the Board of Directors that approval of the amendment to the 2014 Plan to increase the number of shares available for issuance thereunder from 5,000,000 shares to 10,000,000 shares is in the best interests of our company and our stockholders.

Administration

The administration, interpretation and operation of the 2014 Plan is vested in a committee appointed by our Board (the "Committee"). The Committee may designate persons other than members of the Committee to carry out the day-to-day administration of the 2014 Plan. In addition, the Committee may, in its sole discretion, delegate day-to-day ministerial administration to persons other than members of the Committee, except that the Committee shall not delegate its authority with regard to selection for participation in the 2014 Plan and/or the granting of any Awards to Participants. In the event that our Board has not appointed the Committee, then our Board shall have all the powers of the Committee under the 2014 Plan.

Eligibility

Employees, directors and consultants, or those who will become employees, directors and/or consultants of our company and/or its subsidiaries are eligible to receive awards under the 2014 Plan. Awards under the 2014 Plan will be made by the Committee. No determination has been made as to future awards which may be granted under the 2014 Plan, although it is anticipated that recipients of awards will include the current executive officers and directors of our company.

Awards Under the 2014 Plan

Introduction. Awards under the 2014 Plan may consist of stock options, stock appreciation rights (“SARs”), restricted shares or performance unit awards, each of which is described below. All awards will be evidenced by an award agreement between us and the individual participant and approved by the Committee. In the discretion of the Committee, an eligible employee, director or consultant may receive awards from one or more of the categories described below, and more than one award may be granted to an eligible employee, director or consultant.

Stock Options and Stock Appreciation Rights. A stock option is an award that entitles a participant to purchase shares of common stock at a price fixed at the time the option is granted. Stock options granted under the 2014 Plan may be in the form of incentive stock options (which qualify for special tax treatment) or non-qualified stock options, and may be granted alone or in addition to other awards under the 2014 Plan. Non-qualified stock options may be granted alone or in tandem with SARs.

An SAR entitles a participant to receive, upon exercise, an amount equal to (a) the excess of (i) the fair market value on the exercise date of a share of common stock, over (ii) the fair market value of a share of common stock on the date the SAR was granted, multiplied by (b) the number of shares of common stock for which the SAR has been exercised.

The exercise price and other terms and conditions of stock options and the terms and conditions of SARs will be determined by the Committee at the time of grant, provided, however, that the exercise price per share may not be less than 100 percent of the fair market value of a share of common stock on the date of the grant. In addition, the term of any incentive stock options granted under the 2014 Plan may not exceed ten years. An option or SAR grant under the 2014 Plan does not provide an optionee any rights as a stockholder and such rights will accrue only as to shares actually purchased through the exercise of an option or the settlement of an SAR.

If stock options and SARs are granted together in tandem, the exercise of such stock option or the related SAR will result in the cancellation of the related stock option or SAR to the extent of the number of shares in respect of which such option or SAR has been exercised.

Stock options and SARs granted under the 2014 Plan shall become exercisable at such time as designated by the Committee at the time of grant.

Payment for shares issuable pursuant to the exercise of a stock option (and applicable tax withholding) may be made either in cash, by certified check, bank draft, or money order, or, by delivery of shares satisfying such requirements as the Committee shall establish, or through such other mechanism as the Committee shall permit in its sole discretion.

In addition, the Committee, in its sole discretion, may provide in any stock option or SAR award agreement that the recipient of the stock option or SAR will be entitled to dividend equivalents with respect to such award. In such instance, in respect of any such award which is outstanding on a dividend record date for common stock, the participant would be entitled to an amount equal to the amount of cash or stock dividends that would have paid on the shares of common stock covered by such stock option or SAR award had such shares of common stock been outstanding on the dividend record date.

Restricted Share Awards. Restricted share awards are grants of common stock made to a participant subject to conditions established by the Committee in the relevant award agreement on the date of grant. The restricted shares only become unrestricted in accordance with the conditions and vesting schedule, if any, provided in the relevant award agreement. A participant may not sell or otherwise dispose of restricted shares until the conditions imposed by the Committee with respect to such shares have been satisfied. Restricted share awards under the 2014 Plan may be granted alone or in addition to any other awards under the 2014 Plan. Restricted shares which vest will be reissued as unrestricted shares of common stock.

Each participant who receives a grant of restricted shares will have the right to receive all dividends and vote or execute proxies for such shares. Any stock dividends granted with respect to such restricted shares will be treated as additional restricted shares.

Performance Units. Performance units (with each unit representing a monetary amount designated in advance by the Committee) are awards which may be granted to participants alone or in addition to any other awards under the 2014 Plan. Participants receiving performance unit grants will only earn such units if our company and/or the participant achieve certain performance goals during a designated performance period. The Committee will establish such performance goals and may use measures such as total stockholder return, return on equity, net earnings growth, sales or revenue growth, comparison to peer companies, individual or aggregate participant performance or such other measures the Committee deems appropriate. The participant may forfeit such units in the event the performance goals are not met. If all or a portion of a performance unit is earned, payment of the designated value thereof will be made in cash, in unrestricted common stock or in restricted shares or in any combination thereof, as provided in the relevant award agreement.

Recapitalization Adjustments. In the event that our Board determines that any dividend or other distribution (whether in the form of cash, common stock, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of common stock or other securities of our company, or other corporate transaction or event affects the common stock such that an adjustment is determined by our Board, in its sole discretion, to be necessary or appropriate in order to prevent dilution or enlargement of benefits or potential benefits intended to be made available under the 2014 Plan, our Board may, in any manner that it in good faith deems equitable, adjust any or all of (i) the number of shares of common stock or other securities of our company (or number and kind of other securities or property) with respect to which awards may be granted, (ii) the number of shares of common stock or other securities of our company (or number and kind of other securities or property) subject to outstanding awards, and (iii) the exercise price with respect to any stock option, or make provision for an immediate cash payment to the holder of an outstanding award in consideration for the cancellation of such award.

Mergers. If our company enters into or is involved in any merger, reorganization, recapitalization, sale of all or substantially all of its assets, liquidation, or business combination with any person or entity (a “Merger Event”), our Board may, prior to such Merger Event and effective upon such Merger Event, take any action that it deems appropriate, including, replacing such stock options with substitute stock options and/or SARs in respect of the shares, other securities or other property of the surviving corporation or any affiliate of the surviving corporation on such terms and conditions, as to the number of shares, pricing and otherwise, which shall substantially preserve the value, rights and benefits of any affected stock options or SARs granted under the 2014 Plan as of the date of the consummation of the Merger Event. If any Merger Event occurs, our company has the right, but not the obligation, to cancel each participant’s stock options and/or SARs and to pay to each affected participant in connection with the cancellation of such stock options and/or SARs, an amount equal to the excess of the fair market value, as determined by our Board, of the common stock underlying any unexercised stock options or SARs (whether then exercisable or not) over the aggregate exercise price of such unexercised stock options and/or SARs. Upon receipt by any affected participant of any such substitute stock options, SARs (or payment) as a result of any such Merger Event, such participant’s affected stock options and/or SARs for which such substitute options and/or SARs (or payment) were received shall be thereupon cancelled without the need for obtaining the consent of any such affected participant.

Amendment, Suspension or Termination of the 2014 Plan

Unless earlier terminated by our Board, the 2014 Plan shall terminate on December 31, 2023. Our Board may amend, suspend or terminate the 2014 Plan (or any portion thereof) at any time. However, no amendment shall (a) materially adversely affect the rights of any participant under any outstanding award, without the consent of such participant, or (b) make any change that would disqualify the 2014 Plan from the benefits provided under Sections 422 and 162(m) of the Internal Revenue Code of 1986 (the “Code”), or (c) increase the number of shares available for awards under the 2014 Plan without stockholder approval; provided, however, that our Board and/or Committee may amend the 2014 Plan, without the consent of any participants, in any way it deems appropriate to satisfy Code Section 409A and any regulations or other authority promulgated thereunder, including any amendment to the 2014 Plan to cause certain Awards not to be subject to Code Section 409A.

Certain Federal Income Tax Consequences of the 2014 Plan

The following is a brief and general summary of some United States federal income tax consequences applicable to the 2014 Plan. The summary does not reflect any provisions of the income tax laws of any state, local or foreign taxing jurisdiction. Because the tax consequences of events and transactions under the 2014 Plan depend upon various factors, including an individual’s own tax status, each participant who receives an award under the 2014 Plan should consult a tax advisor.

Incentive Stock Options. Stock options granted under the 2014 Plan may be incentive stock options (within the meaning of Section 422 of the Code) or non-qualified stock options. Upon the grant of an incentive stock option, the optionee will not recognize any income. Generally, no income is recognized by the optionee upon the exercise of an incentive stock option. The optionee must increase his or her alternative minimum taxable income for the taxable year in which he or she exercised the incentive stock option by the amount that would have been ordinary income had the option not been an incentive stock option.

Upon the subsequent disposition of shares acquired upon the exercise of an incentive stock option, the federal income tax consequences will depend upon when the disposition occurs and the type of disposition. If the shares are disposed of by the optionee after the later to occur of (i) the end of the two year period beginning the day after the day the incentive stock option is awarded to the optionee, or (ii) the end of the one-year period beginning on the day after the day the shares are issued to the optionee (the later of (i) or (ii) being the "ISO Holding Period"), any gain or loss realized upon such disposition will be long-term capital gain or loss, and our company (or a subsidiary) will not be entitled to any income tax deduction in respect of the option or its exercise. For purposes of determining the amount of such gain or loss, the optionee's tax basis in the shares will be the option price.

Generally, if the shares are disposed of by the optionee in a taxable disposition within (i) the two year period beginning on the day after the day the option was awarded to the optionee, or (ii) the one-year period beginning on the day after the day the shares are issued to the optionee, the excess, if any, of the amount realized (up to the fair market value of the shares on the exercise date) over the option price will be compensation taxable to the optionee as ordinary income, and our company generally will be entitled to a deduction (subject to the provisions of Section 162(m) of the Code discussed below under the caption "Limits on Deductions") equal to the amount of ordinary income realized by the optionee. Any amount realized upon such a disposition by the optionee in excess of the fair market value of the shares on the exercise date will be capital gain.

If an optionee has not remained an employee of our company during the period beginning with the grant of an incentive stock option and ending on the day three months (one year if the optionee becomes disabled) before the date the option is exercised (other than in the case of the optionee's death), the exercise of such option will be treated as the exercise of a non-qualified stock option with the tax consequences described below.

Non-Qualified Stock Options. In general, upon the grant of a non-qualified stock option, an optionee will not recognize any income. At the time a nonqualified option is exercised, the optionee will recognize compensation taxable as ordinary income, and our company generally will be entitled to a deduction (subject to the provisions of Section 162(m) of the Code discussed below under the caption "Limits on Deductions"), in an amount equal to the difference between the fair market value on the exercise date of the shares acquired pursuant to such exercise and the option price. Upon a subsequent disposition of the shares, the optionee will recognize long- or short-term capital gain or loss, depending upon the holding period of the shares. For purposes of determining the amount of such gain or loss, the optionee's tax basis in the shares will be the fair market value of such shares on the exercise date.

Effect of Share-for-Share Exercise. If an optionee elects to tender shares of common stock in partial or full payment of the option price for shares to be acquired through the exercise of an option, generally the optionee will not recognize any gain or loss on such tendered shares. However, if the shares tendered in connection with any share-for-share exercise were previously acquired upon the exercise of an incentive stock option, and such share-for-share exercise occurs during the ISO Holding Period for such shares, then there will be a taxable disposition of the tendered shares with the tax consequences described above for the taxable dispositions during the ISO Holding Period of the shares acquired upon the exercise of an incentive stock option.

If the optionee tenders shares upon the exercise of a nonqualified option, the optionee will recognize compensation taxable as ordinary income and our company generally will be entitled to a deduction (subject to the provisions of Section 162(m) of the Code discussed below under the caption "Limits on Deductions") in an amount equal only to the fair market value of the number of shares received by the optionee upon exercise which is in excess of the number of tendered shares, less any cash paid by the optionee.

Restricted Shares. A participant will not recognize any income upon the award of restricted shares unless the participant makes an election under Section 83(b) of the Code in respect of such grant, as described below. Unless a participant has made an election under Section 83(b) of the Code in respect of any restricted shares, any dividends received by the participant with respect to restricted shares prior to the date the participant recognizes income with respect to such award (as described below) must be treated by the participant as compensation taxable as ordinary income, and our company will be entitled to a deduction, in an amount equal to the amount of ordinary income recognized by the participant. After the terms and conditions applicable to the restricted shares are satisfied, or if the participant has made an election under Section 83(b) of the Code in respect of the restricted shares, any dividends received by the participant in respect of such award will be treated as a dividend taxable as ordinary income, and our company will not be entitled to a deduction in respect of any such dividend payment.

Unless the participant has made an election under Section 83(b) of the Code (as described below), at the time the terms and conditions applicable to the restricted shares are satisfied, a participant will recognize compensation taxable as ordinary income, and our company generally will be entitled to a deduction, in an amount equal to the then fair market value of the shares of common stock for which the terms and conditions applicable to the restricted share award have been satisfied. The participant's tax basis for any such shares of common stock would be the fair market value on the date such terms and conditions are satisfied.

A participant may irrevocably elect under Section 83(b) of the Code to recognize compensation taxable as ordinary income, and our company will be entitled to a corresponding deduction, in an amount equal to the fair market value of such restricted shares (determined without regard to any restrictions thereon) on the date of grant. Such an election must be made by the participant not later than thirty (30) days after the date of grant. If such an election is made, no income would be recognized by the participant (and our company will not be entitled to a corresponding deduction) at the time the applicable terms and conditions are satisfied. The participant's tax basis for the restricted shares received and for any shares of common stock subsequently held in respect thereof would be the fair market value of the restricted shares (determined without regard to any restrictions thereon) on the date of grant. If a participant makes such an election and subsequently all or part of the award is forfeited, the participant will not be entitled to a deduction as a result of such forfeiture.

The holding period for capital gain or loss purposes in respect of the common stock underlying an award of restricted shares shall commence when the terms and conditions applicable to the restricted shares are satisfied, unless the participant makes a timely election under Section 83(b) of the Code. In such case, the holding period will commence immediately after the grant of such restricted shares.

Performance Units. A participant will not recognize any income upon the award of a performance unit. If the performance goals applicable to the performance unit are achieved during the applicable performance period and such performance units are earned, a participant will recognize compensation taxable as ordinary income when he or she receives payment with respect to such performance unit, and at such time the company will be entitled to a deduction equal to the amount of cash or the then fair market value of unrestricted common stock received by the participant in payment of the performance units. The participant's tax basis for any such shares of common stock would be the fair market value on the date such unrestricted shares are transferred to the participant. If all or a portion of the performance units are paid in restricted shares, see "Restricted Shares" above for a discussion of the applicable tax treatment.

Limits on Deductions. Under Section 162(m) of the Code, the amount of compensation paid to our chief executive officer and our four other most highly paid executive officers in the year for which a deduction is claimed by our company (including its subsidiaries) is limited to \$1,000,000 per person in any year, except that qualified performance-based compensation will be excluded for purposes of calculating the amount of compensation subject to this \$1,000,000 limitation. Our ability to claim a deduction for compensation paid to any other executive officer or employee of our company (including its subsidiaries) is not affected by this provision.

We have structured the 2014 Plan so that we may claim a deduction in connection with (i) the exercise of non-qualified stock options and/or SARs, (ii) the disposition during the ISO Holding Period by an optionee of shares acquired upon the exercise of incentive stock options, and (iii) the payment of any performance units, provided that, in each case, the requirements imposed on qualified performance-based compensation under Section 162(m) of the Code and the regulations thereunder are satisfied with respect to such awards. Restricted share awards under the 2014 Plan that vest solely upon the passage of time will not be qualified performance-based compensation under Section 162(m) of the Code. Any deduction we may claim upon the lapse of any restrictions on such restricted share awards will be subject to the limitations on deductibility under Section 162(m).

Additional Information. The recognition by an employee of compensation income with respect to a grant or an award under the 2014 Plan will be subject to withholding for federal income and employment tax purposes. If an employee, to the extent permitted by the terms of a grant or award under the 2014 Plan, uses shares of common stock to satisfy the federal income and employment tax withholding obligation, or any similar withholding obligation for state and local tax obligations, the employee will recognize a capital gain or loss, short-term or long-term, depending on the tax basis and holding period for such shares of common stock.

In the event of a change of control, certain compensation payments or other benefits received by "disqualified individuals" (as defined in Section 280G(c) of the Code) under the 2014 Plan or otherwise may cause or result in "excess parachute payments" (as defined in Section 280G(b)(1) of the Code). Pursuant to Section 280G of the Code, any amount that constitutes an excess parachute payment is not deductible by the company. In addition, Section 4999 of the Code generally imposes a 20% excise tax on the amount of any such excess parachute payment received by such a disqualified individual, and any such excess parachute payments will not be deductible by our company (or a subsidiary).

Interest of Certain Persons

Each of our directors and executive officers would be eligible to participate in the 2014 Plan. As a result, approval of the 2014 Plan impacts each of our directors and executive officers and each of them has a personal interest in this proposal and its approval by our stockholders.

Vote Required and Board of Directors' Recommendation

Assuming a quorum is present, the affirmative vote of a majority of the shares present at the Annual Meeting, either in person or by proxy, and entitled to vote, is required for approval of this Proposal No. 3. For purposes of the approval of Proposal No. 3, abstentions will have the same effect as a vote against this proposal, and broker non-votes will have no effect on the result of the vote.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT
STOCKHOLDERS VOTE "FOR" PROPOSAL NO. 3.**

PROPOSAL NO. 4

RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have appointed Squar Milner LLP (“Squar”) to serve as our independent registered public accounting firm for the fiscal year ending December 31, 2017. Squar has served as our independent registered public accounting firm since December 8, 2016. Squar had also served as the independent registered public accounting firm for IThenaPharma since October 2015. Prior to December 8, 2016, Wolf & Company, P.C. (“Wolf”) served as the independent registered public accounting firm for Marina Biotech. The change of accounting firms is described below.

In the event that ratification of this appointment of independent registered public accounting firm is not approved by the affirmative vote of a majority of votes cast on the matter, then the appointment of our independent registered public accounting firm will be reconsidered by us.

Your ratification of the appointment of Squar as our independent registered public accounting firm for the fiscal year ending December 31, 2017 does not preclude us from terminating our engagement of Squar and retaining a new independent registered public accounting firm, if we determine that such an action would be in our best interest.

Total fees to our independent registered public accounting firms for the years ended December 31, 2016 and 2015 were \$0.113 million and \$0.166 million, respectively, of which (x) \$0.045 million was paid to Squar during 2016 and \$0.068 was paid to Wolf during 2016; and (y) \$0.045 million was paid to Squar by IThena during 2015 and \$0.121 million was paid to Wolf by Marina Biotech during 2015. The foregoing amounts were comprised of the amounts set forth below.

Audit Fees. The aggregate fees for professional services rendered in connection with (i) the audit of our annual financial statements, (ii) the review of the financial statements included in our Quarterly Reports on Form 10-Q for the quarters ended March 31, June 30 and September 30, (iii) consents and comfort letters issued in connection with equity offerings and (iv) services provided in connection with statutory and regulatory filings or engagements were \$0.108 million for the year ended December 31, 2016 and \$0.145 million for the year ended December 31, 2015, of which (x) \$0.04 million was paid to Squar during 2016 and \$0.068 was paid to Wolf during 2016; and (y) \$0.045 million was paid to Squar by IThena during 2015 and \$0.1 million was paid to Wolf by Marina Biotech during 2015.

Audit-Related Fees. The aggregate fees related to audits that are not included in the above were \$0 for the year ended December 31, 2016 and \$0.021 million for the year ended December 31, 2015, all of which was paid to Wolf by Marina Biotech during 2015.

Tax Fees. We did not incur any fees to our independent registered public accounting firm for professional services rendered in connection with tax compliance, tax planning and federal and state tax advice for the years ended December 31, 2016 and December 31, 2015, other than \$0.005 million incurred by IThenaPharma to Squar during 2016.

All Other Fees. We did not incur any such other fees to our independent registered public accounting firm for the years ended December 31, 2016 and December 31, 2015.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

On December 8, 2016, Squar was engaged as our independent registered public accounting firm for the year ending December 31, 2016. The appointment of Squar was approved by our Board. During the fiscal years ended December 31, 2015 and 2014 and during the subsequent interim period from January 1, 2016 through December 8, 2016, neither Marina Biotech nor anyone on behalf of Marina Biotech consulted Squar regarding either (i) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the financial statements of Marina Biotech, and neither a written report nor oral advice was provided to Marina Biotech that Squar concluded was an important factor considered by Marina Biotech in reaching a decision as to any accounting, auditing or financial reporting issue, or (ii) any matter that was either the subject of a “disagreement” or a “reportable event”, each as defined in Regulation S-K Item 304(a)(1)(v), respectively.

Prior to the appointment of Squar as our independent registered public accounting firm, Squar served as the independent registered public accounting firm for IThenaPharma since October 2015.

Also on December 8, 2016, we dismissed Wolf as our independent registered public accounting firm. The decision to change our independent registered public accounting firm was approved by our Board.

Wolf's report on the financial statements of Marina Biotech for either of the fiscal years ended December 31, 2015 and 2014 did not contain an adverse opinion or a disclaimer of opinion, or qualification or modification as to uncertainty, audit scope or accounting principles, except that such report on the financial statements of Marina Biotech contained an explanatory paragraph in regard to the substantial doubt about Marina Biotech's ability to continue as a going concern.

During Marina Biotech's fiscal years ended December 31, 2015 and 2014 and during the subsequent interim period from January 1, 2016 through December 8, 2016, (i) there were no disagreements, resolved or not, with Wolf on any matter of accounting principles or practices, financial statement disclosure, or audit scope or procedures that, if not resolved to Wolf's satisfaction, would have caused Wolf to make reference to the subject matter of the disagreement in connection with its reports and (ii) there were no "reportable events" as defined in Item 304(a)(1)(v) of Regulation S-K, except that Wolf advised Marina Biotech of the following financial reporting deficiencies that represent material weaknesses as of December 31, 2013 as described in Marina Biotech's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, which annual report was filed with the SEC on March 30, 2014:

- **Financial Reporting Process:** Because of the financial challenges that Marina Biotech faced during the 2013 fiscal year and during subsequent reporting periods prior to the filing of the Annual Report on Form 10-K for the 2013 fiscal year, Marina Biotech did not maintain a financial reporting process which would have enabled Marina Biotech to issue timely financial statements as required by the rules of the SEC.
- **Qualified Personnel:** Marina Biotech determined that processes and controls over timely impairment testing of long-lived assets were inadequate at such time primarily because Marina Biotech lacked the resources at such time to acquire the necessary valuation expertise to operate effective processes and controls over the impairment testing of long-lived assets. As a result, a reasonable possibility existed at such time that material misstatements in Marina Biotech's financial statements would not be prevented or detected on a timely basis.

The foregoing material weaknesses were remediated during Marina Biotech's 2014 fiscal year, as noted in Marina's Annual Report on Form 10-K for the fiscal year ended December 31, 2014.

Pre-Approval Policies and Procedures

The Audit Committee has the authority to appoint or replace our independent registered public accounting firm (subject, if applicable, to stockholder ratification). The Audit Committee is also responsible for the compensation and oversight of the work of the independent registered public accounting firm (including resolution of disagreements between management and the independent registered public accounting firm regarding financial reporting) for the purpose of preparing or issuing an audit report or related work. The independent registered public accounting firm was engaged by, and reports directly to, the Audit Committee.

The Audit Committee pre-approves all audit services and permitted non-audit services (including the fees and terms thereof) to be performed for us by our independent registered public accounting firm, subject to the *de minimis* exceptions for non-audit services described in Section 10A(i)(1)(B) of the Exchange Act and Rule 2-01(c)(7)(i)(C) of Regulation S-X, provided that all such excepted services are subsequently approved prior to the completion of the audit. In the event pre-approval for such audit services and permitted non-audit services cannot be obtained as a result of inherent time constraints in the matter for which such services are required, the Chairman of the Audit Committee had been granted the authority to pre-approve such services, provided that the estimated cost of such services on each such occasion does not exceed \$15,000, and the Chairman of the Audit Committee reported for ratification such pre-approval to the Audit Committee at its next scheduled meeting. We have complied with the procedures set forth above, and the Audit Committee has otherwise complied with the provisions of its charter.

Vote Required and Board of Directors' Recommendation

Assuming a quorum is present, the affirmative vote of a majority of the shares present at the Annual Meeting and entitled to vote, either in person or by proxy, is required for approval of Proposal No. 4. For purposes of the ratification of our independent registered public accounting firm, abstentions will have the same effect as a vote against this proposal and broker non-votes will have no effect on the result of the vote.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS
VOTE "FOR" PROPOSAL NO. 4.**

PROPOSAL NO. 5

ADVISORY VOTE ON EXECUTIVE COMPENSATION

We are providing stockholders an advisory vote on executive compensation. This nonbinding vote is required under Section 14A of the Exchange Act. At our Annual Meeting of Stockholders held in September 2014, our stockholders indicated their preference that the advisory vote on executive compensation be held on an annual basis, and we intend to seek an advisory vote on executive compensation annually.

The section entitled “Executive Compensation” describes the compensation of our chief executive officer and our other most highly compensated executive officers during the 2016 fiscal year. Our executive officers are referred to in this Proposal No. 5 as our named executive officers.

Our Board of Directors believes that the policies, procedures and compensation articulated in the “Executive Compensation” section of this proxy statement are appropriate for our company, and that the compensation of our named executive officers in 2016 reflects and supports these compensation policies and procedures.

We are asking our stockholders to indicate their support at the Annual Meeting for the compensation of our named executive officers as described in this proxy statement. This vote is intended to provide an overall assessment of our policies and procedures relating to the compensation of our named executive officers, rather than focus on any specific item of compensation. Accordingly, we are recommending that our stockholders vote FOR the following resolution:

RESOLVED, that the stockholders of Marina Biotech, Inc. approve, on an advisory basis, the compensation of the named executive officers of Marina Biotech, Inc., as disclosed in this proxy statement for the 2017 Annual Meeting of Stockholders pursuant to Item 402 of Regulation S-K, including, as applicable, the Summary Compensation Table and the other related tables and disclosures contained in the section of this proxy statement captioned “Executive Compensation”.

This advisory vote on executive compensation, commonly referred to as a ‘say-on-pay’ advisory vote, is not binding on our Board of Directors. However, our Board of Directors will take into account the result of the vote when determining future executive compensation arrangements.

Vote Required and Board of Directors’ Recommendation

Assuming a quorum is present, the affirmative vote of a majority of the shares present at the Annual Meeting, either in person or by proxy, and entitled to vote, is required for approval of this Proposal No. 5. Because your vote is advisory, it will not be binding upon our Board of Directors. For purposes of the approval of Proposal No. 5, abstentions will have the same effect as a vote against this proposal, and broker non-votes will have no effect on the result of the vote.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT STOCKHOLDERS
VOTE “FOR” PROPOSAL NO. 5.**

REPORT OF THE AUDIT COMMITTEE OF THE BOARD OF DIRECTORS

The Audit Committee of the Board of Directors, on behalf of the Board of Directors, serves as an independent and objective party to monitor and provide general oversight of the integrity of our financial statements, the independent registered public accounting firm's qualifications and independence, the performance of the independent registered public accounting firm, the compliance by us with legal and regulatory requirements and our standards of business conduct. The Audit Committee performs these oversight responsibilities in accordance with its Audit Committee Charter.

Our management is responsible for preparing our financial statements and our financial reporting process. Our independent registered public accounting firm is responsible for performing an independent audit of our consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board ("PCAOB"). The Audit Committee's responsibility is to administer and oversee these processes.

The Audit Committee met with the independent registered public accounting firm, with and without management present, to discuss the audit plan, the results of their examinations, and the overall quality of our financial reporting.

In this context, the Audit Committee has reviewed and discussed the audited financial statements for the year ended December 31, 2016 with management and with the independent registered public accounting firm. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by Auditing Standard No. 16, *Communications with Audit Committees*, which includes, among other items, matters related to the conduct of the audit of our annual financial statements.

The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with the independent registered public accounting firm the issue of its independence from us and management. In addition, the Audit Committee has considered whether the provision of any non-audit services by the independent registered public accounting firm in 2016 is compatible with maintaining the registered public accounting firm's independence and has concluded that it is.

Based on its review of the audited financial statements and the various discussions noted above, the Audit Committee recommended to the Board of Directors that the audited financial statements be included in our Annual Report on Form 10-K for the year ended December 31, 2016.

Respectfully,

Donald A. Williams, Chairman
Philip C. Ranker
Philippe Calais

The foregoing Audit Committee Report does not constitute soliciting material and shall not be deemed filed or incorporated by reference into any of our filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent we specifically incorporate this Audit Committee Report by reference therein.

EXECUTIVE COMPENSATION

Summary Compensation Table

The following table sets forth information regarding compensation earned during 2016 and 2015 by our CEO and our other most highly compensated executive officers as of the end of the 2016 fiscal year (“Named Executive Officers”).

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$) ⁽¹⁾	All Other Compensation (\$)	Total (\$)
J. Michael French, former President, CEO & and Director of Marina Biotech ⁽²⁾	2016	169,897	—	—	—	5,300 ⁽⁴⁾	175,197
Joseph W. Ramelli, CEO and former director ⁽³⁾	2015	425,000	—	—	—	—	425,000
Joseph W. Ramelli, CEO and former director ⁽³⁾	2016	82,500 ⁽⁷⁾	—	—	11,448 ⁽⁵⁾	—	93,948
Vuong Trieu, Ph.D., former CEO of IThenaPharma ⁽⁶⁾	2016	—	—	—	—	—	—
Vuong Trieu, Ph.D., former CEO of IThenaPharma ⁽⁶⁾	2015	—	—	—	—	—	—

- (1) Represents the aggregate grant date fair value under FASB ASC Topic 718 of options to purchase shares of Marina Biotech common stock.
- (2) Mr. French resigned as the president and chief executive officer of Marina Biotech, and as a member of the Board of Directors of Marina Biotech, effective at the close of business on June 10, 2016.
- (3) Mr. Ramelli served as the interim Chief Executive Officer of Marina Biotech from June 10, 2016 until December 8, 2016, at which time he became Chief Executive Officer. Mr. Ramelli also served as a non-employee director of Marina Biotech from August 2012 until June 10, 2016, and he continued to serve as a member of the Board of Directors of Marina Biotech until his resignation therefrom on December 8, 2016. As compensation for his services as a non-employee director of Marina Biotech during the 2015 fiscal year, Mr. Ramelli received cash fees in the amount of \$45,000, and he was granted on January 6, 2015 options to purchase up to an aggregate of 38,000 shares of common stock at an exercise price of \$0.635 per share (which options had a grant date fair value under FASB ASC Topic 718 of \$40,771). The amounts set forth in the table above represent compensation to Mr. Ramelli from Marina Biotech both prior to and after Marina Biotech’s merger with IThenaPharma on November 15, 2016.
- (4) Represents payments of health insurance premiums for the months of July and August 2016 that were paid to Mr. French pursuant to the Agreement and Release dated July 22, 2016 between Marina Biotech and Mr. French.
- (5) On January 4, 2016, Marina Biotech granted to each of its non-employee directors, including Mr. Ramelli (who was serving as a non-employee director at such time), options to purchase up to an aggregate of 38,000 shares of common stock at an exercise price of \$0.26 per share, which options represented the option grant covering service during the 2016 fiscal year. On November 15, 2016, Marina Biotech granted to Mr. Ramelli, as well as its non-employee directors, options to purchase up to an aggregate of 35,000 shares of common stock at an exercise price of \$0.10 per share.
- (6) Dr. Trieu served as the President and sole director of IThenaPharma until that entity’s merger with Marina Biotech on November 15, 2016. Dr. Trieu did not receive any compensation directly from IThenaPharma in his capacity as an officer or director of IThenaPharma prior to the merger. However, IThenaPharma did make payments to Autotelic Inc., of which entity Dr. Trieu serves as Chairman of the Board of Directors, and which entity owned approximately 9% of the outstanding shares of the common stock of IThenaPharma immediately prior to the Merger, pursuant to the Master Services Agreement between IThenaPharma and Autotelic Inc. effective as of January 1, 2015. Please see the section entitled “*Certain Relationships and Related Party Transactions – Related Party Transactions – Related Party Transactions Involving IThenaPharma*” above in this Proxy Statement for further information regarding the Master Services Agreement between IThenaPharma and Autotelic Inc.
- (7) Represents \$60,000 paid to Mr. Ramelli in his capacity as an executive officer of Marina Biotech and \$22,500 paid to Mr. Ramelli in his capacity as a director of Marina Biotech.

Narrative Disclosures Regarding Compensation; Employment Agreements

Marina Biotech entered into an employment agreement with Mr. French, which was amended and restated on September 15, 2014. We have also entered into an employment letter with Mr. Ramelli. The terms and conditions of each of the foregoing agreements is summarized below.

J. Michael French Employment Agreement

On June 10, 2008, Marina Biotech entered into an employment agreement (the “Original French Agreement”) with J. Michael French pursuant to which Mr. French served as the president and CEO of Marina Biotech. The initial term began on June 23, 2008 and ended on June 9, 2011. Thereafter, it continued per its terms on a quarter-to-quarter basis. On September 15, 2014, Marina Biotech entered into an Amended and Restated Employment Agreement (the “Restated French Agreement”) with Mr. French pursuant to which Mr. French was to serve as the president and CEO of Marina Biotech until September 14, 2017. On May 31, 2016, Mr. French resigned as an officer and a director of Marina Biotech, effective June 10, 2016. A copy of the Original French Agreement was filed as Exhibit 10.2 to Marina Biotech’s Current Report on Form 8-K dated June 10, 2008, and a copy of the Restated French Agreement was filed as Exhibit 10.1 to Marina Biotech’s Current Report on Form 8-K dated September 15, 2014.

Pursuant to the Original French Agreement, Mr. French was entitled to annual base compensation of \$340,000, which amount was increased to \$425,000 in the Restated French Agreement. He was also eligible to receive annual performance-based incentive cash compensation, with the targeted amount of such incentive cash compensation being 40% of his annual base compensation for the year under the Original French Agreement, and 50% of his annual base compensation for the year under the Restated French Agreement, but with the actual amount to be determined by the Board or the Compensation Committee.

Under the Original French Agreement, Mr. French was granted options to purchase up to 31,500 shares of Marina Biotech common stock, of which 10,500 options were exercisable at \$50.80 per share, 10,500 options were exercisable at \$90.80 per share, and 10,500 options were exercisable at \$130.80 per share. The options had a term of 10 years beginning on June 23, 2008. Mr. French agreed to cancel these options effective as of December 31, 2014. Under the Restated French Agreement, Mr. French was granted ten-year options to purchase up to 771,000 shares of Marina Biotech common stock at an exercise price of \$1.07 per share, of which 257,000 options vested on the first anniversary of the grant date, 257,000 options were to vest monthly in equal installments commencing after the first anniversary of the grant date and were to vest in full on the second anniversary of the grant date, and 257,000 options were to vest monthly commencing after the second anniversary of the grant date and were to vest in full on the third anniversary of the grant date.

On July 22, 2016, following the resignation of Mr. French, Marina Biotech entered into an Agreement and Release (the "Release Agreement") with Mr. French. Pursuant to the Release Agreement, Mr. French released Marina Biotech from all claims arising prior to the date of the Release Agreement. In consideration therefor, Marina Biotech agreed to make the following payments to Mr. French: (i) wage payments in the amount of \$2,000 relating to the payroll period ended June 15, 2016, and reimbursement for approved expenses in the amount of approximately \$21,000 as of June 10, 2016, which payments were previously made; and (ii) payments of health insurance premiums in the aggregate amount of approximately \$5,300 for the months of July and August 2016, to be paid upon the execution of the Release Agreement.

Marina Biotech also agreed in the Release Agreement to pay to Mr. French all wages owed to Mr. French through June 10, 2016 in the amount of approximately \$65,000, which payment is to be made within fifteen (15) days of receipt of monies reasonably sufficient to provide funding for one full year of operations (if ever). As per a settlement agreement between Marina Biotech and Mr. French dated December 1, 2016, Marina Biotech agreed to pay approximately \$45,000 of such back wages, following which Marina Biotech had no further obligation to make any such payments.

In addition to the foregoing, Marina Biotech agreed in the Release Agreement that any and all options to purchase shares of common stock held by Mr. French that had not vested as of June 10, 2016 shall vest and become immediately exercisable, and all of such options (as well as such options held by Mr. French that had already vested as of June 10, 2016) shall remain exercisable until the earlier of (x) the original termination date of such options and (y) December 31, 2017.

Further, Marina Biotech waived compliance by Mr. French with the restrictive covenants contained in Section 18 of the Restated French Agreement.

Joseph Ramelli Offer Letter

On February 2, 2017, we entered into an employment letter (the "Employment Letter") with Joseph W. Ramelli, our Chief Executive Officer. Pursuant to the Employment Letter, Mr. Ramelli shall continue to serve as our Chief Executive Officer pursuant to the terms and conditions set forth therein. As compensation for such service, Mr. Ramelli will receive a monthly base salary of \$10,000, and he also will be entitled to receive a discretionary bonus as determined by our Board of Directors in its sole discretion. A copy of the Employment Letter was filed as Exhibit 10.1 to our Current Report on Form 8-K dated February 2, 2017.

In connection with the Employment Letter, we granted to Mr. Ramelli 100,000 restricted shares of common stock under our 2014 Long-Term Incentive Plan, with the vesting of such restricted shares to occur upon the first execution and delivery by our company following the date of the Employment Letter of a definitive agreement involving the licensing by our company of its Smarticles-based liposomal delivery technology. This vesting condition was satisfied by our entry into a License Agreement with LipoMedics Inc. on February 6, 2017.

In connection with the Employment Letter, Mr. Ramelli agreed: (i) to a non-solicitation covenant regarding our employees, independent contractors, customers, vendors and clients; and (ii) not to provide services to certain of our clients, customers or business partners (and prospective clients, customers and business partners), in each case, during such time as Mr. Ramelli is employed by our company and for a period of twelve (12) months immediately thereafter.

Outstanding Equity Awards at Fiscal Year End

2016 Outstanding Equity Awards at Fiscal Year-end Table

The following table sets forth information regarding the outstanding equity awards held by our Named Executive Officers as of the end of our 2016 fiscal year:

Name (1)	Option Awards			Stock Awards					
	Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Shares, Units or Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights That Have Not Vested (\$)
J. Michael French.....	771,000	—	—	\$ 1.07	12/31/17	—	—	—	—
Joseph W. Ramelli ...	35,000	—	—	\$ 0.10	11/15/21	—	—	—	—
	38,000	—	—	\$ 0.26	1/4/21	—	—	—	—
	38,000	—	—	\$ 0.635	1/6/20	—	—	—	—
	62,000	—	—	\$ 1.07	9/15/19	—	—	—	—

(1) Dr. Trieu did not hold options to purchase shares of our common stock as of the end of our 2016 fiscal year.

Option re-pricings

We have not engaged in any option re-pricings or other modifications to any of our outstanding equity awards to our Named Executive Officers during fiscal year 2016.

Compensation of Directors

2016 Director Compensation Table

The following Director Compensation table sets forth information concerning compensation for services rendered by our independent directors for fiscal year 2016.

Name	Fees Earned or Paid in Cash (\$) ⁽⁴⁾	Stock Awards (\$)	Option Awards (\$) ⁽¹⁾	All Other Compensation (\$)	Total (\$)
Stefan C. Loren, Ph.D. (3).....	\$ 45,000	—	\$ 11,448	—	\$ 56,448
Philip C. Ranker (3)	45,000	—	11,448	—	56,448
Vuong Trieu (2)	—	—	—	—	—
Joseph W. Ramelli (3)(5).....	22,500	—	8,425	(4)	30,925
Donald A. Williams (3).....	45,000	—	11,448	—	56,448
Total	\$ 157,500	—	\$ 42,769	—	\$ 200,269

(1) Represents the aggregate grant date fair value under FASB ASC Topic 718 of options to purchase shares of Marina Biotech common stock granted during 2016. On January 4, 2016, Marina Biotech granted to each of its non-employee directors (including Joseph W. Ramelli, who was serving as a non-employee director at such time) options to purchase up to an aggregate of 38,000 shares of common stock at an exercise price of \$0.26 per share, which options represented the option grant covering service during the 2016 fiscal year. On November 15, 2016, Marina Biotech also granted to each of the persons that was serving as a non-employee director at such time options to purchase up to an aggregate of 35,000 shares of common stock at an exercise price of \$0.10 per share.

- (2) Dr. Trieu served as the sole member of the Board of Directors, and as the President, of IThenaPharma until that entity's merger with Marina Biotech in November 2016. Dr. Trieu did not receive any compensation for his service as a member of the Board of Directors of IThenaPharma during 2016. Information with respect to his compensation as an officer of IThenaPharma is reflected in the Summary Compensation Table above. Dr. Trieu became a director of Marina Biotech on November 15, 2016 as a result of the Merger.
- (3) Each of Dr. Loren, Mr. Ranker and Mr. Williams served as a member of the Board of Directors of Marina Biotech through the entirety of 2016. Mr. Ramelli served as a member of the Board of Directors of Marina Biotech until his resignation on December 8, 2016.
- (4) Represents payments made to Mr. Ramelli, and payments accrued with respect to Dr. Loren, Mr. Ranker and Mr. Williams.
- (5) The table above reflects only the compensation that was paid to Mr. Ramelli, who served as a director of Marina Biotech until his resignation as a director on December 8, 2016, and as an executive officer of Marina Biotech beginning on June 10, 2016, prior to the date on which he became an executive officer of Marina Biotech (i.e., June 10, 2016) and in his capacity as a non-employee director of Marina Biotech. Such compensation to Mr. Ramelli as a non-employee director of Marina Biotech, as well as any other compensation paid to Mr. Ramelli in his capacity as an executive officer of Marina Biotech (both prior to and following the merger with IThenaPharma), including, without limitation, the grant to Mr. Ramelli of options to purchase up to an aggregate of 35,000 shares of common stock at an exercise price of \$0.10 per share on November 15, 2016, is also reflected in the Summary Compensation Table above.

As of December 31, 2016, Dr. Loren, Mr. Williams and Mr. Ramelli each held options to purchase up to 173,000 shares of our common stock, Mr. Ranker held options to purchase up to 175,500 shares of our common stock and Dr. Trieu held options to purchase no shares of our common stock.

J. Michael French, who served as a director and as an executive officer of Marina Biotech until his resignation effective June 10, 2016, has not been included in the Director Compensation Table because he is a Named Executive Officer and did not receive any additional compensation for services provided as a director.

Director Compensation Program: Marina Biotech's compensation program for non-employee directors for the 2016 fiscal year consisted of (and for the 2017 fiscal year will consist of): (i) a one-time on-boarding grant of 5-year options to purchase up to 43,000 shares of common stock, which options shall vest 50% immediately and 50% after one year; (ii) an annual grant of 5-year options to purchase up to 38,000 shares of common stock, which options vest 50% immediately and 50% after one year; and (iii) an annual cash payment of \$45,000 per year, payable quarterly. In addition, on November 15, 2016 Marina Biotech granted to each of the persons that was serving as a non-employee director of Marina Biotech at such time options to purchase up to 35,000 shares of common stock at an exercise price of \$0.10 per share, and on January 3, 2017 Marina Biotech granted to each person that was serving as a director at such time options to purchase up to 43,000 shares of common stock at an exercise price of \$0.17 per share (in addition to the annual option grant for the 2017 fiscal year).

Equity Compensation Plan Information

The following table provides aggregate information as of the end of the 2016 fiscal year with respect to all of the compensation plans under which our common stock is authorized for issuance, including our 2004 Stock Incentive Plan, our 2008 Stock Incentive Plan and our 2014 Long-Term Incentive Plan:

	Number of Securities to be Issued Upon Exercise of Outstanding Options	Weighted- Average Exercise Price of Outstanding Options	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a))
Equity compensation plans approved by security holders.....	1,688,106 ⁽¹⁾	4.00	7,808,519
Total	1,688,106	4.00	7,808,519

- (1) Consists of: (i) 106 shares of common stock underlying awards made pursuant to our 2004 Stock Incentive Plan, (ii) 45,000 shares of common stock underlying awards made pursuant to our 2008 Stock Incentive Plan and (iii) 1,643,000 shares of common stock underlying awards made pursuant to our 2014 Long-Term Incentive Plan.

SUBMISSION OF STOCKHOLDER PROPOSALS

We intend to hold our 2018 annual meeting of stockholders (the “2016 Annual Meeting”) in May 2018. To be considered for inclusion in our notice of annual meeting and proxy statement for, and for presentation at, the 2018 Annual Meeting, a stockholder proposal must be received by the Corporate Secretary, Marina Biotech, Inc., 17870 Castleton Street, Suite 250, City of Industry, California 91748, no later than December 25, 2017, and must otherwise comply with applicable rules and regulations of the SEC, including Rule 14a-8 of Regulation 14A under the Exchange Act.

Our Bylaws require advance notice of any proposal by a stockholder intended to be presented at an annual meeting that is not included in our notice of annual meeting and proxy statement because it was not timely submitted under the preceding paragraph, or made by or at the direction of any member of the Board of Directors, including any proposal for the nomination for election as a director. To be considered for such presentation at the 2018 Annual Meeting, any such stockholder proposal must be received by the Corporate Secretary, Marina Biotech, Inc., no earlier than January 16, 2018 and no later than March 2, 2018, provided, that if the 2018 Annual Meeting is scheduled to be held on a date more than 30 days before the anniversary date of the 2017 annual meeting of stockholders or more than 60 days after the anniversary date of the 2017 annual meeting of stockholders, a stockholder’s proposal shall be timely if delivered to, or mailed to and received by, our company not later than the close of business on the later of (A) the 75th day prior to the scheduled date of the 2018 Annual Meeting, or (B) the 15th day following the day on which public announcement of the date of the 2018 Annual Meeting is first made by us, and in any case discretionary authority may be used if such proposal is untimely submitted.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our executive officers and directors, and persons who own more than 10% of a registered class of our equity securities (“Reporting Persons”), to file reports of ownership and changes in ownership with the SEC and with NASDAQ. Based solely on our review of the reports filed by Reporting Persons, and written representations from certain Reporting Persons that no other reports were required for those persons, we believe that, during the year ended December 31, 2016, the Reporting Persons met all applicable Section 16(a) filing requirements.

OTHER MATTERS

We will furnish without charge to each person whose proxy is being solicited, upon the written request of any such person, a copy of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, as filed with the SEC, including the financial statements. Requests for copies of such Annual Report on Form 10-K should be directed to Joseph W. Ramelli, chief Executive Officer, Marina Biotech, Inc., 17870 Castleton Street, Suite 250, City of Industry, California 91748.

Our Board of Directors does not know of any other matters that are to be presented for action at the Annual Meeting. If any other matters are properly brought before the Annual Meeting or any adjournments thereof, the persons named in the enclosed proxy will have the discretionary authority to vote all proxies received with respect to such matters in accordance with their best judgment.

It is important that the proxies be returned promptly and that your shares are represented at the Annual Meeting. Stockholders are urged to mark, date, execute and promptly return the accompanying proxy card in the enclosed envelope.

By order of the Board of Directors,

/s/ Joseph W. Ramelli

Joseph W. Ramelli
Chief Executive Officer

April 21, 2017
City of Industry, CA