

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

SCHEDULE 14A

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

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

ArQule, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

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LETTER TO STOCKHOLDERS

Introduction

As I commence on my tenth year as Chief Executive Officer of ArQule, I can say that I have never been more excited about the Company's prospects. We continue to dedicate our energy and resources to deliver on our mission of successfully developing new drugs that dramatically extend and improve the lives of our patients. In 2017, we took important steps in that direction.

Today, ArQule has five product candidates in clinical development, all of which are being tested in biomarker-defined patient populations to maximize the potential for efficacy and greatest clinical benefit. Our business is challenging, but through the continued hard work, energy and dedication of our employees, academic partners and business collaborators, we are moving closer to attaining our goals.

We progressed our entire proprietary pipeline in 2017 in both oncology and rare overgrowth diseases. These accomplishments included establishing proof of concept and obtaining rare pediatric disease designation from the FDA in the rare overgrowth disease, Proteus syndrome. We also initiated clinical work with our BTK inhibitor and launched a registrational trial with our FGFR inhibitor. These and other highlights of the past year follow below.

Proprietary Pipeline

We began 2017 with the filing of an IND for our BTK inhibitor, ARQ 531, in Q1 and launching a Phase 1a/b trial in patients with refractory B-cell malignancies in Q3. ARQ 531 is a potent and reversible inhibitor of both wild type and mutant-C481S BTK with activity against the Src and TRK family of kinases. ARQ 531 presents the opportunity not only to address the issue of resistance to approved therapies like ibrutinib and acalabrutinib, but also to expand into other indications.

Our lead AKT inhibitor, miransertib (formerly ARQ 092), showed proof of concept in the rare overgrowth disease Proteus syndrome, in a Phase 1 study conducted by our collaborators at the NIH. In that trial, miransertib demonstrated biological activity in five out of six patients treated, where the protocol defined decrease in AKT signaling of greater than 50% was observed at a dose of only 10 mg. With *in vitro* and *in vivo* proof of concept with miransertib achieved in this disease, we are excited about moving forward in 2018 with a registrational program while continuing our collaboration with the NIH.

We have also been collaborating with Memorial Sloan Kettering studying miransertib in oncology, specifically in advanced endometrial cancer patients in combination with the aromatase inhibitor, anastrozole. There is a growing body of data to suggest that AKT inhibitors in combination with hormonal therapy could be important drugs in gynecological tumors as well as in breast and prostate cancers. We anticipate that these data from the Phase 1b trial, to be presented at the upcoming AACR meeting in April, will provide the foundation for a path forward to later-stage clinical development.

In addition, in Q4 2017, we launched a registrational trial with our FGFR inhibitor, derazantinib (formerly ARQ 087), for the treatment of intrahepatic cholangiocarcinoma (iCCA). This trial seeks to enroll approximately 100 patients in a single arm study and will measure, as a primary endpoint, overall response rate. We are encouraged by the rate of recruitment to date.

We also partnered the rights to derazantinib in the Greater China region with a subsidiary of Roivant Sciences Ltd. in the early part of 2018 and look forward to advancing the collaboration in this critical region where iCCA is so prevalent.

Our next generation AKT inhibitor, ARQ 751, continues to progress through its Phase 1 trial in patients with AKT1 and PIK3CA mutations. Our successful advancement of ARQ 751 could lead to important future options for ArQule in our overall AKT development strategy in both oncology and rare diseases.

Looking Forward

We believe that 2018 could be a pivotal year for the development of our proprietary pipeline of product candidates through the achievement of the following goals:

- ARQ 531—Complete the Phase 1a trial in refractory B-cell malignancies and launch Phase 1b expansion studies in several cohorts of patients, including CLL with C481S mutations and other B-cell malignancies.
- Miransertib (rare disease)—Initiate a registrational program in Proteus syndrome with the NIH and continue to advance our Phase 1/2 study in PIK3CA related overgrowth syndrome (PROS).
- Miransertib (oncology)—Present data from the Phase 1b study of miransertib with the aromatase inhibitor, anastrozole, in advanced endometrial patients at AACR and work with KOLs to define the path forward for later-stage clinical development.
- Derazantinib—Complete dosing of patients needed to conduct an interim assessment in the registrational trial in second line iCCA patients with FGFR2 fusions and explore additional tumor types.
- ARQ 751—Complete the Phase 1 trial with ARQ 751 in patients with AKT1 and Pik3CA mutations.

Finance

With significant opportunities from our proprietary pipeline, it was critical that we solidify our financial position during 2017. We achieved this goal by raising approximately \$30 million through two financings and other activities. As a result, we ended 2017 with approximately \$48 million in cash and marketable securities, an amount that we believe is sufficient to fund the Company well into 2019.

Early in 2018, we also negotiated the extension of our loan agreement with Oxford Finance that pushes out principal payments and the maturity date of the loan by one year, thus deferring principal payments of approximately \$5 million by twelve months. In addition, we received a \$3 million upfront payment from Roivant in connection with our collaboration in Greater China for derazantinib and will receive an additional \$2.5 million development milestone payment during the first year of the contract.

Although we have faced challenges at ArQule in recent years, we have continued the work necessary to build on the great promise of our proprietary pipeline, and we are now beginning to see the benefits of these efforts and perseverance. On behalf of all ArQule employees and the Board, I want to thank you for your commitment to our journey. We look forward to delivering life changing therapies to our patients in the very near future.

Sincerely,



Paolo Pucci
Chief Executive Officer

ARQULE, INC.

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

TO BE HELD MAY 8, 2018

To Our Stockholders,

Our 2018 Annual Meeting of Stockholders will be held at the Boston Burlington Marriott, One Mall Road, Burlington, Massachusetts 01803 at 10:00 a.m. Eastern Daylight Savings Time on May 8, 2018 for the following purposes:

1. To elect Timothy C. Barabe, Ran Nussbaum and Paolo Pucci as directors to hold office for a term of three years and until their respective successors are elected and qualified;
2. To approve an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our Common Stock, \$0.01 par value per share, from 100,000,000 to 200,000,000;
3. To approve our new 2018 Employee Stock Purchase Plan and the authorization of 500,000 shares of our Common Stock to be available for issuance under the plan;
4. To approve an amendment to our 2014 Equity Incentives Plan to increase the number of shares of our Common Stock available for issuance pursuant to future awards made under the plan by 3,750,000;
5. To ratify the selection of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the year ending December 31, 2018;
6. To approve, by non-binding vote, the compensation of our named executive officers; and
7. To transact any other business that may properly come before the meeting or any adjournment of the meeting.

Only stockholders of record at the close of business on March 16, 2018 will be entitled to vote at the meeting or any continuation of the meeting following an adjournment. A list of these stockholders will be available during ordinary business hours at the offices of ArQule, Inc. for a period beginning ten days before the meeting. Any stockholder may examine the list for any purpose germane to the meeting.

We look forward to seeing you at the meeting.

IT IS IMPORTANT THAT YOUR SHARES ARE REPRESENTED AT THE MEETING. THEREFORE, WHETHER OR NOT YOU PLAN TO ATTEND THE MEETING, PLEASE COMPLETE YOUR PROXY AND RETURN IT IN THE ENCLOSED ENVELOPE, WHICH REQUIRES NO POSTAGE IF MAILED IN THE UNITED STATES. YOU MAY ALSO SUBMIT YOUR PROXY ELECTRONICALLY OR BY TELEPHONE, ACCORDING TO THE INSTRUCTIONS ON THE ENCLOSED PROXY CARD. IF YOU ATTEND THE MEETING AND WISH TO VOTE IN PERSON, YOUR PROXY WILL NOT BE USED. YOU MAY REVOKE YOUR PROXY AT ANY TIME BEFORE IT IS VOTED.

By order of our Board of Directors,



Peter S. Lawrence
President and Chief Operating Officer

Burlington, Massachusetts

Dated: March 29, 2018

TABLE OF CONTENTS

<u>QUESTIONS AND ANSWERS ABOUT THE MEETING AND VOTING</u>	<u>1</u>
<u>Why am I receiving these materials?</u>	<u>1</u>
<u>What is a proxy statement and what is a proxy?</u>	<u>1</u>
<u>What is the difference between holding shares as a stockholder of record and as a beneficial stockholder?</u>	<u>1</u>
<u>What am I voting on?</u>	<u>1</u>
<u>What are my voting choices for each of the proposals to be voted on at the Annual Meeting?</u>	<u>2</u>
<u>What is the Majority Voting Policy?</u>	<u>3</u>
<u>Why is the Company seeking to increase the number of authorized shares of Common Stock?</u>	<u>3</u>
<u>If the stockholders approve this proposal, when would the Company implement the increase in the number of authorized shares</u>	<u>3</u>
<u>What shares can I vote?</u>	<u>3</u>
<u>How many shares must be present or represented to conduct business at the Annual Meeting?</u>	<u>3</u>
<u>What if I am a beneficial owner and do not give voting instructions to my bank, broker or other nominee?</u>	<u>3</u>
<u>How are abstentions and broker non-votes counted?</u>	<u>4</u>
<u>How do I vote if my shares are held by my broker?</u>	<u>4</u>
<u>What different methods can I use to vote?</u>	<u>5</u>
<u>What if I am a stockholder of record and do not specify a choice for a matter when returning a proxy?</u>	<u>5</u>
<u>Can I change my vote after I have already voted?</u>	<u>5</u>
<u>Who will bear the cost of soliciting votes for the Annual Meeting?</u>	<u>5</u>
<u>What happens if additional matters are presented at the Annual Meeting?</u>	<u>5</u>
<u>When will the Company announce the voting results?</u>	<u>5</u>
<u>Can I access the Notice of Annual Meeting, Proxy Statement and Annual Report on Form 10-K on the Internet?</u>	<u>5</u>
<u>PROPOSAL 1—ELECTION OF DIRECTORS</u>	<u>8</u>
<u>Vote Required</u>	<u>8</u>
<u>Nominees for Election at the Annual Meeting</u>	<u>8</u>
<u>Directors with Term Expiring at the 2019 Annual Meeting</u>	<u>10</u>
<u>Directors with Term Expiring at the 2020 Annual Meeting</u>	<u>10</u>
<u>Corporate Governance Guidelines and Code of Conduct</u>	<u>11</u>
<u>Director Qualifications and Nomination Process</u>	<u>11</u>
<u>Majority Voting Policy</u>	<u>13</u>
<u>The Board’s Role in Risk Oversight</u>	<u>13</u>
<u>Communications with Directors</u>	<u>14</u>
<u>Director Independence</u>	<u>14</u>
<u>Compensation Committee Interlocks and Insider Participation</u>	<u>15</u>
<u>BOARD COMMITTEES AND MEETINGS</u>	<u>15</u>
<u>Committees of the Board</u>	<u>15</u>
<u>DIRECTOR COMPENSATION</u>	<u>18</u>
<u>COMPENSATION DISCUSSION AND ANALYSIS</u>	<u>20</u>
<u>Compensation Philosophy</u>	<u>20</u>

The Role of the Compensation Committee	20
The Compensation Committee’s Process	21
Elements of Compensation	22
Potential Payments to Named Executive Officers Upon Termination or Change of Control	25
Tax Considerations	26
COMPENSATION COMMITTEE REPORT	27
EXECUTIVE COMPENSATION	28
SUMMARY COMPENSATION TABLE	28
EMPLOYMENT AGREEMENTS	29
Employment Agreement with Paolo Pucci	29
Employment Agreement with Peter S. Lawrence	29
Employment Agreement with Brian Schwartz	29
GRANTS OF PLAN-BASED AWARDS FOR FISCAL YEAR 2017	30
OUTSTANDING EQUITY AWARDS AT 2017 FISCAL YEAR-END	31
OPTION EXERCISES AND STOCK VESTED IN FISCAL YEAR 2017	33
CEO PAY RATIO	33
PAYMENTS UPON TERMINATION OR CHANGE OF CONTROL	34
REPORT OF THE AUDIT COMMITTEE	37
PROPOSAL 2—APPROVAL OF AN AMENDMENT TO OUR RESTATED CERTIFICATE OF INCORPORATION	38
Overview	38
Reasons for the Amendment	38
Potential Effects of the Amendment	39
Effectiveness of the Amendment	39
Approval Required	40
PROPOSAL 3—APPROVAL OF OUR 2018 EMPLOYEE STOCK PURCHASE PLAN	41
General	41
Summary of the Employee Stock Purchase Plan	41
Federal Tax Information	43
Vote Required	43
PROPOSAL 4—APPROVAL OF AN AMENDMENT TO OUR 2014 EQUITY INCENTIVES PLAN	44
General	44
Common Stock Available under the 2014 Plan	44
Administrative and Eligibility	45
Adjustments to Reflect Certain Events and Transaction	45
Withholding	46
Termination and Amendment; Term of Plan	46
New Plan Benefits	46
Federal Income Tax Consideration	46
Vote Required	48
PROPOSAL 5—RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	49

<u>PROPOSAL 6—ADVISORY VOTE ON APPROVAL OF THE COMPENSATION OF THE COMPANY’S NAMED EXECUTIVE OFFICERS</u>	<u>50</u>
<u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS</u>	<u>51</u>
<u>Review and Approval of Related Person Transactions</u>	<u>51</u>
<u>Certain Relationships and Related Party Transactions</u>	<u>51</u>
<u>SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS</u>	<u>51</u>
<u>SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE</u>	<u>53</u>
<u>STOCKHOLDER PROPOSALS</u>	<u>53</u>
<u>OTHER MATTERS</u>	<u>53</u>
<u>APPENDICES</u>	<u>54</u>

ARQULE, INC.

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Burlington, Massachusetts 01803
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Proxy Statement

QUESTIONS AND ANSWERS ABOUT THE MEETING AND VOTING

Why am I receiving these materials?

ArQule, Inc., a Delaware corporation (“ArQule,” the “Company,” “we,” “us,” or “our”) sent you the Notice of Annual Meeting, this Proxy Statement and the accompanying proxy card because according to our stockholder records you own shares of our Common Stock, \$0.01 par value (“Common Stock”). Any stockholder of record at the close of business on March 16, 2018 (the “Record Date”) is entitled to vote those shares at the Company’s upcoming Annual Meeting of Stockholders (“Annual Meeting”), which will be held on May 8, 2018 at 10:00 a.m. Eastern Daylight Savings Time at the Boston Burlington Marriott, One Mall Road, Burlington, Massachusetts 01803. Our Board of Directors (the “Board”) is soliciting your proxy to vote at the Annual Meeting. All stockholders are invited to attend the Annual Meeting and are entitled to and requested to vote on the items of business described in this Proxy Statement; however, you do not need to attend the Annual Meeting to vote your shares. Instead, you may simply complete, sign and return the accompanying proxy card, or follow the instructions below to submit your proxy by telephone or on the Internet. Although our Annual Report on Form 10-K for the year ended December 31, 2017 is being delivered with the Proxy Statement, the Annual Report should not be deemed to be a part of the Proxy Statement.

What is a proxy statement and what is a proxy?

A proxy statement is a document that the Securities and Exchange Commission (“SEC”) regulations require us to give you when we ask you to sign a proxy designating individuals to vote on your behalf. A proxy is your legal designation of another person to vote the shares you own. That other person is called a proxy. If you designate someone as your proxy in a written document, that document also is called a proxy or proxy card. We have designated Peter S. Lawrence as proxy for the Annual Meeting. We will first provide this Proxy Statement and proxy card on or about March 29, 2018.

What is the difference between holding shares as a stockholder of record and as a beneficial stockholder?

If your shares are registered directly in your name with our registrar and transfer agent, American Stock Transfer and Trust Company, LLC, you are considered a stockholder of record with respect to those shares. If your shares are held in a bank or brokerage account or with another nominee, you are considered the “beneficial owner” of those shares.

What am I voting on?

The principal business expected to be transacted at the Annual Meeting, as more fully described below, will be:

1. To elect Timothy C. Barabe, Ran Nussbaum and Paolo Pucci as directors to hold office for a term of three years and until their respective successors are elected and qualified;
 2. To approve an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our Common Stock, \$0.01 par value per share, from 100,000,000 to 200,000,000;
 3. To approve our new 2018 Employee Stock Purchase Plan and the authorization of 500,000 shares of our Common Stock to be available for issuance under the plan;
-

4. To approve an amendment to our 2014 Equity Incentives Plan to increase the number of shares of our Common Stock available for issuance pursuant to future awards made under the plan by 3,750,000;
5. To ratify the selection of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the year ending December 31, 2018;
6. To approve, by non-binding vote, the compensation of our named executive officers; and
7. To transact any other business that may properly come before the meeting or any adjournment of the meeting.

We will also consider any other business as may properly come before the Annual Meeting or any adjournment thereof. See “What happens if additional matters are presented at the Annual Meeting?” below.

What are my voting choices for each of the proposals to be voted on at the Annual Meeting?

Proposal	Voting Choices and Board Recommendation
Proposal 1: Election of Directors	<ul style="list-style-type: none"> • vote in favor of all nominees; • withhold authority to vote for all nominees; or • withhold authority to vote for any specified nominee. <p>The Board recommends a vote FOR each of the nominees.</p>
Proposal 2: Approval of an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our Common Stock, \$0.01 par value per share, from 100,000,000 to 200,000,000	<ul style="list-style-type: none"> • vote in favor of approval; • vote against approval; or • abstain from voting on approval. <p>The Board recommends a vote FOR approval.</p>
Proposal 3: Approval of our 2018 Employee Stock Purchase Plan and the authorization of 500,000 shares of our Common Stock to be available for issuance under the plan	<ul style="list-style-type: none"> • vote in favor of approval; • vote against approval; or • abstain from voting on approval. <p>The Board recommends a vote FOR approval.</p>
Proposal 4: Approval of an amendment to our 2014 Equity Incentives Plan to increase the number of authorized shares of Common Stock available for issuance pursuant to future awards made under the plan by 3,750,000	<ul style="list-style-type: none"> • vote in favor of approval; • vote against approval; or • abstain from voting on approval. <p>The Board recommends a vote FOR approval.</p>
Proposal 5: Ratification of Selection of Independent Registered Public Accounting Firm	<ul style="list-style-type: none"> • vote in favor of ratification; • vote against ratification; or • abstain from voting on ratification. <p>The Board recommends a vote FOR ratification.</p>
Proposal 6: Advisory Proposal to Approve Executive Compensation	<ul style="list-style-type: none"> • vote in favor of proposal; • vote against proposal; or • abstain from voting on proposal. <p>The Board recommends a vote FOR the advisory vote to approve executive compensation.</p>

For Proposal 1, subject to our Majority Voting Policy described below, the affirmative vote of a plurality of shares of Common Stock cast by stockholders present at the Annual Meeting, in person or by proxy, is required to elect each of the nominees. Proposal 2 must receive an affirmative vote of (i) a majority of the issued and outstanding shares of Common Stock and Preferred Stock (as defined below), voting together as a single class, and (ii) a majority of the issued and outstanding shares of Common Stock, voting without the Preferred Stock. Each of the other proposals will require the affirmative vote of a majority of shares cast by stockholders voting in person or by proxy at the Annual Meeting.

As an advisory vote, Proposal 6, the proposal to approve executive compensation, is not binding on the Company. However, the Compensation, Nominating and Governance Committee of the Board (the "Compensation Committee"), which is responsible for designing and administering our executive compensation program, values the opinions expressed by stockholders and will consider the outcome of the vote when making future compensation decisions.

What is the Majority Voting Policy?

Our Board of Directors has adopted a policy that provides that in an uncontested election of directors, any nominee that is elected but receives a greater number of votes withheld from his or her election than votes in favor of election is expected to tender his or her resignation promptly following the date of the stockholders' meeting at which the vote occurs. As described below, the Compensation Committee will consider the resignation and recommend to the Board whether to accept it in accordance with the terms of our Majority Voting Policy.

Why is the Company seeking to increase the number of authorized shares of Common Stock?

We have 100,000,000 authorized shares of Common Stock. As of March 16, 2018, over 99,500,000 of these shares were issued and outstanding or reserved for issuance under outstanding securities, including stock options and warrants. The Board believes that it is prudent to increase the authorized number of shares of Common Stock in order to maintain a reserve of shares available for immediate issuance to meet business needs, such as equity offerings, equity awards and strategic acquisition opportunities promptly as they arise. In addition, the Board agreed to seek stockholder approval of an amendment to the Restated Certificate of Incorporation to increase the number of authorized shares of Common Stock to facilitate a conversion of the Company's outstanding Convertible Preferred Stock, Series A, par value \$.01 per share (the "Preferred Stock").

If the stockholders approve this proposal, when would the Company implement the increase in the number of authorized shares?

We currently expect that the increase in the number of authorized shares will be implemented as soon as practicable after the receipt of the requisite stockholder approval.

What shares can I vote?

Each holder of Common Stock is entitled to one vote for each share held as of the record date on each matter to be voted on at the Annual Meeting. March 16, 2018 is the record date for our Annual Meeting. On that date, we had outstanding 87,110,202 shares of Common Stock. In addition, we have issued and outstanding 8,370 shares of Preferred Stock. Each share of Preferred Stock is entitled to 1,000 votes per share and votes together with the Common Stock as a single class.

How many shares must be present or represented to conduct business at the Annual Meeting?

The presence at the Annual Meeting, in person or by proxy, of the holders of a majority in interest of all stock issued and outstanding and entitled to vote at the Annual Meeting constitutes a quorum for the transaction of business. For purposes of determining whether a quorum exists, proxies received but marked "ABSTAIN" and so-called "broker non-votes" (described below) will be counted as present.

What if I am a beneficial owner and do not give voting instructions to my bank, broker or other nominee?

As a beneficial owner, in order to ensure that your shares of Common Stock are voted in the way you would like, you must provide voting instructions to your bank, broker or other nominee by the deadline

provided in the materials received from your banker, broker or other nominee. If you do not provide voting instructions to your bank, broker or other nominee, whether your shares of Common Stock can be voted by such person depends on the type of item being voted on.

- **Non-Discretionary Items.** The election of directors and Proposals 3,4 and 6 are non-discretionary items and may not be voted by banks, brokers or other nominees who have not received specific voting instructions from beneficial owners. If you have not specifically instructed your bank, broker or other nominee how to vote your shares on these proposals, your shares will not be voted on that matter, creating what is called a “broker non-vote.”
- **Discretionary Items.** The approval of an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of Common Stock and the ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm are discretionary items. Generally, banks, brokers or other nominees that do not receive specific voting instructions from beneficial owners may vote on these proposals at their discretion.

How are abstentions and broker non-votes counted?

Abstentions and broker non-votes are included in determining whether a quorum is present and will have the following effects on each proposal:

Proposal	Abstentions	Broker Non-Votes
Proposal 1: Election of Directors	N/A	Not counted and no effect on vote.
Proposal 2: Approval of an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our Common Stock, \$0.01 par value per share, from 100,000,000 to 200,000,000	Effect of a vote AGAINST	N/A
Proposal 3: Approval of our 2018 Employee Stock Purchase Plan	Not counted and no effect on vote.	Not counted and no effect on vote.
Proposal 4: Approval of an amendment to our 2014 Equity Incentives Plan to increase the number of authorized shares of Common Stock available for issuance pursuant to future awards made under the plan by 3,750,000	Not counted and no effect on vote.	Not counted and no effect on vote.
Proposal 5: Ratification of Selection of Independent Registered Public Accounting Firm	Not counted and no effect on vote.	N/A
Proposal 6: Advisory Proposal to Approve Executive Compensation	Not counted and no effect on vote.	Not counted and no effect on vote.

How do I vote if my shares are held by my broker?

If your shares are held by your broker in “street name,” you will need to instruct your broker, in the manner provided by your broker, how to vote your shares. If your shares are held in “street name” and you wish to vote them in person at the Annual Meeting, you must obtain from your broker a properly executed legal proxy, identifying you as an ArQule stockholder, authorizing you to act on behalf of the broker at the Annual Meeting and specifying the number of shares with respect to which the authorization is granted.

What different methods can I use to vote?

Your vote is very important. Whether or not you plan to attend the Annual Meeting, we urge you to either:

- complete, sign, date and return the accompanying proxy card;
- vote on the Internet pursuant to the instructions provided in the proxy card; or
- vote by telephone (toll-free) in the United States or Canada, in accordance with the instructions on the proxy card.

What if I am a stockholder of record and do not specify a choice for a matter when returning a proxy?

Stockholders should specify their choice for each matter on the Proxy Card. If you submit a valid proxy without directions as to votes on the matters to be considered at the Annual Meeting, the proxy will be voted "FOR" the election of the nominees listed herein and "FOR" Proposals 2,3,4,5 and 6.

Can I change my vote after I have already voted?

Stockholders may revoke the authority granted by an executed proxy at any time before its exercise by voting in person at the Annual Meeting or by filing with our President and Chief Operating Officer a written revocation or a duly executed proxy with a later date. If your shares are held in "street name," you should contact your broker for instructions on changing your vote.

Who will bear the cost of soliciting votes for the Annual Meeting?

We will bear the cost of solicitation of proxies, including charges and expenses of brokerage firms and others for forwarding solicitation material by mail to beneficial owners of stock. We have engaged The Proxy Advisory Group, LLC[®], to assist in the solicitation of proxies and provide related advice and informational support for a services fee and the reimbursement of customary disbursements in an amount that is not expected to exceed \$15,000 in the aggregate. In addition, our officers, employees and other representatives may solicit proxies in person or by telephone.

What happens if additional matters are presented at the Annual Meeting?

Other than the items of business described in this Proxy Statement, we are not aware of any other business to be acted upon at the Annual Meeting. If you grant a proxy, the persons named as proxy holders will have discretion to vote your shares on any additional matters properly presented for a vote at the Annual Meeting. If for any reason any of our nominees is not available as a candidate for director, the person named as proxy holder will vote your proxy for such other candidates as may be nominated by the Board.

When will the Company announce the voting results?

We will announce the preliminary voting results at the Annual Meeting. The Company will report the final results in a Current Report on Form 8-K filed with the SEC which can be accessed on the SEC's website at www.sec.gov or on our website at www.arqule.com.

Can I access the Notice of Annual Meeting, Proxy Statement and Annual Report on Form 10-K on the Internet?

The Notice of Annual Meeting, Proxy Statement and Annual Report are available at www.proxyvote.com. In addition, stockholders are able to view these documents by accessing the "Investors and Media" Section of our website at www.arqule.com and clicking on the heading "Financial Information".

Instead of receiving future copies of our Notice of Annual Meeting, Proxy Statement and Form 10-K by mail, stockholders can elect to receive an e-mail that will provide electronic links to these documents. Opting to receive your proxy materials online will save us the cost of producing and mailing your documents to your home or business, and also will give you an electronic link to the proxy voting site.

- **Stockholders of Record.** If you vote on the Internet at *www.proxyvote.com*, simply follow the prompts for enrolling in the electronic proxy delivery service. You also may enroll in the electronic proxy delivery service at any time in the future by going directly to *www.proxyvote.com* and following the enrollment instructions.
- **Beneficial Owners.** If you hold your shares of Common Stock in a bank or brokerage account, you also may have the opportunity to receive copies of these documents electronically. Please check the information provided in your proxy material provided to you by your bank or broker regarding the availability of this service.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Proxy Statement, including the accompanying letter to stockholders, as well as other written reports and oral statements that we make from time to time, include statements that express our opinions, expectations, beliefs, plans, objectives, assumptions or projections regarding future events or future results and therefore are, or may be deemed to be, “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can generally be identified by use of forward-looking terminology such as “believes”, “expects”, “intends”, “may”, “will”, “plans”, “should”, “anticipates,” “potential,” “goal” or similar terminology. Forward-looking statements are not guarantees that the future results, plans, intentions or expectations, expressed or implied, will be achieved. Matters subject to forward-looking statements involve known and unknown risks and uncertainties. Although we believe that the expectations reflected in such forward-looking statements are reasonable as of the date hereof, such expectations are based on certain assumptions regarding the progress of product development efforts including clinical trials and pre-clinical activities conducted by ourselves and third parties, the prosecution of existing and efforts to execute new collaborative agreements, receipt of potential milestones and royalties under our collaborative agreements, government regulations, reliance on third parties to conduct clinical trials and perform research and analysis services, adequate financial resources, changes in economic and business conditions, and other factors relating to our growth. Such expectations may not materialize if product development efforts, including any necessary trials of our potential drug candidates, are delayed or suspended, if our compounds fail to demonstrate safety and efficiency, if positive early results are not repeated in later studies or in humans, if the therapeutic value of our compounds is not realized, if negotiations with potential collaborators are delayed or unsuccessful, if we are unsuccessful at integrating acquired assets or technologies, or if other assumptions prove incorrect. We describe additional risks and uncertainties that could cause actual results and events to differ materially from these forward looking statements in the “Risk Factors” section of our annual report on Form 10-K for the year ended December 31, 2017 and other public filings with the SEC.

Any forward-looking statements contained herein represent our judgment as of the date hereof and you are cautioned not to place undue reliance on these forward looking statements. We undertake no obligation to revise or update publicly any forward-looking statements for any reason.

PROPOSAL 1—ELECTION OF DIRECTORS

Our By-laws provide that the number of directors is established by our Board. For 2018, the number of directors is currently fixed at eight, divided into three classes as equal in number as possible and defined by the expiration dates of their terms of service. At the Annual Meeting, three directors will be elected to terms of three years, expiring in 2021, and until their respective successors are elected and qualified.

Timothy C. Barabe, Ran Nussbaum and Paolo Pucci, each of whom is presently serving as a director, have been nominated for re-election by our Board for a term of three years. Mr. Nussbaum was appointed by our Board in November 2017 pursuant to the terms of the securities purchase agreements with Pontifax (China) IV Limited Partnership, Pontifax (Israel) IV Limited Partnership and Pontifax (Cayman) IV Limited Partnership (collectively, “Pontifax”). Pontifax has the right to nominate a director to the board for so long as Pontifax remains the beneficial owner of 50 percent of the shares originally sold to Pontifax in the offering. Unless your proxy withholds authority to vote for any of the nominees, the shares represented by your proxy will be voted for their election as the Board’s nominees. If any nominee is unable to serve, which is not expected, the shares represented by your proxy will be voted for such other candidate as may be nominated by the Board.

Vote Required

Subject to our Majority Voting Policy described below, the affirmative vote of a plurality of the shares of Common Stock cast by the stockholders present at the Annual Meeting in person or by proxy is required to elect each of the nominees. Broker non-votes and votes withheld will not affect the outcome of the election of directors.

Set forth below is certain information about the qualifications and other directorships of the nominees and our continuing incumbent directors.

Nominees for Election at the Annual Meeting

Timothy C. Barabe (Age: 65) Mr. Barabe has been a director since November 2001. In July of 2016, Mr. Barabe joined the Board of Selecta Biosciences, a biopharma company specializing in antigen immunotherapies for rare and serious diseases. He has been a member of the Board of Veeva Systems, Inc., a healthcare software company based in Pleasanton, CA, since September 2015, and member of the Board of Vigilant Biosciences, a private medical device company based in Fort Lauderdale, Florida, since November 2014. Mr. Barabe is on the Board and Executive Committee of Project Open Hand, a San Francisco-based nonprofit providing meals to the elderly and ill. Mr. Barabe retired in June 2013 from his position as Executive Vice President and Chief Financial Officer of Affymetrix, Inc. Previously, from July 2006 until March 2010, he was Senior Vice President and Chief Financial Officer of Human Genome Sciences, Inc. He was with Regent Medical Limited, a U.K.-based, privately owned, surgical supply company, where he was Chief Financial Officer, from 2004 to 2006. Mr. Barabe served with Novartis AG from 1982 through August 2004 in a succession of senior executive positions in finance and general management, most recently as the Chief Financial Officer of Sandoz GmbH, the generic pharmaceutical subsidiary of Novartis. Mr. Barabe received his B.B.A. degree from the University of Massachusetts (Amherst) and his M.B.A. degree from the University of Chicago.

Ran Nussbaum (Age: 44) Mr. Nussbaum has been a director since November 2017. Mr. Nussbaum is a managing partner and co-founder of The Pontifax Group (founded in 2004). The fund runs more than 50 portfolio companies all around the globe. Prior to joining Pontifax, he was a partner at Israel’s largest business intelligence and strategic consulting firm. He currently serves as a board member on many of Pontifax’s portfolio companies, including, VBI Vaccines, UroGen Pharma, Eloxx Pharmaceuticals, Keros Therapeutics (as chairman) and served as a board member of Kite Pharma, Inc. until its acquisition by Gilead Sciences, Inc. in October 2017.

Paolo Pucci (Age: 56) Mr. Pucci joined ArQule as Chief Executive Officer and a member of the Board in June 2008 from Bayer A.G., where he served as Senior Vice President and President in charge of the Bayer-Schering Pharmaceuticals Global Oncology/Specialized Therapeutics Business Units. Previously, Mr. Pucci was senior vice president of Bayer Pharmaceuticals Global Specialty Business Unit, President of U.S. Pharmaceutical Operations and a member of the Bayer Pharmaceuticals Global Management Committee. At Bayer, Mr. Pucci was involved in a broad range of activities related to Nexavar[®] (sorafenib),

an oral multiple kinase inhibitor used to treat liver and kidney cancers. These activities included clinical development, regulatory review, corporate alliance management, product launch and marketing. Mr. Pucci joined Bayer as head of its Italian Pharmaceutical operations in 2001. Prior to Bayer, Mr. Pucci held positions of increasing responsibility with Eli Lilly, culminating with his appointment as Managing Director, Eli Lilly Sweden AB. At Lilly, his responsibilities included operations, sales, marketing and strategic planning. In November 2011, Mr. Pucci was appointed to the Board of Directors of Dyax Corp where he served as an independent director, member of the audit committee and chairman of the governance and nomination committee until the acquisition of Dyax by Shire in January 2016. In April 2013, he was appointed to the Board of Directors of Algeta ASA, an oncology company based in Oslo, Norway, where he served as an independent director and member of the audit committee until the acquisition of Algeta by Bayer A.G. He has also been a Director of NewLink Genetics Corp., since November 2015. During September 2016, Mr. Pucci was elected to the Board of Directors of West Pharmaceutical Services, Inc., an international manufacturer of packaging components and delivery systems for injectable drugs and healthcare products. Mr. Pucci holds an M.B.A from the University of Chicago and is a graduate of the Università Degli Studi Di Napoli in Naples, Italy.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THE ELECTION OF THE NOMINEES LISTED ABOVE.

Directors with Term Expiring at the 2019 Annual Meeting

Susan L. Kelley, M.D. (Age: 63) Dr. Kelley has been a director since April 2011. Dr. Kelley served as Chief Medical Officer of the Multiple Myeloma Research Consortium and its sister organization, the Multiple Myeloma Research Foundation from 2008 to 2011. Previously, Dr. Kelley held positions of increasing responsibility at Bayer Healthcare Pharmaceuticals and Bayer-Schering Pharma including Vice President, Global Clinical Development and Therapeutic Area Head – Oncology. Prior to joining Bayer, she worked at Bristol-Myers Squibb in Oncology and Immunology drug development where she held positions of increasing responsibility, ultimately serving as Executive Director, Oncology Clinical Research, at the Bristol-Myers Squibb Pharmaceutical Research Institute. She was a Fellow in Medical Oncology and Clinical Fellow in Medicine at Dana-Farber Cancer Institute, Harvard Medical School, and a Fellow in Medical Oncology and Pharmacology at Yale University School of Medicine, where she also served as a Clinical Assistant Professor of Medicine. Dr. Kelley also serves on the board of directors of Daré Bioscience (formerly Cerulean Pharma, Inc.), Immune Design Corp. and Vascular Biogenics Ltd. She formerly served as a Director of Alchemia, Ltd. Dr. Kelley received her M.D. from Duke University School of Medicine.

Michael D. Loberg, Ph.D. (Age: 70) Dr. Loberg has been a director since January 2007. Previously, he served as Chief Executive Officer and a member of the Board of Directors of NitroMed, Inc., a pharmaceutical company, from September 1997 to March 2006 and as its President from September 2003 to March 2006. From 1979 to 1997, Dr. Loberg held a number of senior management positions at Bristol-Myers Squibb, including President of Bristol-Myers Squibb's Oncology and Immunology, U.S. Primary Care, Northern Europe, Specialty Pharmaceuticals and Squibb Diagnostics. Dr. Loberg is a Director of IGM Biosciences, a developer of immunotherapeutics. He holds a B.S. in Chemistry from Trinity College and a Ph.D. in Chemistry from Washington University.

Directors with Term Expiring at the 2020 Annual Meeting

Ronald M. Lindsay, Ph.D. (Age: 70) Dr. Lindsay has been a director since June 2005. He is currently Chairman and CEO of Zebra Biologics Inc., a privately held biopharmaceutical company. He was formerly EVP R&D and a director at Sequenom, Inc., and is currently a director of two privately-held companies, NeurocentRx Pharmaceuticals Ltd, Edinburgh and Depixus SAS, Paris. Dr. Lindsay was previously Chief Scientific Officer and Vice President, Research and Development, at diaDexus, Inc., and held a number of senior management positions at Millennium Pharmaceuticals, Inc., including SVP, Biotherapeutics. At Regeneron Pharmaceuticals, he was a founding scientist and led pre-clinical R&D from 1988-1998. Dr. Lindsay also worked at the Sandoz Institute for Medical Research, London. Dr. Lindsay completed post-doctoral work at the Friedrich Miescher Institute, Basel, and he holds a B.Sc. (Hons) in Chemistry from the University of Glasgow and a Ph.D. in Biochemistry from the University of Calgary. He is the author of over 150 peer reviewed publications in the field of neuroscience.

William G. Messenger, D. Min. (Age: 57) Dr. Messenger has been a director since January 2005. He has been the owner and managing director of the Lexington Sycamore Group, consultants in the fields of business strategy, organization and leadership, since 1994. He also serves as Executive Editor of the Theology of Work Project, a small international organization conducting research and publication in the field of business ethics. From 1999 to 2008, Dr. Messenger served as Director of the Mockler Center for Faith and Ethics in the Workplace at Gordon-Conwell Theological Seminary. Dr. Messenger received a B.S. in Physics with highest honors from Case Western Reserve University, an M.B.A. with high distinction from Harvard Business School, a Master of Divinity degree, summa cum laude, from Boston University School of Theology, and a Doctor of Ministry from Gordon-Conwell Theological Seminary

Patrick J. Zenner (Age: 71) Mr. Zenner was named Chairman of the Board in May 2004 and has been a director since 2002. Mr. Zenner retired in 2001 from the position of President and Chief Executive Officer of Hoffmann-La Roche Inc., North America, based in Nutley, N.J. Mr. Zenner held various executive positions during his 32-year career with the company. Mr. Zenner is currently a member of the Board of Trustees of Creighton University and is Chairman of the Board of Trustees of Fairleigh Dickinson University. In addition, Mr. Zenner is Chairman of the Board of Directors of West Pharmaceutical

Services, Inc. and a director at Selecta Bioscience, Inc. Until its sale in 2012, Mr. Zenner was a director of Par Pharmaceuticals, Inc. In 2010, he resigned from the boards of Geron Corporation, Xoma Ltd. and Exact Sciences, Inc. He has a B.S./B.A. from Creighton University and an M.B.A. from Fairleigh Dickinson University.

Corporate Governance Guidelines and Code of Conduct

At ArQule, we value honesty, integrity, and fairness in our dealings with our fellow employees, our stockholders, our collaborators and our communities. In addition to meeting both the letter and the spirit of regulations and rules adopted by the SEC, other federal and state laws and regulations and the standards of the Nasdaq Global Market (“Nasdaq”), our directors have mandated that our business dealings comply with the highest ethical and corporate governance standards.

We have adopted general corporate governance principles, the ArQule Corporate Code of Conduct (“Code of Conduct”) and related policies to provide guidance to our directors and management in their efforts to provide effective and appropriate corporate governance. As is the case with our other policies and practices, the tenets reflected in our governance principles, Code of Conduct and policies are intended to align the interests of our directors, management and other employees with those of our stockholders. We will review and, if necessary in our judgment, modify the guidelines from time to time.

The Code of Conduct applies to our directors, employees and officers, including our Chief Executive Officer, President and Chief Operating Officer and Chief Financial Officer and Treasurer (our principal executive officer, principal financial officer and principal accounting officer, respectively), and our Chief Medical Officer. The Code of Conduct addresses: the standards of conduct expected of each director, officer and employee; conflicts of interest; corporate disclosure processes; compliance with laws, rules and regulations (including insider trading laws); corporate opportunities; confidentiality; fair dealing; and protection and proper use of Company assets. It also strongly encourages the reporting of any illegal or unethical behavior. Waivers of the requirements of the Code of Conduct or associated policies with respect to members of the Board and executive officers are subject to the approval of the full Board or a committee of the Board to which resolution of the matter is delegated and will be disclosed on our website. The governance principles, Code of Conduct, and certain related policies are available on our website at <http://www.arqule.com> in the “Investors and Media” Section under the heading “Corporate Governance.”

Director Qualifications and Nomination Process

Director Qualifications

Our Compensation Committee identifies nominees for director from various sources including referrals from current Board members and industry contacts. In the past, the Compensation Committee has also used third party consultants to assist in identifying, evaluating, and recruiting potential nominees; however, no third party consultant was used for this purpose during 2017. The directors have not set formal criteria or qualifications for individuals to be nominated or re-nominated as candidates for Board membership. Instead, the Compensation Committee has developed a general profile for candidates reflecting the personal and professional characteristics that our directors believe a suitable individual should possess. Such characteristics include integrity, business acumen and educational background, relevant industry experience, understanding of interpersonal relationships, no conflict of interest, a high degree of commitment to the functioning of the Board and its committees, and the ability to meet the independence and financial literacy requirements defined by applicable Nasdaq and SEC rules. Additionally, the Compensation Committee carefully considers issues of diversity among its members in identifying and considering potential nominees and attempts, where appropriate, to achieve a diversity of professional experiences, business cultures, perspectives, genders, ages and ethnicities, among other characteristics, in the membership of the Board and its committees. The Company does not require members of the Board (or our executive officers) to purchase or hold a minimum number of shares of our Common Stock.

Our Company is a clinical-stage biotechnology company engaged in the research and development of innovative therapeutics to treat cancers and rare diseases. In light of the Company’s current needs and business priorities, the Compensation Committee believes that the Board’s membership should include directors with a high level of scientific and relevant business experience. Our business requires an

understanding of the science behind our pre-clinical and clinical product candidates, as well as the clinical development and commercialization processes. Accordingly, the Compensation Committee has determined that scientific, drug development and commercialization experience should be represented on the Board. In addition, as a public company, our Board should include individuals who are financially literate to serve as members of the audit and other committees. We also believe that members should have a firm grounding in corporate governance and business ethics. Lastly, our business is dynamic and rapidly evolving and benefits from having a Board that includes individuals from a variety of backgrounds and professional experiences who contribute to the Board's overall ability to identify and ask difficult questions and to think innovatively.

The following table summarizes how the qualifications, attributes, skills and experience described above relate to each individual director's contributions to the Board and its Committees. An "X" in the chart below indicates a specific competency for which the director has been nominated to serve on the Company's Board and its Committees.

The lack of an "X" for a particular qualification does not mean that the director does not possess that qualification or skill. Rather, an "X" indicates a primary area of focus or expertise of a director on which the Board currently relies.

	Timothy C. Barabe (1)	Susan L. Kelley (3)	Ronald M. Lindsay (3)	Michael D. Loberg (2)(3)	William G. Messenger (1)(2)	Ran Nussbaum	Paolo Pucci	Patrick J. Zenner (1)(2)
High level of financial literacy	X			X	X	X	X	X
Relevant biotechnology business experience	X	X	X	X	X	X	X	X
Extensive knowledge of drug research and development		X	X	X		X	X	X
Extensive knowledge of drug commercialization and marketing			X	X			X	X
Expertise in corporate governance and business ethics	X				X	X	X	X
Diversity of background, professional experience or culture	X	X		X	X	X	X	

(1) Member of Audit Committee

(2) Member of Compensation Committee

(3) Member of Science Committee

Stockholder Nominations

The Compensation Committee has not established any special procedures for stockholder submissions of nominees for election to the Board. Our By-laws permit any stockholder entitled to vote for the election of directors to nominate one or more directors. We believe that this long-standing mechanism, in place since incorporation of the Company, provides the appropriate means for stockholder nominations. Pursuant to our By-laws, a stockholder wishing to nominate a director candidate must deliver or mail written notice of such nomination to the Chairman of the Board, the President, or the Secretary of the Company at our principal executive office. If a stockholder is nominating a director candidate for election at the annual meeting of stockholders, notice must be received at least 75 days before the anniversary date of the prior year's meeting, assuming there was an annual meeting in the prior year and the date of the current year's annual meeting is within 30 days of the anniversary date of the prior year's meeting. Otherwise, notice must be received at least 45 days before the date of the current year's annual meeting or a special meeting, if at least 60 days' notice or prior public disclosure of the date of the current year's annual meeting or the special meeting is provided. If neither of the previous two sentences applies, notice must be

received no later than 15 days after the date on which notice of the date of the current year's annual meeting or the special meeting was mailed or public disclosure was made of such meeting date. The notice must include the stockholder's name and address, the class and number of shares of securities beneficially owned by such stockholder, and each nominee's:

- (i) name, age, business address, and home address;
- (ii) principal occupation or employment;
- (iii) beneficial ownership of Company securities, including the class and number of shares of stock; and
- (iv) any other information relating to the nominee that is required to be disclosed in solicitations for proxies for election of directors by Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act").

The Compensation Committee will consider all nominees submitted by stockholders in the manner described above and will evaluate all potential nominees using the same criteria.

Majority Voting Policy

On March 18, 2014, our Board adopted the "Majority Voting Policy with Respect to the Election of Directors". The Majority Voting Policy provides that in an uncontested election of directors of the Company, any nominee for election as a director who receives a greater number of votes "withheld" from his or her election than votes "for" such election (a "Majority Withheld Vote") shall, promptly following the date of the stockholders' meeting at which the election occurred, tender his or her resignation to the Chairman of the Board for consideration by the Compensation Committee. For purposes of the Majority Voting Policy, an "uncontested election" means an election in which the number of nominees for election as director is equal to the number of directors to be elected.

The Compensation Committee will consider the resignation and, promptly following the stockholders' meeting at which the election occurred, will recommend to the Board whether or not to accept it. The Compensation Committee will be expected to accept the resignation except in situations where circumstances would warrant the applicable director continuing to serve on the Board.

In its deliberations about the proper recommendation, the Compensation Committee will consider a range of possible alternatives concerning the director's tendered resignation as it deems appropriate including, without limitation, acceptance of the resignation, rejection of the resignation, or rejection of the resignation coupled with a commitment to seek to address and cure the underlying reasons reasonably believed by the Compensation Committee to have substantially resulted in the "withheld" votes.

The Board will act on the Compensation Committee's recommendation within 90 days of the date of the stockholders' meeting at which the election occurred. The Board will consider the information, factors and alternatives evaluated by the Compensation Committee in arriving at its recommendation and such additional information, factors and alternatives that the Board may consider to be relevant.

Following the Board's decision on the Compensation Committee's recommendation, the Company will promptly disclose the decision regarding whether or not to accept the nominee's resignation (or the reasons for rejecting the resignation, if applicable), as well as a summary of the factors considered, in a Form 8-K furnished to the SEC.

The Board's Role in Risk Oversight

Our Board retains ultimate responsibility for risk oversight and our management retains the responsibility for risk management. The role of our Board in our Company's risk oversight process includes receiving regular reports that include areas of material long- and short-term internal and external risks to our Company, including clinical, regulatory, manufacturing, financial, information technology, intellectual property, legal, compensation, strategic and reputational risks. The full Board (or the appropriate committee in the case of risks that are under the purview of a particular committee) receives these reports from the member of management responsible for the function from which the risk arises so that it can understand and assess our ongoing risk identification, risk management and risk mitigation strategies. Our

Board also administers its risk oversight function through the required approval by the Board (or a committee of the Board) of significant transactions and other material decisions, and regular periodic reports from our company's independent registered public accounting firm and other outside consultants regarding various areas of potential risk, including, among others, those relating to our internal controls and financial reporting. As part of its charter, the Audit Committee discusses with management and our independent registered public accounting firm significant financial risks and exposures and the steps management has taken to minimize those risks.

Communications with Directors

We do not have a formal process for communication by stockholders with our directors. However, stockholders and others who wish to communicate may write to the Board as a whole, or to individual director's c/o:

ArQule, Inc.
One Wall Street
Burlington, Massachusetts 01803-4757
Attn. Rob Weiskopf
Chief Financial Officer and Treasurer

Such communications will be forwarded directly to the addressee.

Director Independence

For a director to be designated as independent, as defined by the Nasdaq listing standards set forth below, our Board must determine that he or she has no "material relationship" with ArQule other than that of a director. When assessing the materiality of a director's relationship with ArQule, the Board considers:

- all relevant facts and circumstances, including not only a director's relationship with the Company, but also all relevant affiliations;
- the frequency and regularity of any services the director performed for the Company outside of the scope of duties as a director;
- whether the director carried out those services at arm's length in the ordinary course of business; and
- whether the director provided those services on substantially the same terms as those prevailing at the time for unrelated parties in comparable transactions.

For a Nasdaq-listed company, a director is not considered independent if any of the following circumstances exist:

- the director is currently, or was at any time during the preceding three years, employed by the listed company, its parent or subsidiaries, or if any of the director's family members is, or was, an executive officer of the listed company, its parent or subsidiaries, at any time during the preceding three years;
- the director has accepted, or has a family member who has accepted, from the listed company, its parent or subsidiaries, any payment in excess of \$120,000 during any twelve-month period within the preceding three years, other than (a) compensation for board or board committee services, (b) compensation paid to a family member who is a non-executive employee of the listed company, its parent or any subsidiary; or (c) benefits under a tax-qualified retirement plan or non-discretionary compensation;
- the director is, or has a family member who is, employed as an executive officer of any other entity where at any time during the preceding three years any of the executive officers of the company served on the compensation committee of such other entity;
- the director is, or has a family member who is, a partner in, or a controlling stockholder or an executive officer of, any organization to which the listed company made, or from which the company received, payments (other than payments arising solely from investments in the listed

company's securities or payments under non-discretionary charitable contribution matching programs) that exceed the greater of \$200,000 or 5% of the recipient's consolidated gross revenues during the current or any of the past three fiscal years;

- the director is, or has a family member who is, a current partner of the listed company's outside auditors, or was a partner or employee of the listed company's outside auditor who worked on the listed company's audit at any time during the past three years; or
- the director otherwise has a relationship that, in the opinion of the listed company's board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

On January 16, 2018, our Board determined that all of our directors, other than our Chief Executive Officer, are "independent directors" as defined in the listing standards of the Nasdaq Marketplace Rules, and these independent directors constitute a majority of the members of the Board and each of its committees.

Compensation Committee Interlocks and Insider Participation

No member of the Compensation Committee during 2017 was an officer, former officer, or employee of the Company or had a relationship disclosable under our policies or SEC regulations. Further, during 2017, no executive officer of the Company served as:

- a member of the compensation committee (or equivalent) of any other entity, one of whose executive officers served as one of our directors or was an immediate family member of a director, or served on our Compensation Committee; or
- a director of any other entity, one of whose executive officers or their immediate family member served on our Compensation Committee.

BOARD COMMITTEES AND MEETINGS

During 2017, the Board held nine meetings in person or by telephone. Each director attended at least 75% of the aggregate number of meetings of the Board and the committees of the Board on which he or she served.

We do not have a policy regarding attendance of directors at our annual meeting of stockholders. In May 2017, all of our directors attended our 2017 Annual Meeting. We also do not have a formal policy regarding the separation of our Board Chairman and Chief Executive Officer positions. At this time, the positions are separate because the Board believes that this structure is in the best current interest of the Company and our stockholders.

Committees of the Board

Our Board has a standing audit committee (the "Audit Committee"), compensation, nominating, and governance committee (the "Compensation Committee"), and science committee (the "Science Committee"). Independent directors chair and make up the entire membership of each of these committees. The Board has adopted written charters for each of our standing committees, which may be viewed by accessing the "Investors and Media" Section of our website at www.arqle.com and clicking on the heading "Corporate Governance".

Audit Committee

In 2017, the members of the Audit Committee were Mr. Barabe (Chairman), Dr. Messenger and Mr. Zenner. The Audit Committee met five times in 2017. Each member of the Audit Committee meets the independence and financial literacy requirements as defined by applicable Nasdaq and SEC rules. The Board has determined that Mr. Barabe is an "audit committee financial expert" as defined by the rules and regulations of the SEC.

The duties and principal purposes of the Audit Committee include:

- generally, oversight of the integrity of the Company’s financial reporting process;
- in particular, monitoring of:
 - the integrity of the Company’s financial statements;
 - the Company’s compliance with legal and regulatory requirements; and
 - the qualifications, independence and performance of the Company’s independent registered public accountants and, as necessary and appropriate, of its internal audit function;
- pre-approval of all audit and non-audit services;
- review and approval of the audit committee report that is required to be included in the proxy statement for our annual meeting of stockholders;
- assessment of significant financial risks and exposures and the adequacy of the Company’s overall risk assessment and risk management policies and procedures to mitigate such risks and exposures;
- evaluation of whether risks presented by the Company’s financial policies and practices are likely to have a material adverse effect on the Company; and
- assessment of the steps management has taken to control such risks to the Company.

The Company’s independent registered public accounting firm (currently, PricewaterhouseCoopers LLP) is ultimately accountable to the Audit Committee in its capacity as a committee of the Board. The Audit Committee has sole authority and responsibility to select, hire, oversee, evaluate, approve the compensation of, and, where appropriate, replace our independent registered public accounting firm.

A more detailed description of the duties of the Audit Committee is set forth in the committee’s charter.

Compensation Committee

In 2017, the members of the Compensation Committee were Dr. Messenger (Chairman), Dr. Loberg and Mr. Zenner. The Compensation Committee met five times in 2017.

The duties and purposes of the Compensation Committee include:

- advising the Board concerning the Company’s compensation philosophy and policies, in general, and, in particular, to determine, or recommend to the Board for determination, the compensation of the Company’s Chief Executive Officer and all other executive officers and directors;
- advising the Board regarding succession planning for the Company’s Chief Executive Officer;
- identifying individuals qualified to become members of the Board;
- recommending candidates to the Board to fill vacancies on the Board;
- recommending to the Board the directors to be appointed to its committees;
- assessing, or ensuring that the Board assesses, the performance of individual members of the Board and the Board as a whole;
- administering our stock option, stock purchase, and other stock compensation plans;
- reviewing and approving or rejecting proposed related party transactions;
- reviewing with management the annual compensation discussion and analysis (“CD&A”) prepared by management and recommending to the Board whether the CD&A should be included in the Company’s filings with the SEC;
- overseeing the Company’s efforts to meet its corporate governance, legal, and regulatory obligations and identifying, reviewing, and resolving issues relating to such matters; and

- reviewing and discussing with management any risks created by the Company's compensation practices and determining the adequacy of the Company's risk assessment and risk management policies and procedures to mitigate such risks and exposures.

A more detailed description of the duties of the Compensation Committee is set forth in the committee's charter.

Science Committee

In 2017, the members of the Science Committee were Dr. Lindsay (Chairman), Dr. Loberg and Dr. Kelley. The Science Committee met five times in 2017.

The Science Committee is responsible for:

- reviewing the scientific direction of the Company;
- playing a role in assessing the manner by which the Company will continue to enhance its capabilities as a drug discovery and development organization (whether by acquisition, merger, in-licensing, internal growth, or a combination of those methods);
- evaluating the scientific opportunities under consideration by management; and
- regularly reviewing data relating to pre-clinical and clinical testing and analysis being conducted by the Company.

A more detailed description of the duties of the Science Committee is set forth in the committee's charter.

2017 DIRECTOR COMPENSATION

The following table provides information concerning compensation paid by the Company to its non-employee directors during 2017. Any director who is also an employee of the Company is not compensated for his or her service as a director. During 2017, Mr. Pucci, the Company's Chief Executive Officer, also served on the Board, but did not receive any compensation for services as a director.

Name	Fees Earned or Paid in Cash (\$)	Option Awards(1)(\$)	Total (\$)
Timothy C. Barabe(2)	\$ 57,000	\$14,060	\$71,060
Susan L. Kelley, M.D.	49,500	14,060	63,560
Ronald M. Lindsay, Ph.D. .	67,000	14,060	81,060
Michael D. Loberg, Ph.D.(3)	55,750	14,060	69,810
William G. Messenger, D. Min.	64,500	14,060	78,560
Ran Nussbaum(4)	6,250	18,459	24,709
Patrick J. Zenner	69,500	17,575	87,075

- (1) This column reflects the aggregate grant date fair values for all option awards granted during 2017. Assumptions used in the calculation of these amounts are included in Note 2 to the Company's audited financial statements for the year ended December 31, 2017, set forth in the Company's Annual Report on Form 10-K filed with the SEC on March 5, 2018 ("2017 Annual Report on Form 10-K"). As of December 31, 2017, for each director the aggregate number of shares of Common Stock that may be acquired upon exercise of outstanding option awards is as follows: Mr. Barabe, 150,000; Dr. Kelley, 145,000; Dr. Lindsay, 150,000; Dr. Loberg, 150,000; Dr. Messenger, 150,000; Mr. Nussbaum, 30,000; and Mr. Zenner, 230,000.
- (2) Mr. Barabe elected to have a portion of his fees for service as a director in the amount of \$7,200, paid to him in the form of 5,784 shares of our Common Stock. The number of shares was determined on the date of the payment of director fees based on the closing market price for a share on that date.
- (3) Dr. Loberg elected to have a portion of his fees for service as a director in the amount of \$14,244 paid to him in the form of 11,438 shares of our Common Stock. The number of shares was determined on the date of the payment of director fees based on the closing market price for a share on that date.
- (4) Mr. Nussbaum was appointed by our Board as a director in November 2017.

Currently, each of our non-employee directors who is serving as a director prior to and immediately following any annual meeting of stockholders receives a \$25,000 annual retainer. Each non-employee director receives \$2,000 for each day on which the Board meets and the director attends. For attendance at committee meetings, a non-employee director will be paid \$1,250 per day for meetings of the Audit Committee and the Compensation Committee, and \$2,500 for meetings of the Science Committee. In addition to the base compensation for directors, chairs of committees receive additional compensation. The director serving as Chairman of the Board (currently, Mr. Zenner) receives an additional \$20,000 annual retainer; the director serving as Chairman of the Audit Committee (currently, Mr. Barabe) receives an additional \$15,000 annual retainer, the director serving as Chairman of the Compensation Committee (currently, Dr. Messenger) receives an additional \$15,000 annual retainer; and the director serving as Chairman of the Science Committee (currently, Dr. Lindsay) receives an additional \$20,000 annual retainer.

All of our non-employee directors, currently seven directors, are eligible to participate in our 2014 Equity Incentives Plan. Pursuant this plan, an option to purchase 30,000 shares of Common Stock is automatically granted to each non-employee director at the time that he or she is first elected or appointed to the Board. This initial option becomes exercisable as to 10,000 shares on the date of the Company's next annual meeting following the date of grant and as to 10,000 shares on the date of each of the next two annual meetings.

Also, at each annual meeting of stockholders, each eligible director (other than the Chairman) serving as a member of the Board prior to and immediately after such annual meeting is automatically granted an option to purchase 20,000 shares of Common Stock (whether or not the director is a nominee for election at such annual meeting). This annual option becomes exercisable as to all shares one year from the date of grant.

Upon the initial election of a non-employee director as Chairman of the Board, the non-employee director will be automatically granted an option to purchase 25,000 shares of Common Stock (in addition to the initial option awarded to directors). This initial option becomes exercisable as to 8,334 shares on the date of the Company's next annual meeting following the date of grant and as to 8,333 shares on the date of each of the next two annual meetings.

In addition, at each annual meeting of stockholders, the eligible director serving as Chairman of the Board prior to and immediately after such annual meeting is automatically granted an option to purchase 25,000 shares of Common Stock (whether or not the Chairman is a nominee for election at such annual meeting). This annual option becomes exercisable as to all shares one year from the date of grant.

COMPENSATION DISCUSSION AND ANALYSIS

The Compensation Committee is responsible for determining the recommended compensation of our named executive officers, including our Chief Executive Officer.

Compensation Philosophy

Guiding Principles:

Our executive compensation program is designed to be closely linked to corporate performance and returns to stockholders. To this end, we have developed an overall compensation strategy and a specific compensation plan that establish competitive base salaries and tie a significant portion of executive compensation to the Company's success in meeting specified and measurable Company-wide performance goals. By using stock options and other stock-based awards, we ensure that part of each executive's compensation is closely tied to the performance of our stock. We believe that a significant part of overall compensation for senior executives should be "at risk," i.e., contingent upon successful implementation of the Company's strategy and achievement of its goals. Individuals with the greatest influence on company-wide performance should have the largest amount of cash benefits and stock-based awards at risk. In our view, a balanced approach to compensation decisions motivates management's efforts to drive positive outcomes in both current and future environments and mitigates the risk that any one incentive could lead executive officers to take actions that are not in our best interests. In addition, the tying of compensation to performance goals that must be achieved in a heavily regulated business environment such as ours adds an additional layer of scrutiny to the Company's actions and lessens greatly the opportunities for individuals to take inappropriate actions without discovery and sanctions.

Objectives:

- To attract and retain the best executive talent available;
- To motivate our executives to achieve the goals inherent in our business strategy;
- To link executive and stockholder interests through equity-based compensation; and
- To provide a compensation package that recognizes corporate performance and individual contributions.

Key compensation elements:

- Base salary;
- Annual performance-based cash bonuses;
- Stock-based incentive awards; and
- Employee benefits.

Each of these elements is described in more detail below.

The Role of the Compensation Committee

The members of the Compensation Committee are currently Michael D. Loberg, William G. Messenger (Chairman), and Patrick J. Zenner. Each of the current members is an "independent director" under Nasdaq listing standard and a "Non-Employee Director" within the meaning of Section 16 of the Exchange Act.

The Compensation Committee advises our Board concerning the Company's compensation philosophy and policies, in general, and, in particular, determines, or recommends to the Board for determination, the compensation of our Chief Executive Officer and other named executive officers and of members of the Board. Recommendations and decisions made by the Compensation Committee are reported to the full Board for approval, endorsement or ratification, as appropriate. As part of our Board's risk oversight responsibilities, our Compensation Committee reviews the Company's compensation policies and practices as generally applicable to our employees and discusses with management risks created by such policies and

practices. Based on that review and discussions with management, and taking into consideration ArQule's risk assessment and risk management policies and procedures, we believe that our compensation policies and procedures do not encourage excessive or unnecessary risk-taking and that the level of risk that they do encourage is appropriate.

The Compensation Committee's Process

General

Our Compensation Committee sets the mix of elements of executive compensation to be recommended to the Board for approval including base salary, annual performance-based cash bonuses and stock-based awards for our named executive officers. While the Compensation Committee considers the elements of compensation described below separately, it takes into account the full compensation package afforded to each executive officer in making its recommendations. The Compensation Committee also makes recommendations concerning the appropriate linkage of executive compensation to corporate and individual performance and financial returns to stockholders.

Independent Compensation Consultant

Under its charter, SEC regulations and Nasdaq rules, the Compensation Committee has access to extensive resources and broad discretionary authority to engage compensation consultants and other advisors to assist it in its deliberations. From time to time and on an *ad hoc* basis, as needed, the Compensation Committee an independent compensation consultant to provide executive compensation advice. In making its selection the Compensation Committee assesses the consultants independence to determine whether a conflict of interest exists that would prevent the consultant from exercising independent judgment when advising the Compensation Committee. The Compensation Committee did not engage a compensation consultant during 2017.

The Compensation Committee considers the views of our Chief Executive Officer regarding achievement of individual and departmental objectives of those executives reporting directly to him. Approximately every two years the Compensation Committee reviews peer group compensation data and additional selected compensation data produced by Radford, an Aon Hewitt Company ("Radford"). Our peer group of companies, which we evaluate in conjunction with our review of peer compensation data, is comprised principally of non-commercial, life sciences companies with products in phase 2 or phase 3 clinical trials that Radford has deemed to be most comparable to us in market capitalization and head count. Since we did not conduct a review of peer group compensation data and additional selected compensation data in 2017, we did not compile a list of peer group companies for 2017.

Benchmarking

In general terms on a periodic basis, the Compensation Committee benchmarks total compensation for all of our employees to the median compensation (i.e. 50th percentile) of employees performing similar job functions at biotechnology companies nationally, adjusted for differences in company size, stage of development, location, and performance as a basis for its compensation recommendations. However, we strongly believe in retaining the best talent among our executive management team. Therefore, we have recommended, and may recommend in the future, total compensation packages for executive management that vary substantially from the median based on factors such as industry experience, scope of responsibility, knowledge, and unique qualifications.

Say-on-Pay

In May 2017 our stockholders cast an advisory vote on the compensation of our named executive officers. The compensation disclosure and analysis and compensation tables in our 2017 proxy statement provided our stockholders with then current information identical in scope with the discussion and analysis and tables in this section.

In the 2017 proxy statement, we stated our belief that our compensation policies and procedures support our business strategy by rewarding successful achievement of specific financial and operational goals and providing performance-based incentives to maximize stockholder value. We also expressed our belief that these policies and procedures are closely aligned with the long-term interests of our stockholders.

Our stockholders endorsed our compensation philosophy with 96% of stockholders' votes cast to approve our named executive officers' compensation. Consequently, our current intention is to continue implementing our existing programs and policies.

Elements of Compensation

Base Salary

Salary levels are considered annually as part of our performance review process, but also in cases including promotion or other change in the job responsibilities of an executive officer. For named executive officers, initial base salaries generally are established in connection with negotiation of an offer of employment and employment agreement. Increases in base salary have several elements. In addition to promotion and increased responsibilities, merit and company-wide general increases are also factored in. Salaries of our named executive officers for 2017 and certain prior years are also reported in the Summary Compensation Table.

The following table shows changes in the annualized base salaries of our named executive officers from 2016 to 2017:

Name and Principal Position	2016 Annualized Base Salary (\$)	2017 Annualized Base Salary (\$)	% Increase	Comment
Paolo Pucci, CEO	489,000	499,000	2.0	Base salary negotiated in and adjusted per amended employment agreement and annual review.
Peter S. Lawrence, COO	431,000	448,000	4.0	Base salary negotiated in and adjusted per amended employment agreement and annual review.
Dr. Brian Schwartz, CMO	429,000	446,000	4.0	Base salary negotiated in and adjusted per employment agreement and annual review.
Robert J. Weiskopf, CFO	305,000	317,000	4.0	Base salary adjusted at annual review.

Performance-Based Bonuses

Cash bonuses represent a percentage of each named executive officer's salary. In determining the target award opportunity for the bonus of a particular executive, we consider compensation data and level of strategic contribution to the Company's performance. This determination is made at the time an executive officer is hired and generally is one of the negotiated terms of his or her employment agreement. Adjustments to bonus targets are also considered, subject to the requirements of those employment agreements, as part of the annual review process.

At the beginning of each fiscal year, we set corporate goals at minimum, planned, and maximum levels of performance and weight the goals according to their importance to our corporate strategy. Levels of performance for these goals are expressed as percentages which, when determined by our Compensation Committee and Board following conclusion of the fiscal year, are aggregated to arrive at an overall level of performance for the Company. In determining individual bonus amounts for our named executive officers, our directors take into consideration the Company's overall performance, the named executive officer's achievement of specific individual goals, and the amount of the named executive officer's target bonus.

The following is a summary description of the primary corporate goals for 2017 used to determine performance-based bonuses:

Tivantinib Program

- complete the planned final analysis of the Phase 3 METIV-HCC trial and, if positive, file an NDA by a specified date;

*Pipeline Programs**Derazantinib (ARQ 87)*

- dose first patient in pivotal trial in intrahepatic cholangiocarcinoma by a specified date;

ARQ 092

- dose first patient in ArQule-run Phase 1/2 trial in Overgrowth Diseases by a specified date;
- achieve rare pediatric disease voucher designation;

ARQ 751

- complete Phase 1 trial in oncology in patients with AKT1 and PI3K mutations

Finance

- end 2017 with a specified amount of cash and marketable securities while meeting all key budget parameters.

Business Development

- conclude one or more business development transactions generating a specified amount of upfront payments.

Following the recommendations of the Compensation Committee, our Board determined that, on a weighted basis, our overall level of performance warranted payment of bonuses at 83% of the bonus target. This determination reflected results with respect to development and finance goals that were at planned performance levels and other development and business development goals that were below planned performance levels. The following table shows percentages of target and actual bonuses paid to our named executive officers.

The following table shows percentages of target and actual bonuses paid to our named executive officers.

Name and Principal Position	2017 Bonus Target (% of Base Salary)	2017 Bonus Actual (% of Base Salary)	Comment
Paolo Pucci, CEO	60.0%	49.8%	Target bonus set by terms of amended employment agreement. Actual bonus 83% of target.
Peter S. Lawrence, COO	45.0%	37.4%	Target bonus set by terms of amended employment agreement. Actual bonus 83% of target.
Dr. Brian Schwartz, CMO	40.0%	33.2%	Target bonus set by terms of employment agreement. Actual bonus 83% of target.
Robert J. Weiskopf, CFO	40.0%	33.2%	Bonus target set by Compensation Committee in accordance with annual standard process. Actual bonus 83% of target.

The amounts of cash bonus awards made to our named executive officers are also reported in the Summary Compensation Table.

Stock-based Awards

Primarily, we have granted stock options and/or shares of restricted stock to our named executive officers under our stockholder-approved plans. Stock options and/or shares of restricted stock must be issued with an exercise price or share valuation equal to the closing price of our Common Stock as reported

by Nasdaq on the date of grant. Options vest over various periods of time, generally four years. Restricted stock awards have restrictions which lapse over various periods of time, also generally four years. We have also awarded performance-based stock units (PSUs), each of which represents a contingent right to receive one share of Common Stock. Under the terms of our plans and subject to the restrictions contained in those plans, the Compensation Committee has the flexibility to rebalance the vesting terms and performance conditions of these awards as it deems necessary or advisable, e.g., to take into account unforeseen adverse events or clinical developments.

Stock option grants, and awards of restricted stock and stock units, are designed to encourage the creation of stockholder value over the long term since the full benefits of the options and awards cannot be realized unless stock price appreciation is achieved, and, once achieved, is maintained and increased. Accordingly, awards of options, restricted stock and stock units align the interests of executive officers and employees with those of stockholders.

In general, we establish ranges for these grants and awards to our named executive officers based on a number of factors, including published third-party data, the executive's job level, promotions, responsibilities he or she may assume in the upcoming year, responsibilities undertaken in prior years and other considerations deemed appropriate by the Compensation Committee. In determining an executive's annual grant, we apply the results of the Company's annual performance and the executive's individual performance to the applicable range, and then take into consideration any other factors that the Compensation Committee deems relevant.

After consideration of all of these factors, as well as corporate and individual performance, in January 2018 for performance in 2017, we awarded Mr. Pucci an option to purchase 249,000 shares of our Common Stock; Mr. Lawrence, an option to purchase 124,500 shares of our Common Stock, Dr. Schwartz, an option to purchase 107,900 shares of our Common Stock and Mr. Weiskopf, an option to purchase 62,250 shares of our Common Stock. All of these options vest ratably over a four-year period commencing from the date awarded and are conditioned on stockholder approval of the proposed amendment to our restated certificate of incorporation.

The Compensation Committee comes to a recommendation regarding annual stock option awards at a meeting in December prior to the first meeting of the Board in the following calendar year. The effective date for such awards is the date of such meeting of the full Board. At its January meeting, the Board acted upon the recommendations of the Compensation Committee.

Performance-Based Option Awards

On April 4, 2017, the Compensation Committee approved a new stock-based incentive and retention program for certain senior executives. This new program replaces a program previously established by the Committee related to tivantinib performance goals that expired in March of 2017.

Under the new program, the Compensation Committee granted participating executives performance-based options (the "Performance-based Options") at an exercise price of \$0.95 per share. Mr. Pucci, Mr. Lawrence, Dr. Schwartz and Mr. Weiskopf have the opportunity to earn options covering up to 600,000, 300,000, 260,000 and 160,000 shares, respectively, under this plan, and another executive has the opportunity to earn options covering up to a total of 110,000 shares. In addition to time-based vesting, the options will vest and become exercisable only if specified performance conditions are satisfied. All of the Performance-based Options have vesting conditions linked to our product candidate development pipeline, with the percentage of vesting ranging from 25% to 100% depending upon the level of our clinical success. In addition, the option grants to Messrs. Pucci and Lawrence are subject to an additional condition tied to our stock price. If the applicable performance conditions are not satisfied within 36 months, the options will terminate.

Other Factors

Each year, prior to arriving at final compensation for the Company's named executive officers, the Compensation Committee typically considers all other factors that it deems relevant in addition to those listed above. These factors may include the performance of the Company's stock relative to its peer group as well as other considerations and circumstances. As a result, even in cases where progress against corporate

performance goals has been positive and an individual's performance has been judged as strong, the individual's compensation may be impacted. For example, until 2017 our Chief Executive Officer's realizable pay (base salary and bonus) had been effectively unchanged for five years since its adjustment in January 2012 despite relatively strong performance against corporate performance goals and high levels of individual performance during that period. The Compensation Committee will continue to exercise this type of discretion in situations where it is deemed appropriate.

Employment Agreements

ArQule generally enters into employment agreements with its named executive officers. Typically, these agreements are offered in connection with recruiting executive officers when ArQule deems it necessary or appropriate to attract, incentivize and retain new hires. Agreements of this type exist to establish initial salary and bonuses, benefits, initial option grants, reporting lines, and change of control and related severance provisions, among other things. Mr. Pucci, Mr. Lawrence and Dr. Schwartz have such agreements.

Other Elements of Compensation and Perquisites

We provide our named executive officers with certain benefits and perquisites. In general, we provide these benefits on the same terms as those applicable to all of our other employees. Any non-recurring benefit or program such as housing allowance or relocation costs, will be reported as "All Other Compensation" in the Summary Compensation Table. The primary benefits are:

- health (medical, dental and vision) insurance for which the Company pays a portion of the premiums;
- a life insurance benefit equivalent to two times base salary up to a maximum of \$400,000 for which the Company pays the premiums;
- long-term disability insurance equal to 60% of base salary up to \$15,000 per month, the premiums for which are paid by the Company with the amount of the premiums being included in the taxable compensation of employees;
- if necessary in given circumstances to attract management talent, housing allowances and relocation costs;
- a retirement plan (401(k) Plan) under which an employee can choose to contribute up to 60% (subject to Tax Code limits) of compensation on a pre-tax basis with a matching contribution from the Company of \$0.50 for each \$1.00 contributed up to the first 6% of compensation;
- a tax-qualified stock purchase plan which permits participants to acquire shares of Common Stock at a price that is 85% of the stock price on either the first day or last day of the designated offering period (generally six months), whichever is lower; and
- tuition reimbursement up to \$3,000 per year for undergraduate courses and \$6,000 for graduate courses.

Currently, the Company does not have a nonqualified deferred compensation plan, a pension plan, or other defined benefit plan. In addition, the Company does not have a policy on adjustments to, or recovery of, awards if the performance measures on which they were based are adjusted or restated.

Potential Payments to Named Executive Officers upon Termination or Change of Control

The employment agreements of Mr. Pucci, Mr. Lawrence and Dr. Schwartz provide for certain payments to be made to them in the event that their employment with the Company is, or is deemed to be (as provided in the employment agreements), terminated without "cause." Severance benefits are an important tool in attracting and retaining key employees, and provide a degree of financial security to such employees where their employment is terminated through no fault of their own. Each of the agreements also provides for acceleration of vesting of the executive's stock-based awards in certain circumstances following the occurrence of a change of control of the Company. We believe that it is generally appropriate to vest stock-based awards to key employees in a change of control transaction, as such a transaction may often result in the elimination or reduction of the employee's ability to realize value from his or her options.

For information regarding the severance and change of control benefits provided to Mr. Pucci, Mr. Lawrence and Dr. Schwartz under their employment agreements, see “Payments upon Termination or Change of Control”.

Tax Considerations

If an executive is entitled to nonqualified deferred compensation benefits that are subject to Section 409A of the Internal Revenue Code of 1986, as amended (“Tax Code”), and such benefits do not comply with Section 409A, the executive would be subject to adverse tax treatment, including accelerated income recognition (in the first year that benefits are no longer subject to a substantial risk of forfeiture) and an additional income tax of 20% of the amount so recognized. The employment agreements of our named executive officers described herein contain provisions intended to limit or eliminate adverse tax consequences through timing of payments.

Section 162(m) of the Tax Code generally denies a deduction to any publicly held corporation for compensation paid to its named executive officers to the extent that any such individual’s compensation exceeds \$1 million, subject to certain exceptions, including one for “performance-based compensation.” Historically, the Compensation Committee seeks to maximize executive compensation deductions for federal income tax purposes. However, on December 22, 2017, the U.S. federal government enacted the Tax Cuts and Jobs Act, which substantially modifies the Tax Code and, among other things, eliminates the performance-based compensation exception under Section 162(m). As a result, the Compensation Committee currently expects that, in respect of fiscal 2018 and beyond, compensation, if any, in amounts over \$1 million paid to any named executive officer will no longer be deductible.

COMPENSATION COMMITTEE REPORT

The Compensation, Nominating and Governance Committee of the Board of Directors of ArQule, Inc., composed entirely of independent directors in accordance with applicable laws, regulations, Nasdaq rules and listing requirements and our governance guidelines, sets and administers policies that govern the Company's executive compensation programs and various incentive and stock programs. The Compensation, Nominating and Governance Committee has reviewed and discussed the Compensation Discussion and Analysis with the management of ArQule, Inc. Based on this review and discussion, the Committee recommended to the full Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement.

Submitted by the Compensation,
Nominating and Governance Committee,

William G. Messenger, Chairman
Michael D. Loberg
Patrick J. Zenner

EXECUTIVE COMPENSATION

The table and text below describe the cash and additional incentive compensation paid to the Company's Chief Executive Officer, President and Chief Operating Officer (principal financial officer for SEC reporting purposes), Chief Medical Officer and Chief Financial Officer (the "named executive officers") for the fiscal periods indicated.

SUMMARY COMPENSATION TABLE

The following table summarizes total compensation earned during the fiscal years ended December 31, 2017, 2016 and 2015 by each of our named executive officers:

Name and Principal Position	Year	Salary (\$)		Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$)	Total (\$)
		(1)	Bonus (\$)					
Paolo Pucci	2017	498,718	—	—	634,860	248,568	8,742	1,390,888
Chief Executive Officer	2016	489,345	—	—	548,208	255,438	8,550	1,301,541
	2015	489,345	—	—	285,948	293,607	8,550	1,077,450
Peter S. Lawrence	2017	447,140	—	—	350,267	167,279	8,742	973,428
President, Chief Operating Officer, General Counsel and Secretary	2016	430,286	—	—	274,104	168,597	8,550	881,536
	2015	421,562	—	—	160,571	189,990	8,550	780,673
Dr. Brian Schwartz	2017	445,121	—	—	275,106	148,021	8,742	876,991
Chief Medical Officer and Senior Vice President	2016	428,001	—	—	237,557	149,187	8,550	823,295
	2015	410,991	—	—	107,780	164,884	8,550	692,205
Robert J. Weiskopf	2017	316,684	—	—	183,369	105,310	8,742	614,105
Chief Financial Officer and Treasurer	2016	305,000	—	—	137,052	92,873	8,550	543,475
	2015	288,372	—	—	91,876	106,750	8,550	495,548

- (1) The amounts in this column include compensation earned but deferred at the election of the named executive officer, under the Company's retirement savings plan established under Section 401(k) of the Tax Code.
- (2) This column reflects the aggregate grant date fair values for all option awards granted during the fiscal year. Assumptions used in the calculation of these amounts are included in Note 2 to the Company's audited financial statements for the year ended December 31, 2017, included in the Company's 2017 Annual Report on Form 10-K. Additional information regarding stock options issued to the named executive officers is provided in the table "Outstanding Equity Awards at Fiscal Year-End".
- (3) Represents bonus amounts earned under our annual incentive program for 2017 and paid in the first quarter of 2018. Additional information regarding the annual incentive program is provided in "Compensation Discussion and Analysis—Performance-Based Bonuses".
- (4) In 2017, for each named executive officer, the amount includes the Company's contributions to a 401(k) plan account for the executive and payment of group term life insurance and long-term disability premiums.

EMPLOYMENT AGREEMENTS

The Company is party to employment agreements with several of its named executive officers. A summary of the material terms of these agreements follows below. For information regarding the post-employment and change of control benefits provided by these agreements, see “Payments upon Termination or Change of Control”.

Employment Agreement with Paolo Pucci

Mr. Pucci’s employment agreement, as amended, provides that the Company will employ Mr. Pucci as its Chief Executive Officer at a base salary of \$475,000. The base salary is subject to annual review and upward adjustment by the Company. Mr. Pucci is also eligible to receive a discretionary annual cash bonus based on a current target amount of 60% of his base salary. The award of a bonus is in the discretion of the Board based on Company and individual performance.

Employment Agreement with Peter S. Lawrence

Mr. Lawrence’s employment agreement, as amended, provides that the Company will employ Mr. Lawrence as President and Chief Operating Officer at an initial base salary of \$375,000 per year. The base salary is subject to annual review and upward adjustment by the Company. Mr. Lawrence is also eligible to receive a discretionary annual cash bonus based on a current target amount of 45% of his base salary. The award of a bonus is in the discretion of the Company’s Board based on Company and individual performance.

Employment Agreement with Brian Schwartz

Dr. Schwartz’s employment agreement, as amended, provides that the Company will employ Dr. Schwartz as its Chief Medical Officer at an initial base salary of \$325,000. The base salary is subject to annual review and upward or downward adjustment by the Company. Dr. Schwartz is also eligible to receive a discretionary annual cash bonus based on a current target amount of 40% of base salary. The award of a bonus is in the discretion of the Company’s Board based on Company and individual performance.

GRANTS OF PLAN-BASED AWARDS FOR FISCAL YEAR 2017

The following table sets forth certain information with respect to awards granted during the fiscal year ended December 31, 2017 to our named executive officers under our equity and non-equity incentive plans.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards(1)			All Other Option Awards: Number of Securities Underlying Options (#)	Grant Date Fair Value of Stock and Option Awards (\$)
		Threshold (\$)	Target (\$)	Maximum (\$)		
Paolo Pucci	N/A	—	303,971	455,957		
	01/17/2017				300,000	281,460
	04/04/2017				600,000	353,400
Peter S. Lawrence	N/A	—	206,579	309,869		
	01/17/2017				185,000	173,567
	04/04/2017				300,000	176,700
Dr. Brian Schwartz	N/A	—	182,797	274,195		
	01/17/2017				130,000	121,966
	04/04/2017				260,000	153,140
Robert J. Weiskopf	N/A	—	130,052	195,078		
	01/17/2017				95,000	89,129
	04/04/2017				150,000	88,350

- (1) The threshold amount under the cash bonus program is zero. The target amount is based on the individual's current salary. The target represents 60%, 45%, 40% and 40% of the base salaries of Mr. Pucci, Mr. Lawrence, Dr. Schwartz and Mr. Weiskopf, respectively. The maximum amount is 150% of the target amount.

OUTSTANDING EQUITY AWARDS AT 2017 FISCAL YEAR-END

The following table sets forth certain information with respect to the value of all unexercised options previously awarded to our named executive officers as of December 31, 2017:

Name	Number of Securities Underlying Unexercised Options (#)(1) Exercisable	Number of Securities Underlying Unexercised Options (#)(1) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Equity Incentive Plan Awards: Number of Shares, Units or Other Rights that Have Not Vested	Equity Incentive Plan Awards: Market or Payout Value of Shares, Units or Other Rights that Have Not Vested(2)
Paolo Pucci	500,000		\$ 3.95	6/9/2018		
	225,000		3.42	1/21/2020		
	100,000		4.14	7/15/2020		
	300,000		6.70	1/24/2021		
	315,000		7.95	2/1/2022		
	285,000		2.51	1/14/2023		
	228,750	76,250	2.57	1/22/2024		
	97,502	195,000	1.16	1/20/2025		
	120,000	360,000	1.79	1/19/2026		
		300,000	1.53	1/17/2027		
		600,000	0.95	4/4/2027		
	Peter S. Lawrence	200,000		4.75	1/17/2018	
130,000			3.42	1/21/2020		
130,000			6.70	1/24/2021		
25,000			6.70	1/24/2021		
147,750			7.95	2/1/2022		
123,500			2.51	1/14/2023		
105,375		35,125	2.57	1/22/2024		
84,500		84,500	1.16	1/20/2025		
25,000		25,000	1.16	1/20/2025		
60,000		180,000	1.79	1/19/2026		
		150,000	1.53	1/17/2027		
		35,000	1.53	1/17/2027		
	300,000	0.95	4/4/2027			
Dr. Brian Schwartz	200,000		3.62	7/14/2018		
	90,000		3.42	1/21/2020		
	90,000		6.70	1/24/2021		
	50,000		6.70	1/24/2021		
	109,500		7.95	2/1/2022		
	85,500		2.51	1/14/2023		
	79,875	26,625	2.57	1/22/2024		
	58,500	58,500	1.16	1/20/2025		
	15,000	15,000	1.16	1/20/2025		
	52,000	156,000	1.79	1/19/2026		
		130,000	1.53	1/17/2027		
		260,000	0.95	4/4/2027		

Name	Number of Securities Underlying Unexercised Options (#)(1) Exercisable	Number of Securities Underlying Unexercised Options (#)(1) Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Equity Incentive Plan Awards: Number of Shares, Units or Other Rights that Have Not Vested	Equity Incentive Plan Awards: Market or Payout Value of Shares, Units or Other Rights that Have Not Vested(2)
Robert J. Weiskopf	22,500		4.75	1/17/2018		
	45,000		3.42	1/21/2020		
	45,000		6.70	1/24/2021		
	40,500		7.95	2/01/2022		
	42,750		2.51	1/14/2023		
	36,187	12,063	2.57	1/22/2024		
	29,250	29,250	1.16	1/20/2025		
	10,000	10,000	1.16	1/20/2025		
	15,000	15,000	1.80	6/01/2025		
	30,000	90,000	1.79	1/19/2026		
		75,000	1.53	1/17/2027		
		20,000	1.53	1/17/2027		
		160,000	0.95	4/4/2027		

- (1) Except as otherwise noted, each option award vests at the rate of one-fourth of the underlying shares annually beginning on the anniversary of the date of grant.
- (2) Market value is calculated as the number of shares of unvested stock awarded times the market price on the date of award.

OPTION EXERCISES AND STOCK VESTED IN FISCAL YEAR 2017

The table below sets forth certain information regarding stock option exercises and vested stock awards for the Company's executive officers during the last fiscal year.

Name	Number of Securities Acquired on Exercise	Value Realized Upon Exercise (\$)	Number of Shares Acquired on Vesting	Value Realized on Vesting (\$)(1)
Peter S. Lawrence	—	—	6,250	9,875
Dr. Brian Schwartz	—	—	7,500	11,850
Robert J. Weiskopf	—	—	3,200	5,056

- (1) On January 14, 2013, Mr. Lawrence, Dr. Schwartz and Mr. Weiskopf were awarded 25,000, 30,000 and 12,799 shares of restricted stock, respectively, the restrictions on 25% of which lapsed on each of the next four anniversaries of the award date. The fair market value of the Company's Common Stock was \$1.58 on January 14, 2017.

CEO Pay Ratio—8.3:1

We believe our executive compensation program must be consistent and internally equitable to motivate our employees to perform in ways that enhance shareholder value. We are committed to internal pay equity, and the Compensation Committee monitors the relationship between the pay of our executive officers and the pay of our non-executive employees. The Compensation Committee reviewed a comparison of our CEO's annual total compensation in fiscal year 2017 to that of all other Company employees for the same period. The calculation of annual total compensation of all employees was determined in the same manner as the "Total Compensation" shown for our CEO in the "Summary Compensation Table" in this proxy. Pay elements that were included in the annual total compensation for each employee are:

- salary received in fiscal year 2017
- annual bonus payment received in fiscal year 2017
- grant date fair value of annual stock option awards granted in 2017
- grant date fair value of performance stock option awards granted in fiscal year 2017
- Company-paid 401(k) Plan match made during fiscal year 2017
- Company-paid life insurance premiums during fiscal year 2017

Our calculation includes all employees as of December 31, 2017.

We determined the compensation of our median employee by: (i) calculating the annual total compensation described above for each of our employees, (ii) ranking the annual total compensation of all employees except for the CEO from lowest to highest (a list of 30 employees), and (iii) since we have an even number of employees when not including the CEO, determining the average of the annual total compensation of the two employees ranked fifteen and sixteen on the list ("Median Employee").

The annual total compensation for fiscal year 2017 for our CEO was \$1,391,498, and for the Median Employee was \$166,959. The resulting ratio of our CEO's pay to the pay of our Median Employee for fiscal year 2017 is 8.3 to 1.

PAYMENTS UPON TERMINATION OR CHANGE OF CONTROL

The Company has employment agreements with Mr. Pucci, Mr. Lawrence and Dr. Schwartz. Each of these employment agreements provides for the payment of severance and change of control benefits. The following discussion and table provide information about the severance and change of control provisions of these employment agreements, and are qualified by reference to the full text of the agreements, as amended, each of which is on file with the SEC.

The following terms are used in the discussion below:

- “*Change of Control*” means any of the following:
 - the acquisition by any person or entity of our Common Stock so that such person or entity holds or controls 50% or more of our outstanding Common Stock;
 - the merger or consolidation of the Company with or into any other entity in circumstances where the holders of the Company’s outstanding shares of capital stock before the transaction do not retain stock representing a majority of the voting power of the surviving entity;
 - a sale of all or substantially all of the assets of the Company to a third party;
 - within any 24-month period, the election by the Company’s stockholders of 20% or more of the Company’s directors other than pursuant to nomination by management; or
 - the execution of an agreement approved by the Board providing for any of the above.
- “*Cause*” means any of the following:
 - arbitrary, unreasonable, or willful failure of the executive to follow the reasonable instructions of the Chief Executive Officer (or, in the case of the Chief Executive Officer, the Board), or otherwise perform his or her duties;
 - willful misconduct by the executive that is materially injurious to the Company;
 - willful commission by the executive of an act constituting fraud with respect to the Company;
 - conviction of the executive for a felony under state or federal law; or
 - material breach by the executive of his or her obligations to the Company regarding confidentiality of information or rights in intellectual property.
- Termination “*without Cause*” means any of the following occurrences:
 - the Company terminates the executive’s employment without Cause; or
 - the executive terminates his employment upon the occurrence of any of the following: (a) the Company substantially reduces or diminishes the executive’s responsibilities or title without cause; (b) the Company reduces the executive’s base salary or bonus target (other than in connection with a Company-wide decrease in salary or bonus, respectively); (c) the Company materially breaches any of its obligations to the executive under his or her employment agreement, and fails to cure such breach; (d) the Company relocates the executive’s place of employment without his or her consent by a distance of more than fifty (50) miles; or (e) a successor in interest to the Company fails to assume the obligations of the employment agreement.
- In the case of Mr. Pucci, Termination without Cause shall also occur if, following a Change of Control, the executive terminates his employment:
 - because the executive is unable to have direct responsibility for the Company’s fully-integrated profit and loss statement (whether as a stand-alone entity or as a division or other business unit of some other acquiring entity); or

- because of the exclusion from, or failure to appoint the executive to, the board of directors, or the executive committee, management committee or equivalent corporate managerial body of senior executives, of the acquiring company.

Employment Agreement with Paolo Pucci

Mr. Pucci's agreement, as amended, provides for continued employment until April 4, 2020. If Mr. Pucci is terminated without Cause, the Company will be required to pay Mr. Pucci an amount equal to twenty-four months of his base salary in effect at the time of termination, plus an amount equal to the total of bonuses paid to him with respect to the two years preceding the year in which he is terminated. These amounts will be paid in substantially equal installments according to the Company's normal payroll schedule during the twenty-four month period following termination. In addition, the Company will, at its expense, continue to provide Mr. Pucci with certain employee benefits for a period of twenty-four months from the date of termination. Finally, all of Mr. Pucci's unvested stock options and restricted stock that would have become exercisable or vested within one year from the termination date will immediately become exercisable or vested free of restrictions without regard to the original vesting schedule. The employment agreement further provides that, if the Company terminates (or is deemed to terminate) Mr. Pucci's employment with the Company without Cause within one year following a Change of Control of the Company, in addition to the severance benefits described above, any then unvested stock options will become immediately exercisable without regard to the original vesting schedule and any shares of restricted stock previously granted shall immediately be free and clear of any restrictions.

Employment Agreement with Peter S. Lawrence

Mr. Lawrence's employment agreement, as amended, provides for continued employment until April 4, 2020. If Mr. Lawrence is terminated without Cause, he is entitled, subject to the execution of a general release of claims, to a lump sum severance payment equal to twelve months' base salary as of the date of termination, plus the average of the annual performance bonuses that he received in the preceding two years. In addition, 50% of any then unvested options that were granted at the time that the employment agreement was originally executed will become immediately exercisable on the termination date, and the Company will pay, for the twelve-month period following the date of termination, the cost of continuing the health and other employee benefits that Mr. Lawrence is entitled to receive under his employment agreement at the level in effect as of the termination date. The employment agreement further provides that, if the Company terminates (or is deemed to terminate) Mr. Lawrence's employment with the Company without Cause within one year following a Change of Control of the Company, in addition to the severance benefits described above, any then unvested options held by Mr. Lawrence will become immediately exercisable and any shares of restricted stock previously granted shall immediately be free and clear of any restrictions.

Employment Agreement with Brian Schwartz

Dr. Schwartz's employment agreement provides for continued employment until April 4, 2020. If Dr. Schwartz is terminated without Cause, he is entitled, subject to the execution of a general release of claims, to a severance payment equal to twelve months' base salary as of the date of termination, plus the average of the annual performance bonuses that he received in the preceding two years. This amount will be paid in substantially equal installments according to the Company's normal payroll schedule during the twelve-month period following termination. In addition, the Company will pay, for the 12-month period following the date of termination, the cost of continuing the benefits that Dr. Schwartz is entitled to receive under his employment agreement at the level in effect as of the termination date. The employment agreement further provides that, if the Company terminates (or is deemed to terminate) Dr. Schwartz's employment with the Company without Cause within one year following a Change of Control of the Company, in addition to the severance benefits described above, any then unvested stock options will become immediately exercisable without regard to the original vesting schedule and any shares of restricted stock previously granted shall immediately be free and clear of any restrictions.

The following table sets forth information with respect to compensation that would have been payable to Mr. Pucci, Mr. Lawrence and Dr. Schwartz if the named executive officer's employment had been terminated without Cause as of December 31, 2017 immediately following a Change of Control of the Company:

Name	Cash Payment(1) (\$)	Equity Acceleration (\$)	Benefits and Perquisites(2) (\$)	Total (\$)
Paolo Pucci	\$1,540,439	\$551,550	\$48,870	\$2,140,859
Peter S. Lawrence	649,410	285,855	24,435	959,700
Dr. Brian Schwartz	624,186	233,615	24,435	882,236

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- (1) For Mr. Pucci, the cash payment is calculated as the sum of an amount equal to two times his annual salary as of December 31, 2017, plus a bonus payment equal to the sum of the 2016 and 2017 bonuses. For each of Mr. Lawrence and Dr. Schwartz, the cash payment is calculated as the sum of the executive's annual salary as of December 31, 2017, plus a bonus payment equal to 45% and 40%, respectively, of annual salary.
- (2) For Mr. Pucci, reflects the premiums for twenty-four months for group medical, dental, life and disability programs. For each of Mr. Lawrence and Dr. Schwartz, reflects the premiums for twelve months for group medical, dental, life and disability programs. Amounts are based on the premiums in effect at December 31, 2017.

REPORT OF THE AUDIT COMMITTEE

In the course of its oversight of the Company's financial reporting process, the Audit Committee of the Board of Directors has:

- reviewed and discussed with management the Company's audited financial statements for the fiscal year ended December 31, 2017;
- discussed with our independent registered public accounting firm, PricewaterhouseCoopers LLP, matters required to be discussed under Public Company Accounting Oversight Board standards;
- received the written disclosures and the letter from PricewaterhouseCoopers LLP pursuant to applicable requirements of the Public Company Accounting Oversight Board regarding the independent accountant's communications with the Audit Committee concerning independence;
- discussed with PricewaterhouseCoopers LLP the firm's independence; and
- considered whether the provision of non-audit services by PricewaterhouseCoopers LLP is compatible with maintaining independence.

Based on the foregoing review and discussions, the Audit Committee recommended to the Board of Directors that the Company's audited financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 for filing with the SEC.

By the Audit Committee,

Timothy C. Barabe, Chairman
William G. Messenger
Patrick J. Zenner

**PROPOSAL 2—APPROVAL OF A PROPOSED AMENDMENT TO OUR
RESTATED CERTIFICATE OF INCORPORATION
TO INCREASE OUR AUTHORIZED SHARES OF COMMON STOCK**

Overview

Our Restated Certificate of Incorporation currently authorizes us to issue a total of 100,000,000 shares of Common Stock, \$0.01 par value, and 1,000,000 shares of Preferred Stock, \$0.01 par value. Our Board of Directors has approved, and is seeking stockholder approval of, an amendment to our Restated Certificate of Incorporation, substantially in the form attached hereto as Appendix A (the “Amendment”), to increase the number of shares of authorized Common Stock from 100,000,000 shares to 200,000,000 shares. Of the 100,000,000 shares of Common Stock currently authorized, as of March 16, 2018, approximately 99,500,000 of these shares were issued and outstanding or reserved for issuance under outstanding securities, including stock options and warrants. As of March 16, 2018, 87,110,202 shares are issued and outstanding, 12,013,290 shares are reserved for issuance upon exercise of existing stock options and purchase warrants, and 337,081 shares are reserved for future issuance under existing equity incentive awards. Therefore, we currently have limited authorized shares of Common Stock available for future issuance.

The Board has unanimously determined that the Amendment is advisable and in the best interests of the Company and our stockholders, and recommends that our stockholders approve the Amendment. In accordance with the General Corporation Law of the State of Delaware, we are hereby seeking approval of the Amendment by our stockholders.

No changes to the Restated Certificate of Incorporation are being proposed with respect to the number of authorized shares of Preferred Stock. Other than the proposed increase in the number of authorized shares of Common Stock, the Amendment is not intended to modify the rights of existing stockholders in any material respect. The additional shares of Common Stock to be authorized pursuant to the proposed amendment will be of the same class of Common Stock as is currently authorized.

Under the Delaware General Corporation Law, our stockholders are not entitled to appraisal rights with respect to the Amendment.

Reasons for the Amendment

The Board believes that it is prudent to increase the authorized number of shares of Common Stock in order to maintain a reserve of shares available for immediate issuance to meet business needs, such as equity offerings, equity awards to employees and strategic acquisition opportunities promptly as they arise. In addition, the Board agreed to seek stockholder approval of this amendment to facilitate a conversion of the Company’s outstanding Preferred Stock.

On November 3, and November 5, 2017, we sold 8,370 shares of Preferred Stock and warrants (the “Warrants”) to purchase up to 2,260 shares of Preferred Stock (the “Warrant Shares”). The Company sold the Preferred Stock and the Warrants together at a price per unit of \$1,135 to certain institutional investors. By no later than May 31, 2018, we agreed to seek stockholder approval of an amendment to the Certificate to increase the number of authorized shares of Common Stock. Upon the effectiveness of that amendment, each share of Preferred Stock automatically will convert into 1,000 shares of Common Stock and each Warrant covering a share of Preferred Stock will be exercisable for 1,000 shares of Common Stock at an exercise price of \$1.75 per share.

If our stockholders do not approve the Amendment, the Preferred Stock will remain outstanding. Beginning July 1, 2018, each share of Preferred Stock will be entitled to receive a dividend, payable in additional Preferred Stock, equal to 10 percent per annum of each share of Preferred Stock’s stated value per share. The preferred dividends will be payable quarterly in arrears. Dividends do not accrue or cumulate.

Prior to conversion, the Preferred Stock will vote together as a single class with the shares of Common Stock on each matter submitted to a vote of the stockholders. Each share is entitled to 1,000 votes.

In determining the size of the proposed authorized share increase, the Board considered a number of factors, including the advice of its external advisors, industry norms, shares issued in connection with the conversion of the Preferred Stock and Warrants, future issuance under its equity plans and the long-term need for additional shares in connection with potential future equity financing, acquisitions and other transactions.

Other than issuances pursuant to the conversion of the Preferred Stock and Warrants, equity incentive plans and currently outstanding warrants, as of the date of this Proxy Statement, we have no current plans, arrangements or understandings regarding the issuance of any additional shares of Common Stock that would be authorized pursuant to this proposal and there are no negotiations pending with respect to the issuance thereof for any purpose. The Board of Directors does not intend to issue any Common Stock except on terms which the Board deems to be in the best interests of the Company and its then existing stockholders.

Potential Effects of the Amendment

The proposed increase in the number of authorized shares of Common Stock will not have any immediate effect on the rights of our existing stockholders. The Board will have the authority to issue the additional shares of Common Stock without requiring future stockholder approval of such issuances, except as may be required by applicable law or rules of any stock exchange on which our securities may be listed. The issuance of additional shares of Common Stock will decrease the relative percentage of equity ownership of our existing stockholders, thereby diluting the voting power of their Common Stock, and, depending on the price at which additional shares may be issued, could also be dilutive to the earnings per share of our Common Stock.

It is possible that a subsequent issuance of these shares could have the effect of delaying or preventing a change in control of the Company. Shares of authorized and unissued Common Stock could, within the limits imposed by applicable law, be issued in one or more transactions that would make a change in control of the Company more difficult, and therefore, less likely. Issuances of additional shares of our stock could dilute the earnings per share and book value per share of our outstanding Common Stock and dilute the stock ownership or voting rights of a person seeking to obtain control of the Company. While it may be deemed to have potential anti-takeover effects, the proposal to increase the authorized Common Stock is not prompted by any specific effort of which we are aware to accumulate shares of our Common Stock or obtain control of the Company.

The additional authorized shares of Common Stock, if and when issued, would be part of the existing class of Common Stock and would have the same rights and privileges as the shares of Common Stock currently outstanding. Stockholders do not have preemptive rights with respect to our Common Stock. Therefore, should the Board determine to issue additional shares of Common Stock, existing stockholders would not have any preferential rights to purchase such shares in order to maintain their proportionate ownership thereof.

Effectiveness of the Amendment

If the Amendment is approved by our stockholders, it will become effective upon the filing of an amendment to our Restated Certificate of Incorporation, which filing is expected to occur promptly after stockholder approval of this proposal.

Vote Required

The affirmative votes of (i) a majority of the issued and outstanding shares of Common Stock and Preferred Stock, voting together as a single class, and (ii) a majority of the issued and outstanding shares of Common Stock, voting without the Preferred Stock, are required to approve the Amendment. Abstentions and “broker non-votes” will not be counted as having been voted on the proposal and, therefore, will have the same effect as negative votes.

**OUR BOARD OF DIRECTORS RECOMMENDS THAT THE STOCKHOLDERS
VOTE “FOR” THE AMENDMENT.**

PROPOSAL 3—APPROVAL OF OUR 2018 EMPLOYEE STOCK PURCHASE PLAN**General**

On March 6, 2018, the Board unanimously approved the 2018 Employee Stock Purchase Plan (the “Employee Stock Purchase Plan” or “Plan”), which will become effective only upon its approval by our stockholders at the Annual Meeting. The purpose of the Employee Stock Purchase Plan is to provide employees of the Company with an opportunity to purchase Common Stock of the Company through their accumulated payroll deductions and lump sum contributions. The Purchase Plan is intended to qualify as an “employee stock purchase plan” under Section 423 of the Tax Code.

Summary of the Employee Stock Purchase Plan

A summary of the material terms of the Employee Stock Purchase Plan is set forth below and is qualified, in its entirety, by the full text of the Plan set forth in Appendix B to this Proxy Statement. A copy of the Employee Stock Purchase Plan can be obtained from us at no charge upon request.

Administration

The Employee Stock Purchase Plan will be administered by the Compensation Committee. All questions of interpretation of the Employee Stock Purchase Plan are determined by the Compensation Committee, whose decisions are final and binding upon all participants.

Authorized Shares

If this Proposal No. 3 is approved at the Annual Meeting, 500,000 shares of our Common Stock will initially be reserved for issuance under the Employee Stock Purchase Plan, subject to appropriate adjustments in the event of any stock dividend, stock split, reverse stock split, combination, reclassification or any other increase or decrease in the number of shares of our Common Stock effected without receipt of consideration. Appropriate adjustments also may be made in the event of a merger, sale of assets or other reorganization of the Company.

Eligibility

Subject to certain limitations imposed by Section 423(b) of the Tax Code, any person who is employed by the Company (or any subsidiary designated by the Board or the Compensation Committee) as of the commencement of an offering period is eligible to participate in the offering period. Eligible employees may become participants in the Employee Stock Purchase Plan by delivering to the Company a subscription agreement for the applicable offering period at the time prescribed by the Compensation Committee. As of January 18, 2018, most of the Company’s 32 employees, including all current executive officers, were eligible to participate in the Employee Stock Purchase Plan.

Offering Periods

The Employee Stock Purchase Plan is implemented by a series of six-month offering periods beginning each May 1st and November 1st of each year. The Compensation Committee generally may change the dates or duration of any offering period without stockholder approval, but no offering period may exceed 27 months in duration.

Option Price

The option price per share offered under the Employee Stock Purchase Plan in any given offering period is the lower of (i) 85% of the fair market value of a share of our Common Stock on the first day of the offering period containing the exercise date, or (ii) 85% of the fair market value of a share of Common Stock on the exercise date (*i.e.*, the last day) of the offering period. The Compensation Committee generally may increase the exercise price of shares offered under the Plan during any offering period without stockholder approval. The fair market value of our Common Stock on a given date is the closing sale price of our Common Stock on such date as reported by the NASDAQ Global Market or on any successor stock exchange on which the shares of Common Stock then trade.

Contributions; Payroll Deductions

The purchase price for shares under the Plan is the participant's accumulated payroll deductions and lump sum contributions during each offering period.

Grant and Exercise of Purchase Right

In general, the maximum number of shares subject to purchase by a participant for any offering period is that number determined by dividing the Participant's total accumulated contributions as of the exercise date for the offering period by the option price for the offering period. However, the maximum number of shares a participant may purchase on any exercise date is equal to 15% of the participant's annual rate of compensation as of the date the participant elected to participate in the Plan for the offering period, divided by the option price for the offering period. Unless a participant withdraws from the Employee Stock Purchase Plan, the participant's right to purchase shares is exercised automatically on each exercise date for the maximum number of whole shares that may be purchased at the applicable option price.

No employee will be permitted to subscribe for shares under the Employee Stock Purchase Plan if, immediately after the grant of a purchase right, the employee would own stock and/or hold purchase rights covering 5% or more of the voting securities of the Company. Further, no employee may be granted a purchase right which would permit the employee to accrue a right to purchase more than \$25,000 worth of stock (determined by the fair market value of the shares at the time the purchase right is granted) for each calendar year in which the purchase right is outstanding at any time.

As soon as practicable following each exercise date, an account established for the benefit of each participant at a bank, brokerage firm or otherwise will be credited, in book entry form, with the number of shares purchased by the participant on such exercise date.

Withdrawal; Termination of Employment

A participant may withdraw all, but not less than all, accumulated contributions credited to the participant's account, but not yet used to exercise a purchase right under the Plan, at any time prior to the exercise date of an offering period with such advance notice as the Compensation Committee may prescribe.

If a participant's employment is terminated for any reason, his or her participation in the Plan will terminate immediately and the balance, if any, in his or her contribution account will be returned in cash, without interest.

Transferability

No rights or accumulated contributions of a participant under the Employee Stock Purchase Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or pursuant to the Employee Stock Purchase Plan) and any attempt to so assign or transfer will be treated by the Compensation Committee as an election to withdraw from the Employee Stock Purchase Plan.

Adjustments upon Changes in Capitalization

In the event any change is made in the Company's capitalization pursuant to a stock split or any other increase or decrease in the number of shares of Common Stock effected without receipt of consideration by the Company, proportionate adjustments may be made by the Compensation Committee to the number of shares authorized for issuance under the Employee Stock Purchase Plan, the maximum number of shares of our Common Stock that may be purchased on any exercise date, the number of shares subject to each outstanding purchase right, and in the option price per share.

Amendment or Termination

The Board may at any time and for any reason amend or terminate the Employee Stock Purchase Plan, except that (other than in limited circumstances set forth in the Employee Stock Purchase Plan) no amendment may make any change in any purchase right previously granted that adversely affects a

participant's rights. Stockholder approval must be obtained for any amendment to the extent necessary to comply with applicable law. Under its current terms, the Employee Stock Purchase Plan will expire when all reserved shares of Common Stock have been issued, unless stockholders have approved an increase in the number of reserved shares.

Federal Tax Information

The Employee Stock Purchase Plan is designed to qualify as an employee stock purchase plan under Section 423 of the Tax Code. A general summary of the federal income tax consequences regarding the Employee Stock Purchase Plan is stated below. The tax consequences of participating in the Employee Stock Purchase Plan may vary with respect to individual situations.

Neither the grant nor the exercise of options under the Employee Stock Purchase Plan will have a tax impact on the participant or on us. If a participant disposes of the Common Stock acquired upon the exercise of his options after at least two years from the date of grant and one year from the date of exercise, then the participant must treat as ordinary income the amount by which the lesser of (i) the fair market value of the Common Stock at the time of disposition, or (ii) the fair market value of the Common Stock at the date of grant, exceeds the purchase price. Any gain in addition to this amount will be treated as a capital gain. If a participant holds Common Stock at the time of his or her death, the holding period requirements are automatically deemed to have been satisfied and he or she will realize ordinary income in the amount by which the lesser of (i) the fair market value of the Common Stock at the time of death, or (ii) the fair market value of the Common Stock at the date of grant, exceeds the purchase price. We will not be allowed a deduction if the holding period requirements are satisfied. If a participant disposes of Common Stock before expiration of two years from the date of grant and one year from the date of exercise, then the participant must treat as ordinary income the excess of the fair market value of the Common Stock on the date of exercise of the option over the purchase price. Any additional gain will be treated as long-term or short-term capital gain or loss, as the case may be. We will be allowed a deduction equal to the amount of ordinary income recognized by the participant.

Vote Required

The affirmative vote of a majority of the total votes cast by the stockholders present at the meeting, in person or by proxy, is necessary for approval of the amendment to the Purchase Plan. If you submit a proxy without direction as to a vote on this matter, the proxy will be voted "FOR" the proposal. Abstentions and broker non-votes will not be treated as votes cast and will have no effect on the outcome of the vote on this proposal.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THIS PROPOSAL.

PROPOSAL 4—APPROVAL OF AMENDMENT TO OUR 2014 EQUITY INCENTIVES PLAN

General

We are asking our stockholders to approve a 3,750,000 share increase in the aggregate number of shares of Common Stock that may be issued under our 2014 Equity Incentives Plan, referred to as the 2014 Plan. The Board approved this increase available for grants and awards under the 2014 Plan in January 2018.

The following summary of the material terms of the 2014 is qualified by reference to the full text of the 2014 Plan a copy of which is attached hereto as Appendix C. A copy of the 2014 Plan also may be obtained by writing to:

Robert J. Weiskopf
Chief Financial Officer and Treasurer
ArQule, Inc.
One Wall Street
Burlington, Massachusetts 01803-4757

The 2014 Plan currently permits us to authorize the granting of awards to our directors, employees and consultants in any of the following forms:

- options to purchase shares of Common Stock, which may be non-statutory stock options or incentive stock options;
- stock appreciation rights, which give the holder the right to receive the difference between the fair market value per share of Common Stock on the date of exercise over the grant price;
- performance shares vesting upon the attainment of specified performance goals;
- restricted stock, which is subject to restrictions on transferability and subject to forfeiture on terms set by the Compensation Committee;
- stock units, which represent the right to receive shares of Common Stock in the future, subject to terms, restrictions, conditions, performance criteria, vesting requirements and payment rules as set by the Compensation Committee; and
- other stock-based awards in the discretion of the Compensation Committee, including convertible Preferred Stock, convertible debentures, exchangeable securities and Common Stock awards or options.

The 2014 Plan also allow us to make cash awards under specified circumstances.

To date, we have granted only incentive stock options, non-statutory stock options, restricted stock and stock units under the 2014 Plan. Currently, we plan to issue only stock options and restricted stock under the 2014 Plan but wish to retain the flexibility to make awards in other forms.

Common Stock Available under the 2014 Plan

We are seeking stockholder approval to increase the aggregate number of shares of Common Stock that we currently may issue under the 2014 Plan by 3,750,000 shares. If stockholders approve this increase, the aggregate number of shares that will be available for grants and awards under the 2014 Plan will be 7,500,000, plus an undetermined number of shares subject to awards made under the terminated 1994 Equity Incentive Plan that otherwise would have been returned to that plan on account of the expiration, cancellation or forfeiture of awards. As of March 16, 2018, options to purchase an aggregate of 5,595,350 shares of Common Stock have been granted pursuant to the 2014 Plan. Options to purchase 425,750 shares have been cancelled, options to purchase 97,498 shares have been exercised, and options to purchase 5,072,102 shares remain outstanding.

Under the 2014 Plan, the number of shares of Common Stock available for grants and awards is calculated as follows:

- To the extent that any award is forfeited, or any stock option or stock appreciation right terminates, expires or lapses without being exercised, the shares subject to those awards not delivered are again available for awards under the 2014 Plan.
- Shares tendered or withheld to pay the exercise price of a stock option or to pay tax withholding for restricted stock will count against shares authorized but unissued under the 2014 Plan and will not be added back to the shares available under the 2014 Plan. When a stock appreciation right is exercised and settled for shares, the number of shares subject to the grant will be counted against the number of shares available for issuance under the 2014 Plan regardless of the number of shares used to settle the stock appreciation right upon exercise.
- For any two (2) shares of Common Stock issued in connection with a full value award, i.e., performance shares, restricted stock, stock units or other stock-based awards, three (3) fewer shares of Common Stock will be available for issuance in connection with options and future stock awards under the 2014 Plan.

Administration and Eligibility

The selection of persons who will receive awards under the 2014 Plan and the sizes and types of awards will be generally determined by the Compensation Committee. All of the Company's directors and employees are eligible to participate in the 2014 Plan. As of January 18, 2018, the Company had 32 employees. Consultants of the Company or any affiliate, who are capable of contributing significantly to the successful performance of the Company, are also eligible to participate in the 2014 Plan, but only for awards other than incentive stock options.

Awards under the 2014 Plan will be either granted at the discretion of the Compensation Committee, with ratification of the Compensation Committee's actions by the Board or recommended by the Compensation Committee for approval by the Board. The Compensation Committee determines the recipients and, within the limits of the 2014 Plan, establishes the terms and conditions of each award. In the case of stock options, the terms and conditions include the exercise price, the form of payment of the exercise price, the number of shares subject to the option, and the dates at which the option becomes exercisable. However, the exercise price of any incentive stock option granted under the 2014 Plan may not be less than the fair market value of the Common Stock on the date of grant and the term of any such option cannot be greater than 10 years. The Compensation Committee determines the exercise price of any non-statutory stock option. In the case of restricted stock, the terms and conditions include the restrictions on ownership and the dates upon which the restrictions lapse.

The exercise price of any stock option (non-statutory and incentive) granted under the 2014 Plan will not be less than 100% of the fair market value of the Common Stock on the date of grant and the term of any such option or stock appreciation right will not be greater than 10 years.

Subject to certain limitations, the Compensation Committee or the Board may delegate to one or more of our executive officers the power to make awards to participants who are not subject to Section 16 of the Exchange Act. The Board has granted such authority to Mr. Pucci and Mr. Lawrence.

Adjustments to Reflect Certain Events and Transactions

If the outstanding Common Stock of the Company changes as a result of a stock dividend, stock split, extraordinary cash dividend, recapitalization, reorganization, split-up, spin-off, combination, exchange of shares, or the like, the 2014 Plan permits the Compensation Committee to substitute or adjust: (a) the number and class of securities subject to outstanding awards or the type of consideration to be received upon exercise or payment of an award, (b) the exercise price of options, (c) the aggregate number and class of securities for which awards may be granted under the 2014 Plan, and/or (d) the maximum number of securities with respect to which an employee may be granted awards during any calendar year. In the event of a merger or consolidation to which the Company is a party or other specified transactions, the 2014 Plan

authorizes the Compensation Committee to make such changes and adjustments to outstanding awards as it deems equitable including causing any award to become vested in whole or in part, be assumed by a successor or acquirer, or be cancelled in consideration of a cash payment equal to the fair value of the cancelled award.

Withholding

The Company is generally required to withhold tax on the amount of income recognized by a participant with respect to an award. Withholding requirements may be satisfied, as provided in the agreement evidencing the award, by (a) tender of a cash payment to the Company, (b) withholding of shares of Common Stock otherwise issuable, or (c) delivery to the Company by the participant of unencumbered shares of Common Stock.

Termination and Amendment; Term of Plan

Unless sooner terminated by the Board in accordance with its terms, the 2014 Plan will terminate on May 12, 2024. Once the 2014 Plan is terminated, no further awards may be granted or awarded under the 2014 Plan. Termination of the 2014 Plan will not affect the validity of any awards outstanding on the date of termination.

New Plan Benefits

The following table sets forth all stock options that have been granted to our named executive officers, our current executive officers, our non-executive officer employees and our non-employee directors that are subject to stockholder approval of Proposal 2.

Name of Individual or Identity of Group and Position	Number of Shares Underlying Options
<i>Named Executive Officers and Current Executive Officers</i>	
Paulo Pucci, Chief Executive Officer	249,000
Peter S. Lawrence, President and Chief Operating Officer	124,500
Brian Schwartz, Chief Medical Officer	107,900
Robert J. Weiskopf, Chief Financial Officer	62,250
All current executive officers, as a group (4 persons)	543,650
<i>Non-Employee Directors and Non-Executive Officers</i>	
All current non-employee directors and director nominees, as a group	—
All non-executive officer employees as a group	177,620

The Compensation Committee awarded the options identified above on January 16, 2018, subject to stockholder approval. The exercise price of these options is \$1.75 per share, the closing price of our Common Stock as reported by Nasdaq on the date of grant.

Federal Income Tax Considerations

The following discussion briefly summarizes certain federal income tax consequences of awards under the 2014 Plan and does not attempt to describe all possible federal or any foreign, state, local, or other tax consequences related to awards or tax consequences based upon particular circumstances.

Incentive Stock Options. In general, no taxable income is realized by a participant upon the grant of an Incentive Stock Option (“ISO”). If stock is issued to the participant pursuant to the exercise of an ISO, and if no disqualifying disposition of such shares is made by the participant within two years after the date of grant or within one year after the transfer of such shares to such him or her, then upon the sale of such shares, any amount realized in excess of the option price will be taxed to the participant as a long-term capital gain and any loss sustained will be a long-term capital loss. However, if the participant disposes of the shares acquired on exercise before the later of the second anniversary of the date of grant or one year after the receipt of the shares by the participant (a “Disqualifying Disposition”), the participant generally

would include in ordinary income in the year of the Disqualifying Disposition an amount equal to the excess of the fair market value of the shares at the time of exercise (or, if less, the amount realized on the disposition of the shares), over the exercise price paid for the shares. Subject to certain exceptions, an ISO generally will not be treated as an ISO if it is exercised more than three months following termination of employment. If an ISO is exercised at a time when it no longer qualifies as an ISO, it will be treated for tax purposes as a non-statutory stock option as discussed below.

Non-statutory Stock Options. A participant generally is not required to recognize income on the grant of a non-statutory stock option. Generally, ordinary income is instead required to be recognized on the date the non-statutory stock option is exercised. In general, the amount of ordinary income required to be recognized is the excess, if any, of the fair market value of the shares of Common Stock on the date of exercise over the exercise price.

Restricted Stock. A participant who is granted restricted stock under the 2014 Plan is not required to recognize income with respect to the shares until the shares vest, unless the participant makes a special tax election to recognize income upon award of the shares. In either case, the amount of income the participant recognizes equals the fair market value of the shares of Common Stock at the time income is recognized.

Stock Appreciation Rights, Performance Shares, Stock Units and Other Stock Based Awards. A participant generally is not required to recognize income on the grant of a stock appreciation right, an award of performance shares, an award of stock units, or any other stock based award. Generally, ordinary income is instead required to be recognized upon the issuance of shares and/or cash pursuant to the terms of the award. In general, the amount of ordinary income required to be recognized is the excess, if any, of the amount of cash and the fair market value of any shares received, over the amount, if any, paid for the award.

Deductibility by Company. The Company generally is not allowed a deduction in connection with the grant or exercise of an incentive stock option. However, if a participant is required to recognize ordinary income as a result of a Disqualifying Disposition, the Company generally will be entitled to a deduction equal to the amount of ordinary income so recognized. In general, for a non-statutory stock option (including an incentive stock option that is treated as a non-statutory stock option, as described above), a restricted stock award, a stock appreciation right, a performance shares award, a stock units award, or any other stock-based award, the Company will be allowed to deduct the amount of ordinary income recognized by the participant, provided certain income tax reporting requirements are satisfied.

Performance-Based Compensation. Subject to certain exceptions, Section 162(m) of the Tax Code disallows federal income tax deductions for compensation paid by a publicly-held corporation to certain executives to the extent the amount paid to an executive exceeds \$1 million for the taxable year. Historically, compensation that qualified as “performance-based compensation” under Section 162(m) could be excluded from this \$1 million limit, but this exception has now been repealed, effective for taxable years beginning after December 31, 2017, unless transition relief for certain compensation arrangements in place as of November 2, 2017 is available.

Tax Rules Affecting Nonqualified Deferred Compensation Plans. Section 409A of the Tax Code imposes tax rules that apply to “nonqualified deferred compensation plans.” Failure to comply with, or to qualify for an exemption from, the rules with respect to an award could result in significant adverse tax results to the award recipient including immediate taxation upon vesting, an additional income tax of 20 percent of the amount of income so recognized, plus a tax in the nature of interest. The 2014 Plan is intended to comply with, or qualify for an exemption from, Section 409A of the Tax Code to the extent applicable.

Parachute Payments. Where payments to certain persons that are contingent on a change of control exceed limits specified in the Tax Code, the person generally is liable for a 20 percent excise tax on, and the corporation or other entity making the payment generally is not entitled to any deduction for, a specified portion of such payments. Any award under which vesting is accelerated by a change of control of the Company, would be relevant in determining whether the excise tax and deduction disallowance rules would be triggered.

Vote Required

The affirmative vote of a majority of the total votes cast by the stockholders present at the Annual Meeting, in person or by proxy, is needed to approve the increase in the number of shares that may be issued under the 2014 Plan. If you submit a proxy without direction as to a vote on this matter, your proxy will be treated as a vote “FOR” this proposal. Broker non-votes and abstentions will not be treated as votes cast and will have no effect on the outcome of the vote on this proposal.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THIS PROPOSAL.

**PROPOSAL 5—RATIFICATION OF SELECTION OF INDEPENDENT
REGISTERED PUBLIC ACCOUNTING FIRM**

We are asking our stockholders to ratify the selection by our Audit Committee of PricewaterhouseCoopers LLP, as our independent registered public accounting firm for the fiscal year ending December 31, 2018. PricewaterhouseCoopers LLP has audited our financial statements since our inception.

The Audit Committee of our Board selected PricewaterhouseCoopers LLP to audit our financial statements and internal control over financial reporting for the year ending December 31, 2018. We expect that representatives of PricewaterhouseCoopers LLP will attend our Annual Meeting to respond to appropriate questions. They will also have the opportunity to make a statement if they so desire. PricewaterhouseCoopers LLP has no direct or indirect financial interest in the Company or in any of its subsidiaries, nor has it had any connection with the Company or any of its subsidiaries in the capacity of promoter, underwriter, voting trustee, director, officer or employee.

The following table presents fees billed and expected to be billed for professional audit and audit related services rendered by PricewaterhouseCoopers LLP for fiscal years 2017 and 2016.

	<u>2017</u>	<u>2016</u>
Audit Fees	\$544,000	\$490,000
Audit-Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—
Total	<u>\$544,000</u>	<u>\$490,000</u>

“Audit Fees” are fees for the audit of our financial statements and internal controls over financial reporting, included in our Annual Reports on Form 10-K, the review of interim financial statements included in our Quarterly Reports on Form 10-Q, other services normally associated with statutory and regulatory filings or engagements, and services that generally only the principal auditor can reasonably provide to a client, such as comfort letters, consents and assistance with review of documents to be filed with the SEC. In 2017, these fees included \$82,000 incurred in connection with SEC filings associated with our ATM stock offering in September, 2017, our Common Stock offering in October 2017 and our Preferred Stock offering in November 2017. In 2016, these fees included \$22,000 incurred in connection with the filing of a prospectus supplement with the SEC in March 2016 and a Form S-3 in September 2016, and \$33,000 incurred in connection with filing a Form 8-K with the SEC in October 2016.

The Audit Committee pre-approves each proposed service by PricewaterhouseCoopers LLP on a case-by-case basis. The Audit Committee does not have any pre-approval policies or procedures for PricewaterhouseCoopers LLP’s services. The Audit Committee approved 100% of the audit and audit-related services PricewaterhouseCoopers LLP provided to us in 2017 and 2016.

The affirmative vote of a majority of the total votes cast by the stockholders present at the Annual Meeting, in person or by proxy, is necessary to ratify the selection of PricewaterhouseCoopers LLP to audit our financial statements. If you submit a proxy without direction as to a vote on this matter, your proxy will be treated as a vote “FOR” this proposal. Abstentions will have no effect on this proposal.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THIS PROPOSAL.

**PROPOSAL 6—ADVISORY VOTE ON APPROVAL OF THE COMPENSATION OF
THE COMPANY’S NAMED EXECUTIVE OFFICERS**

The SEC’s proxy rules permit our stockholders to cast an advisory vote on the compensation of our named executive officers as described in this proxy statement. Furthermore, our Board recognizes that stockholders have a legitimate interest in executive compensation matters and a growing interest in voicing their approval on our policies with respect to such matters.

Accordingly, this proposal gives you, as a stockholder, the opportunity to endorse or not endorse our overall compensation programs and policies relating to our named executive officers, as described in detail in the Compensation Discussion and Analysis, the Summary Compensation Table and related compensation tables (and accompanying narrative disclosures) contained in this proxy statement, by voting for or against the compensation of our named executive officers. The affirmative vote of a majority of the total votes cast by the stockholders present at the Annual Meeting, in person or by proxy, is necessary to approve this proposal.

Your vote will not directly affect or otherwise limit any compensation or award arrangements that have already been granted to any of our named executive officers. Because your vote is advisory, it will not be binding on the Board. However, our Compensation Committee will take into account the outcome of the vote when considering future executive compensation arrangements.

We believe that our compensation policies and procedures support our business strategy by rewarding successful achievement of specific business goals, as well as our operating and financial results. Furthermore, we believe that our compensation policies and procedures, which provide performance-based incentives to maximize stockholder value, are strongly aligned with the long-term interests of our stockholders.

OUR BOARD OF DIRECTORS RECOMMENDS A VOTE “FOR” THIS PROPOSAL.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Review and Approval of Related Person Transactions

Pursuant to our written Conflict of Interest Policy, no director, director nominee, or executive officer may enter into any transaction or relationship that is disclosable by the Company pursuant to SEC Regulation S-K, Item 404, without the prior approval of the disinterested members of our Compensation Committee. No director or executive officer may directly or indirectly approve, or represent the Company or the other party in arranging, the terms of any transaction between the Company and a party with which he/she has any relationship of a type that is disclosable by the Company pursuant to Item 404. All transactions between ArQule and a party with which a director or executive officer has such a relationship shall be on an arm's length basis.

Relationships or transactions disclosable under Item 404 may be deemed acceptable and appropriate upon full disclosure of the relationship or transaction, review of all of the relevant factors, including those specified in our Conflict of Interest Policy, and approval by the disinterested members of our Compensation Committee.

Certain Relationships and Related Party Transactions

There is no amount due to or from a related party as of December 31, 2017, and there was no revenue from a related party in 2017.

SHARE OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

The following table and footnotes set forth certain information regarding the beneficial ownership of the Company's Common Stock by persons known by us based on required filings made by the holders with the SEC to be beneficial owners of more than 5% of our Common Stock as of March 16, 2018.

We had approximately 87,110,202 shares of Common Stock outstanding as of March 16, 2018.

Name	Common Stock Owned	Options to Purchase Common Stock	Total Stock and Stock-based Holdings	Percent of Class
First Eagle Investment Management, LLC(1) 1345 Avenue of the Americas New York, NY 10105	14,733,484	—	14,733,484	16.9%
Nantahala Capital Management, LLC(2) 19 Old Kings Highway S, Suite 200 Darien, CT 06820	12,222,130	—	12,222,130	14.0%
BVF Partners, LP(3) 900 North Michigan Avenue, Suite 1100 Chicago, IL 60611	16,434,912	—	16,434,912	18.9%

- (1) These shares are beneficially owned by First Eagle Investment Management, LLC based on the Schedule 13G/A it filed with the SEC on February 6, 2018. The percentage of ownership is calculated as of March 16, 2018. According to the Schedule 13G/A filed with the SEC on February 6, 2018, First Eagle Investment Management, LLC has sole voting power and sole dispositive power over all of the shares.
- (2) These shares are beneficially owned by Nantahala Capital Management, LLC and persons associated with it based on the Amendment to Schedule 13G filed with the SEC on February 14, 2018. The percentage of ownership is calculated as of March 16, 2018. According to the Schedule 13G Amendment, Nantahala Capital Management, LLC and persons associated with it have shared voting power and shared dispositive power over all of the shares.

- (3) These shares are beneficially owned by BVF Partners, LP and persons associated with it based on the Schedule 13G Amendment it filed with the SEC on October 20, 2017. The percentage of ownership is calculated as of March 16, 2018. According to the Schedule 13G Amendment, BVF Partners, LP and persons associated with it have shared voting power and shared dispositive power over all of the shares.

The following table and footnotes set forth certain information regarding the beneficial ownership of the Company's Common Stock as of March 16, 2018 by (i) our directors, (ii) our named executive officers, and (iii) all directors and executive officers as a group. Shares of Common Stock underlying options include shares for which options are currently exercisable or will become exercisable within 60 days after March 16, 2018. Those options are deemed to be outstanding for computing the percentage of the person or group holding such options, but are not deemed outstanding for computing the percentage of any other person or group.

Directors and Executive Officers(1)	Common Stock Owned	Options to Purchase Common Stock	Total Stock and Stock-based Holdings	Percent of Class
Timothy C. Barabe(2)	136,897	130,000	266,897	*
Susan L. Kelley	50,000	125,000	175,000	*
Ronald M. Lindsay	20,000	130,000	150,000	*
Michael D. Loberg	162,514	130,000	292,514	*
William G. Messenger	10,000	130,000	140,000	*
Ran Nussbaum(3)	—	—	—	*
Patrick J. Zenner	73,770	205,000	278,770	*
Peter S. Lawrence	77,743	1,027,250	1,104,993	1.3%
Paolo Pucci	485,364	2,540,002	3,025,366	3.5%
Brian Schwartz	63,886	978,250	1,042,136	1.2%
Robert J. Weiskopf	30,407	379,125	409,532	*
Directors and executive officers as a group (11 persons)	<u>1,110,581</u>	<u>5,774,627</u>	<u>6,885,208</u>	<u>7.9%</u>

* Indicates less than 1%.

- (1) The persons named in the table have sole voting and investment power with respect to the shares beneficially owned by them, except as noted below or as otherwise provided under community property laws. Total Stock and Stock-based Holdings numbers include shares of Common Stock issuable pursuant to outstanding options that may be exercised within 60 days after March 16, 2018.
- (2) Mr. Barabe disclaims any direct, indirect or beneficial ownership of 420 shares of Common Stock owned by his spouse.
- (3) Pontifax is the beneficial owner of 8,370 shares of Preferred Stock. Each share of Preferred Stock is entitled to 1,000 votes per share and votes together with the shares of Common Stock as a single class. As a result, Pontifax holds approximately 9.6% of the total voting power of the shares of Common Stock and Preferred Stock voting. Mr. Nussbaum has the power and authority to vote the shares of Preferred Stock on behalf of Pontifax.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Our executive officers and directors and persons who beneficially own more than 10% of a registered class of our equity securities are required under Section 16(a) of the Exchange Act to file reports of ownership and changes in ownership of our securities with the SEC. Copies of those reports must also be furnished to us, unless we and the person reporting have agreed that we will file on his or her behalf pursuant to a power of attorney.

We file reports required under Section 16(a) on behalf of all our directors and officers pursuant to powers of attorney. Based solely on a review of the copies of reports furnished to, or filed by, us and written representations that no other reports were required, we believe that during 2017, our executive officers and directors and persons who beneficially own more than 10% of a registered class of our equity securities complied with all applicable Section 16(a) filing requirements.

STOCKHOLDER PROPOSALS

If you wish to bring business before the 2019 Annual Meeting of Stockholders and have your proposal included in the proxy statement and card for that meeting, you must give written notice to ArQule by November 29, 2018 and comply with the requirements of SEC Rule 14a-8.

If you intend to bring such a proposal at the 2019 Annual Meeting outside the SEC's stockholder proposal rules, or wish to propose a director nomination at the 2019 Annual Meeting, you must provide written notice to ArQule of such proposal or nomination by February 22, 2019.

Notices of stockholder proposals and nominations should be given in writing to:

Peter S. Lawrence
President and Chief Operating Officer
ArQule, Inc.
One Wall Street
Burlington, Massachusetts 01803-4757

OTHER MATTERS

Our Board does not know of any business to come before the Annual Meeting other than the matters described in the Notice of Annual Meeting. If other business is properly presented for consideration at the meeting, the enclosed proxy authorizes the persons named therein to vote the shares represented thereby in their discretion.

A copy of our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC on March 5, 2018, accompanies this Proxy Statement. Any exhibit to Form 10-K is also available upon written request at a reasonable charge for copying and mailing. Written requests should be addressed to:

Robert J. Weiskopf
Chief Financial Officer and Treasurer
ArQule, Inc.
One Wall Street
Burlington, Massachusetts 01803-4757

Copies of these documents may also be accessed electronically by means of the SEC's website at <http://www.sec.gov> and <http://www.proxyvote.com>. The Annual Report on Form 10-K is not part of the proxy solicitation material.

Appendix A

Amendment to Restated Certificate of Incorporation

RESOLVED, that the first sentence of Article FOURTH of the Restated Certificate of Incorporation shall be amended in its entirety to read as follows:

FOURTH: The Corporation shall be authorized to issue TWO HUNDRED AND ONE MILLION (201,000,000) shares of capital stock, which shall be divided into TWO HUNDRED MILLION (200,000,000) shares of Common Stock, par value \$0.01 per share, and ONE MILLION (1,000,000) shares of Preferred Stock, par value \$0.01 per share.

Appendix B
2018 Employee Stock Purchase Plan
ARQULE, INC.
2018 EMPLOYEE STOCK PURCHASE PLAN

INTRODUCTION

The ArQule, Inc. 2018 Employee Stock Purchase Plan (the “Plan”) is intended to provide employees of ArQule, Inc. (the “Company”) and any Designated Affiliate with an opportunity to purchase shares of Common Stock of the Company. It is the intention of the Company that the Plan qualify as an “employee stock purchase plan” under Code Section 423 and be construed in a manner consistent with the requirements thereof. The Plan is not qualified under Code Section 401(a) and is not subject to the provisions of the Employee Retirement Income Security Act of 1974.

1. **Definitions.** In this Plan, except where the context otherwise indicates, the following definitions apply:

1.1 “Account” means a bookkeeping account established and maintained in the name of each Participant. Interest will not be paid on a Participant’s Account balance unless specifically provided for by the Committee.

1.2 “Affiliate” means a parent or subsidiary corporation of the Company, as defined in Sections 424(e) and (f) of the Code (but substituting “the Company” for “employer corporation”), including parents or subsidiaries of the Company which become such after adoption of the Plan.

1.3 “Board” or “Board of Directors” means the Board of Directors of the Company.

1.4 “Business Day” means a day on which The NASDAQ Global Market (or such other stock exchange on which the Company’s Common Stock is listed) is open for business.

1.5 “Code” means the Internal Revenue Code of 1986, as amended.

1.6 “Committee” means the Compensation Committee of the Board.

1.7 “Common Stock” means the Common Stock, par value \$.01 per share, of the Company.

1.8 “Company” means ArQule, Inc., a Delaware corporation.

1.9 “Compensation” means an Eligible Employee’s annual rate of compensation, as defined by the Committee in an Offering.

1.10 “Designated Affiliate” means any Affiliate that has been designated by the Board or the Committee as eligible to participate in the Plan.

1.11 “Eligible Employee” shall mean an Employee whose customary employment is at least twenty (20) hours per week and more than five (5) months during the calendar year as of the relevant Offering Commencement Date.

1.12 “Employee” means any individual, including an officer, who is employed as an employee for purposes of Code Section 423(b)(4) of the Company or a Designated Affiliate. The status of an individual as an Employee shall not be affected by a leave of absence from employment with the Company or a Designated Affiliate, as the case may be, provided that such leave is for a period of not more than 90 days or reemployment upon the expiration of such leave is guaranteed by contract, policy, or statute.

1.13 “Fair Market Value” means the closing price per share of Common Stock as reported by The NASDAQ Global Market (or such other stock exchange on which the Company’s Common Stock is listed) on the applicable date, or if there are no trades reported for such date, on the last preceding date for which trades were reported.

1.14 “Human Resources” means the human resources department of the Company.

1.15 “Offering” means the grant of Options to Eligible Employees to purchase Shares hereunder. The Committee shall have the power to determine how and when Options will be granted and the terms and conditions of each Offering.

1.16 “Offering Commencement Date” means the first day of an Offering Period; provided, however, that if any Offering Commencement Date shall not be a Business Day in any Offering Period, then for purposes of that Offering Period such Offering Commencement Date shall be the first Business Day following such Offering Commencement Date.

1.17 “Offering Period” means the six (6)-month period beginning on May 1st and November 1st of each calendar year; provided, however, that, the Committee may change the duration of future Offering Periods (subject to a maximum Offering Period of twenty-seven (27) months) and/or the start and end dates of future Offering Periods.

1.18 “Offering Termination Date” means the last day of an Offering Period; provided, however, that if any Offering Termination Date shall not be a Business Day in any Offering Period, then for purposes of that Offering Period such Offering Termination Date shall be the first Business Day following such Offering Termination Date.

1.19 “Option” means the grant of a right to purchase Shares hereunder.

1.20 “Option Price” means, for each Option granted pursuant to this Plan, eighty-five percent (85%) of the Fair Market Value of a share of Common Stock on the applicable Offering Commencement Date or Offering Termination Date, whichever is less. Notwithstanding the preceding, the Committee may, in its sole discretion, determine a higher Option Price for an Offering Period.

1.21 “Participant” means any Eligible Employee who elects, pursuant to Section 4 hereof, to participate in the Plan.

1.22 “Plan” means this ArQule, Inc. 2018 Employee Stock Purchase Plan, as may be amended from time to time.

1.23 “Share” means a share of Common Stock.

2. Administration.

2.1 The Plan will be administered by the Committee, which has the discretionary authority to (a) construe and interpret the terms of the Plan, (b) make rules and regulations not inconsistent with the Plan or Code Section 423 relating to the administration of the Plan, including without limitation specifying (i) the duration of any Offering, (ii) the maximum number of Shares subject to an Option, and the aggregate number of Shares subject to all Options, granted during any Offering, and (iii) all other terms and conditions of any Offering; and (c) make all other determinations deemed necessary or advisable for the administration of the Plan.

2.2 The Committee’s interpretations and decisions with regard to the Plan shall be final and conclusive.

2.3 The Committee shall have the authority to appoint such person(s) to manage the Plan (or specified aspects thereof) and to delegate to it or them such authority with respect to the administration of the Plan as the Committee, in its sole discretion, deems advisable from time to time.

3. Eligibility.

3.1 Any Eligible Employee may elect to participate in the Plan, if immediately after the applicable Offering Commencement Date, such Eligible Employee would not be deemed for purposes of Code Section 423(b)(3) to possess five (5%) percent or more of the total combined voting power or value of all classes of stock of the Company or any Affiliate.

3.2 To the extent permitted by Treasury Regulations Section 1.423-2, the Company may modify the terms of any Offering made to Eligible Employees who are then resident or primarily employed outside of the United States (without regard to whether they are also citizens of the U.S. or resident

aliens) in any manner deemed by the Company to be necessary or appropriate in order that such Offering and any related purchase shall conform to laws, regulations, and customs of the country in which the Participant is then resident or primarily employed.

4. Participation; Method of Payment.

4.1 Participation in the Plan is voluntary. To participate during an Offering Period, an Eligible Employee must (a) complete a Plan enrollment form and file it with Human Resources within the time frame prescribed by the Committee, and (b) agree, in such form as may be prescribed by the Committee, to promptly provide written notice to the Committee of any disposition of Shares purchased under the Plan that occurs within the holding periods set forth in Code Section 423(a)(1).

4.2 The method of payment for Shares purchased upon exercise of an Option granted hereunder shall be through regular payroll deductions withheld from Participants' pay or lump sum payments made by Participants or both, as determined by the Committee. All such payroll deductions and lump sum payments shall be credited to the respective Participants' Accounts.

4.3 No interest shall be paid upon such payroll deductions or lump sum payments unless specifically provided for by the Committee.

4.4 Payroll deductions withheld from Participants' pay and lump sum payments made by Participants shall constitute general funds of the Company and may be used by the Company for any corporate purpose. The Company shall not be obligated to segregate such funds.

5. Payroll Deductions.

5.1 Payroll deductions shall be in any whole percentage, up to fifteen percent (15%) (or such lesser percentage as may be prescribed by the Committee), of a Participant's Compensation with respect to an Offering. Payroll deductions for an Offering Period will commence on the first payday, and will end on the last payday, in the Offering Period.

5.2 Authorized payroll deductions will continue during any Offering as long as the Employee remains eligible and, during the Offering Period, has a valid authorization form in effect. A Participant must submit a new authorization for payroll deductions in order to participate in each subsequent Offering Period.

5.3 If a Participant does not have, after other authorized deductions, a sufficient amount in any payroll period to permit his or her deduction under the Plan to be made in full, his or her deduction under the Plan will be suspended until such time as the Employee has a sufficient amount in a single payroll period to permit such deduction to be made.

6. Payroll Deduction Changes.

6.1 A Participant may not increase or decrease his or her payroll deductions during any Offering Period, but may terminate payroll deductions for the remainder of the Offering Period by withdrawing from the Offering, pursuant to Section 7 hereof. A Participant who terminates payroll deductions by withdrawing during an Offering Period must submit a new authorization for payroll deductions in order to participate in a subsequent Offering Period.

6.2 An Eligible Employee may increase or decrease the amount of payroll deductions from his or her pay with respect to future Offerings by filing a new enrollment form with Human Resources within the time frame prescribed by the Committee.

7. Withdrawal.

7.1 A Participant may withdraw from the Plan prior to the Offering Termination Date of any Offering Period by written notice to Human Resources within the time frame prescribed by the Committee. As soon as practicable after the notice of withdrawal is delivered, the Company shall refund the entire cash amount, if any, in the Participant's Account to him or her, and thereupon, the Participant's payroll deduction authorization (if any), his or her interest in the Plan and his or her Option under the Plan shall terminate.

7.2 Any Participant who withdraws from the Plan during any Offering Period may again become a Participant in accordance with Sections 3 and 4 hereof as of any subsequent Offering Period.

8. Grant of Option.

8.1 On each Offering Commencement Date, each Eligible Employee who participates in the Plan will be granted an Option to purchase a maximum number of whole Shares equal to the aggregate amount credited to the Account of the Employee during the applicable Offering Period, divided by the Option Price, rounded down to the nearest whole Share.

8.2 No Option granted to any Eligible Employee under an Offering, when aggregated with Options granted under any other Offering still exercisable by the Eligible Employee, shall cover more Shares than may be purchased at an Option Price equal to fifteen percent (15%) of the Employee's Compensation on the date the Employee elects to participate in the Offering or such lesser percentage as the Committee may determine.

8.3 Notwithstanding any other provision of the Plan to the contrary, no Eligible Employee shall be granted any right to purchase Common Stock under the Plan and all other employee stock purchase plans of the Company and its Affiliates at an aggregate rate that exceeds twenty-five thousand dollars (\$25,000) (or such other maximum as may be prescribed from time to time by the Code) in Fair Market Value of the Common Stock (determined at the Offering Commencement Date) for each calendar year in which such right is outstanding in accordance with the provisions of Code Section 423(b)(8).

9. Exercise of Option and Purchase of Shares.

9.1 Upon each Offering Termination Date, any Eligible Employee who continues to be a Participant shall be deemed to have automatically exercised his or her Option granted on the Offering Commencement Date for the relevant Offering to purchase the maximum number of whole Shares with the amount credited to the Participant's Account during the Offering Period. If any balance remains in the Participant's Account after the purchase of Shares on an Offering Termination Date for an Offering, such remaining Account balance shall be refunded, in the manner prescribed by the Committee, to the Participant on or as soon as practicable after such Offering Termination Date.

9.2 As soon as practicable following each Offering Termination Date, an account established for the benefit of each Participant at a bank, brokerage firm or otherwise will be credited, in book entry form, with the number of Shares purchased by such Participant pursuant to Section 9.1 hereof.

9.3 Notwithstanding any provision of this Plan to the contrary, if the aggregate funds available for the purchase of Shares on any Offering Termination Date would cause an issuance of Shares in excess of the number of Shares then available for issuance and sale under the Plan, then (a) the Committee shall proportionately reduce the number of Shares which would otherwise be purchased by each Participant on such Offering Termination Date in order to eliminate such excess, and (b) the Plan shall automatically terminate immediately after such Offering Termination Date. In such event, the Committee shall give notice of such reduction to each Participant affected thereby.

9.4 Each purchase of Shares under the Plan by a Participant shall be confirmed by the Committee in writing to the Participant.

10. Shares Subject to Plan.

10.1 Subject to adjustment as provided in Section 10.3 hereof, no more than 500,000 Shares in the aggregate may be sold pursuant to Options granted under the Plan. Both authorized and unissued Shares and issued Shares heretofore and hereafter acquired by the Company may be subject to Options under the Plan.

10.2 If for any reason any Option terminates or is cancelled in whole or in part, Shares subject to such terminated or cancelled Option may again be subjected to an Option hereunder.

10.3 In the event of any change or adjustment in the outstanding Shares by reason of any stock dividend, stock split (or reverse stock split), recapitalization, reclassification, reorganization, reincorporation, combination or exchange of shares, merger, consolidation, liquidation or other similar

change in corporate structure or otherwise, the Committee, in its discretion, may make or provide for a substitution for, or adjustment in, (a) the number and class of stock or other securities that may be reserved for purchase or purchased under the Plan, (b) the number of Shares covered by each outstanding Option that has not yet been exercised, (c) the maximum number of Shares that may be purchased by a Participant with respect to any Offering Period, (d) the Option Price, and (e) the aggregate number and class of Shares that may be issued and purchased under the Plan.

11. Stock Certificates.

The Company will maintain a current record of the number of Shares purchased by Participants in each Offering Period, but will not issue certificates unless a Participant requests the issuance of a certificate. Certificates may be issued in the name of the Participant, alone, or in the name of the Participant and a member of his or her family as joint tenants with right of survivorship, in accordance with the instructions contained in the authorization signed by the Participant.

12. Dividends.

Any cash dividends declared by the Company will be paid, in the manner determined by the Committee, to each Participant in accordance with the number of Shares the Participant owns on the applicable dividend record date.

13. Expenses.

All charges in connection with the cost of administration of the Plan will be borne by the Company.

14. Rights as a Stockholder: Nontransferability of Rights.

14.1 No Participant shall have any rights as a shareholder in the Shares covered by an Option hereunder until such Option purchase rights have been exercised, full payment has been made for the corresponding Shares and the Shares are actually issued to the Participant. No adjustment shall be made for dividends (ordinary or extraordinary, whether in cash, securities or other property) or distributions or other rights for which the record date is prior to the date such Shares are purchased.

14.2 During a Participant's lifetime, an Option granted to a Participant hereunder shall be exercisable only by the Participant. Neither amounts credited to a Participant's Account nor any rights of a Participant with regard to an Option may be assigned, alienated, encumbered, transferred, pledged or otherwise disposed of in any way by the Participant other than by will or the laws of descent and distribution.

14.3 In the event of attachment, execution, or other legal process against the Participant or his or her property, or in the event of an attempted transfer of a Participant's rights under the Plan, his or her authorized payroll deductions will terminate forthwith, and his or her only right (or the right of any person claiming through such Participant) will be to receive in cash the total amount then credited to his or her Account.

15. Termination of Employment.

15.1 A Participant's payroll deductions and participation in the Plan will terminate automatically upon the Participant's retirement, resignation, legal incapacity, discharge by the Company and Designated Affiliates, death, or termination of employment in any other manner, and any outstanding unexercised Options will be automatically terminated.

15.2 If a Participant ceases to be an Eligible Employee during an Offering Period, then (a) the entire amount of his or her Account balance shall be refunded to the Participant (or his or her estate, if applicable) as soon as practicable after the date of cessation of eligibility, (b) such Participant shall not purchase any Shares hereunder on the Offering Termination Date for such Offering Period, and (c) no further payroll deductions or lump sum contributions for the purchase of Shares under the Plan may be made by such Participant after he or she ceases to be an Eligible Employee.

16. Suspension or Termination of the Plan.

The Plan will continue from year to year, subject to Section 9.3 hereof; provided, however, that the Company reserves the right to terminate the Plan for any reason at any time. When the Plan is terminated, each Participant will receive in cash the total amount then credited to his or her Account on the date of such termination as soon as practicable thereafter.

17. Amendment of the Plan.

The Company reserves the right to amend the provisions of the Plan, including, without limitation, provisions regarding the determination of the Option Price. No amendment shall be made without approval of (a) the Company's stockholders to the extent stockholder approval is required by applicable law or regulations or the requirements of the principal securities exchange or interdealer quotation system upon which the Common Stock then is listed or quoted, if any, and (b) each affected Participant if such amendment or termination would adversely affect his or her rights or obligations under any Option granted prior to the date of such amendment or termination. No Options may be granted, no Shares may be issued and no payroll deductions may be made under the Plan after it is terminated.

18. Responsibility; Indemnification.

18.1 Neither the Company nor any member of the Committee shall have any responsibility or liability, other than liabilities arising out of the securities laws, for any act or omission to act, including any action taken with respect to the price, time, quantity, or other conditions and circumstances of the purchase of shares under the terms of the Plan.

18.2 In addition to such other rights of indemnification as they may have as members of the Board, each member of the Committee shall be indemnified by the Company against the reasonable expenses, including attorneys' fees, actually and reasonably incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which such member may be a party by reason of any action taken or failure to act under or in connection with the Plan or any Option and against all amounts reasonably paid by such member in settlement thereof or paid by such member in satisfaction of a judgment in any such action, suit or proceeding, if such member acted in good faith and in a manner which such person believed to be in, and not opposed to, the best interests of the Company.

19. Legal Restrictions.

19.1 Notwithstanding any other provision of the Plan, the Company shall not be obligated to issue or sell Shares under the Plan (a) unless the approval of all regulatory bodies deemed necessary by the Committee have been obtained and unless the issuance, sale and delivery of such Shares pursuant to the Plan shall comply, to the Committee's complete satisfaction, with all provisions of federal, state or local law deemed applicable by the Committee and all rules and regulations thereunder, and the requirements of any securities exchange upon which the Common Stock may then be listed or interdealer quotation system upon which the Common Stock is then quoted, or (b) if the Committee determines that the issuance, sale or delivery of such Shares pursuant hereto would violate any applicable law or regulation.

19.2 The Committee may require any person acquiring Shares pursuant to the Plan hereunder to represent to, and agree with, the Company in writing that such person is acquiring the Shares without a view to distribution thereof. The certificates for such Shares may include any legend that the Committee deems appropriate to reflect any restrictions on transfer. All certificates for Shares issued pursuant to this Plan shall be subject to such stock transfer orders and other restrictions as the Committee may deem advisable under the rules, regulations and other requirements of the Securities and Exchange Commission, any stock exchange upon which the Common Stock is then listed or interdealer quotation system upon which the Common Stock is then quoted, and any applicable federal or state securities laws. The Committee may place or cause to be placed a legend or legends on any such certificates to make appropriate reference to such restrictions.

20. Governing Law.

To the extent that Section 423 of the Code and the regulations thereunder do not apply, the Plan and all rights and obligations thereunder shall be governed, construed, administered and enforced in accordance with the laws of the Commonwealth of Massachusetts.

21. Miscellaneous.

21.1 The establishment of the Plan shall not confer upon any Employee any legal or equitable right against the Company, any Affiliate or the Committee, except as expressly provided in the Plan.

21.2 Participation in this Plan shall not give an Employee any right to be retained in the service of the Company or any Affiliate.

21.3 Neither the adoption of the Plan nor its submission to, or approval by, the stockholders of the Company shall be taken to impose any limitations on the powers of the Company or its Affiliates to issue, grant, or assume options otherwise than under this Plan, or to adopt other stock option plans, stock purchase plans, or other plans, or to impose any requirement of stockholder approval upon the same.

22. Plan Adoption and Amendment.

The Plan was adopted by the Board of Directors of the Company on March 6, 2018 and was approved by the shareholders on _____, 2018. The Plan shall become effective as of _____, 2018.

Appendix C**ARQULE, INC.****2014 EQUITY INCENTIVES PLAN (as amended)****1. Purpose: Effective Date**

1.1. The purpose of the Plan is to attract and retain key Employees and Consultants of the Company and its Affiliates, to provide an incentive for them to achieve long-range performance goals, and to enable them to participate in the long-term growth of the Company.

1.2. The Plan is effective as of May 13, 2014, subject to approval by an affirmative vote of the holders of a majority of the Shares that are present in person or by proxy and entitled to vote at the 2014 Annual Meeting of Stockholders of the Company.

2. **Definitions.** In the Plan, except where the context otherwise indicates, the following definitions shall apply:

2.1. "Adjustment Event" means an event in which there occurs any change in the outstanding Common Stock by reason of any corporate transaction involving the Company (including, without limitation, any stock dividend, stock split, extraordinary cash dividend, recapitalization, reorganization, split-up, spin-off, combination, or exchange of shares).

2.2. "Affiliate" means a corporation, partnership, business trust, limited liability company, or other form of business organization at least a majority of the total combined voting power of all classes of stock or other equity interests of which is owned by the Company, either directly or indirectly, and any other entity designated by the Committee in which the Company has a significant interest.

2.3. "Agreement" means an agreement or other document evidencing an Award. An Agreement may be in written or such other form as the Committee may specify in its discretion, and the Committee may, but need not, require a Participant to sign an Agreement.

2.4. "Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws and regulations, the Code, any stock exchange or quotation system on which Common Stock is listed or quoted and the applicable laws and regulations of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

2.5. "Award" means a grant of an Option, Restricted Stock, a Restricted Stock Unit, a Performance Award, or an Other Stock-Based Award.

2.6. "Board" means the Board of Directors of the Company.

2.7. "Code" means the Internal Revenue Code of 1986, as amended.

2.8. "Committee" means the Compensation, Nominating and Governance Committee of the Board or such other committee(s), subcommittee(s) or person(s) the Board or an authorized committee of the Board appoints to administer the Plan or to make and/or administer specific Awards hereunder. If no such appointment is in effect at any time, "Committee" shall mean the Board. Notwithstanding the foregoing, "Committee" means the Board for purposes of granting Awards to members of the Board who are not Employees, and administering the Plan with respect to those Awards, unless the Board determines otherwise.

2.9. "Common Stock" means the Company's common stock, \$.01 par value per share.

2.10. "Company" means ArQule, Inc. and any successor thereto.

2.11. "Consultant" means any consultant, independent contractor, or other person who provides significant services to the Company or its Affiliates, but who is neither an Employee nor a Director.

2.12. “Date of Exercise” means the date on which the Company receives notice of the exercise of an Option in accordance with Section 7.

2.13. “Date of Grant” means the date on which an Award is granted under the Plan.

2.14. “Designated Beneficiary” means the beneficiary designated by a Participant, in a manner determined by the Committee, to receive amounts due or exercise rights of the Participant in the event of the Participant’s death. In the absence of an effective designation of a beneficiary by a Participant, “Designated Beneficiary” shall mean (i) the Participant’s estate, if such amounts or rights are, under applicable inheritance laws, deemed to be part of the Participant’s estate, or (ii) such person who acquired the right to receive amounts due or exercise rights of the Participant by bequest or inheritance.

2.15. “Director” means an individual who is a member of the Board or the board of directors of an Affiliate.

2.16. “Eligible Person” means any person who is (a) an Employee, (b) a member of the Board or the board of directors of an Affiliate, or (c) a consultant.

2.17. “Employee” means any person who the Committee determines to be an employee of the Company or an Affiliate. A person will not be considered as an Employee under the Plan because such person is deemed to be a “common law” employee of the Company or any Affiliate.

2.18. “Exercise Price” means the price per Share at which an Option or SAR may be exercised.

2.19. “Fair Market Value” means, as of any date on which the Shares are listed or quoted on a securities exchange or quotation system, and except as otherwise determined by the Committee, the closing sale price of a Share as reported on such securities exchange or quotation system as of the relevant date, and if the Shares are not listed or quoted on a securities exchange or quotation system, then an amount equal to the then fair market value of a Share as determined by the Committee pursuant to a reasonable method adopted in good faith for such purpose.

2.20. “Full Value Award” means a Performance Award, Restricted Stock or Restricted Stock Units or any combination thereof and any Other Stock-Based Award (other than an Option or Stock Appreciation Right) under which the Participant receives the entire value of each Share that vests.

2.21. “Incentive Stock Option” means an Option that the Committee designates as an incentive stock option under Section 422 of the Code.

2.22. “Nonqualified Stock Option” means an Option that is not an Incentive Stock Option.

2.23. “Option” means an option to purchase Shares granted pursuant to Section 6.

2.24. “Option Period” means the period during which an Option may be exercised.

2.25. “Other Stock-Based Award” means an Award of Shares or units that are valued in whole or in part by reference to, or otherwise based on the value of Common Stock, granted pursuant to Section 12.

2.26. “Participant” means an Eligible Person who has been granted an Award.

2.27. “Performance Award” means a performance award granted pursuant to Section 8.

2.28. “Performance Goals” means performance goals that the Committee establishes, which may be based on satisfactory internal or external audits, achievement of balance sheet or income statement objectives, cash flow, customer satisfaction metrics, achievement of customer satisfaction goals, dividend payments, earnings (including before or after taxes, interest, depreciation, and amortization), earnings growth, earnings per share, economic value added, expenses (including sales, general and administrative expenses), improvement of financial ratings, internal rate of return, market share, geographic expansion, net asset value, net income, net operating gross margin, net operating profit after taxes, net sales growth, operating income, operating margin, comparisons to the performance of other companies, pro forma income, regulatory compliance, business development, collaboration management, pre-clinical and clinical product development, return measures (including return on

assets, designated assets, capital, capital employed, equity, or stockholder equity, and return versus the Company's cost of capital), revenues, sales, stock price (including growth measures and total stockholder return), comparison to stock market indices, implementation or completion of one or more projects or transactions (including mergers, acquisitions, dispositions, and restructurings), working capital, or any other objective goals that the Committee establishes. Performance Goals may be absolute in their terms or measured against or in relationship to other companies comparably, similarly or otherwise situated. Performance Goals may be particular to an Eligible Person or the department, branch, Affiliate, or division in which the Eligible Person works, or may be based on the performance of the Company, one or more Affiliates, or the Company and one or more Affiliates and may cover such period as the Committee may specify.

2.29. "Performance Shares" means Shares awarded as part of a Performance Award.

2.30. "Plan" means this ArQule, Inc. 2014 Equity Incentives Plan, as amended from time to time.

2.31. "Restricted Stock" means Shares granted pursuant to Section 9.

2.32. "Restricted Stock Units" means an Award providing for the contingent grant of Shares (or the cash equivalent thereof) pursuant to Section 10.

2.33. "Section 422 Employee" means an Employee who is employed by the Company or a "parent corporation" or "subsidiary corporation" (each as defined in Sections 424(e) and (f) of the Code) with respect to the Company, including a "parent corporation" or "subsidiary corporation" that becomes such after adoption of the Plan.

2.34. "Share" means a share of Common Stock.

2.35. "Stock Appreciation Right" or "SAR" means a right to receive any excess in value of Shares over the exercise price awarded to a Participant under Section 11.

2.36. "Ten-Percent Stockholder" means a Section 422 Employee who (applying the rules of Section 424(d) of the Code) owns stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or a "parent corporation" or "subsidiary corporation" (each as defined in Sections 424(e) and (f) of the Code) with respect to the Company.

2.37. "Transaction" means a merger or consolidation to which the Company is a party or any sale, disposition or exchange of at least 50% of the Company's Common Stock or all or substantially all of the Company's assets for cash, securities or other property, or any other similar transaction or event.

Unless the context expressly requires the contrary, references in the Plan to (a) the term "Section" refers to the sections of the Plan, and (b) the word "including" means "including (without limitation)."

3. Administration. The Committee shall administer the Plan and shall have plenary authority, in its discretion, to grant Awards to Eligible Persons, subject to the provisions of the Plan. The Committee shall have plenary authority and discretion, subject to the provisions of the Plan, to determine (i) who is an Employee or a Designated Beneficiary; (ii) the effect on an Award of the disability, death, retirement or other termination of employment of a Participant and the extent to which, and the period during which, the Participant's legal representative, guardian or Designated Beneficiary may receive payment of an Award or exercise rights thereunder; (iii) the Eligible Persons to whom it grants Awards, the terms (which terms need not be identical) of all Awards, including without limitation, the Exercise Price of Options, the time or times at which Awards are granted, the number of Shares covered by Awards, whether an Option shall be an Incentive Stock Option or a Nonqualified Stock Option, any exceptions to non-transferability, any Performance Goals applicable to Awards, any provisions relating to vesting, and the periods during which Options may be exercised and Restricted Stock shall be subject to restrictions. In making these determinations, the Committee may take into account the nature of the services rendered or to be rendered by Award recipients, their present and potential contributions to the success of the Company and its Affiliates, and such other factors as the Committee in its discretion shall deem relevant. Subject to the provisions of the Plan, the Committee shall have plenary authority and discretion to interpret the Plan and Agreements, prescribe, amend and rescind rules and regulations relating to them, and make all other determinations deemed necessary or advisable for the administration of the Plan and Awards granted

hereunder. The determinations of the Committee on the matters referred to in this Section 3 shall be binding and final. The Committee, in its sole discretion and on such terms and conditions as it may provide, may, consistent with the requirements of Applicable Laws, delegate all or any part of its authority and powers under the Plan to one or more members of the Board or officers of the Company, except that the Committee may not delegate all or any part of its authority under the Plan with respect to Awards granted to a nonemployee Director.

Notwithstanding the foregoing, with respect to Awards that are intended to qualify as performance-based compensation under Section 162(m) of the Code, the Committee may not delegate its authority and powers with respect to such Awards if such delegation would cause the Awards to fail to so qualify.

4. Eligibility. Awards may be granted only to Eligible Persons, provided that Incentive Stock Options may be granted only to Eligible Persons who are Section 422 Employees.

5. Stock Subject to Plan.

5.1. Subject to adjustment as provided in Section 5.2 or Section 14 or amendment of the Plan pursuant to Section 15, the maximum number of Shares that may be issued pursuant to Awards (including Incentive Stock Options) under the Plan shall equal the sum of (a) ~~3,750,000~~ 7,500,000 and (b) any Shares that otherwise would have been returned to the Amended and Restated 1994 Equity Incentive Plan after the Effective Date, on account of the expiration, cancellation or forfeiture of awards granted under the Company's Amended and Restated 1994 Equity Incentive Plan. Shares granted under the Plan may be either authorized but unissued Shares or treasury Shares.

5.2. If any Shares subject to an Award under the Plan or an award outstanding under the Company's Amended and Restated 1994 Equity Incentive Plan are forfeited, or any Award or award outstanding under the Company's Amended and Restated 1994 Equity Incentive Plan is settled for cash, the Shares shall, to the extent of such forfeiture or cash settlement, again be available for Awards under the Plan subject to the following sentence. Notwithstanding anything to the contrary contained herein, the following Shares shall not be added to the Shares authorized for grant under this Section: (i) Shares tendered by the Participant or withheld by the Company in payment of the purchase price of an Option, (ii) Shares tendered by the Participant or withheld by the Company to satisfy any tax withholding obligation with respect to an Award, (iii) Shares subject to an SAR settled in Shares for which the Award is exercised (that is, Shares actually issued pursuant to an SAR, as well as the Shares that represent payment of the exercise price) will cease to be available under the Plan.

5.3. Subject to adjustment as provided in Section 14, the maximum number of Shares with respect to which an Employee may be granted Awards under the Plan (whether settled in Shares or the cash equivalent thereof) during any calendar year is one million (1,000,000) Shares. The maximum number of Shares with respect to which an Employee has been granted Awards shall be determined in accordance with Section 162(m) of the Code.

5.4. Notwithstanding the provisions of Section 5, for any two (2) Shares issued in connection with a Full Value Award, three (3) fewer Shares will be available for issuance in connection with Awards under Section 5.1.

5.5. Shares of Common Stock underlying any outstanding stock option or Full Value Award granted under the Amended and Restated 1994 Equity Incentive Plan that, after the Effective Date, expires, or is terminated, surrendered or forfeited, in whole or in part, for any reason without issuance of such Shares shall be available for the grant of new Awards under this Plan. For purposes of Section 5.7, for any two (2) Shares added back in connection with a Full Value Award, three (3) Shares will be available for issuance in connection with Awards under Section 5.1.

6. Options.

6.1. Options granted under the Plan shall be either Incentive Stock Options or Nonqualified Stock Options, as designated by the Committee. Each Option granted under the Plan shall be a Nonqualified Stock Option unless expressly identified as an Incentive Stock Option, and each Option shall be evidenced by an Agreement that specifies the terms and conditions of the Option. Options shall be

subject to the terms and conditions set forth in Section 6 and such other terms and conditions not inconsistent with the Plan as the Committee may specify. The Committee, in its discretion, may condition the grant or vesting of an Option upon the achievement of one or more specified Performance Goals.

6.2. The Exercise Price of an Option granted under the Plan shall not be less than 100% of the Fair Market Value of a Share on the Date of Grant. Notwithstanding the foregoing, in the case of an Incentive Stock Option granted to an Employee who, on the Date of Grant is a Ten-Percent Stockholder, the Exercise Price shall not be less than 110% of the Fair Market Value of a Share on the Date of Grant.

6.3. The Committee shall determine the Option Period for an Option, which shall be specifically set forth in the Agreement, provided that an Option shall not be exercisable after ten years (five years in the case of an Incentive Stock Option granted to an Employee who on the Date of Grant is a Ten-Percent Stockholder) from its Date of Grant.

7. Exercise of Options.

7.1. Subject to the terms of the applicable Agreement, an Option may be exercised, in whole or in part, by delivering to the Company a notice of the exercise, in such form as the Committee may prescribe, accompanied by (a) full payment for the Shares with respect to which the Option is exercised or (b) to the extent provided in the applicable Agreement, irrevocable instructions to a broker to deliver promptly to the Company cash equal to the Exercise Price of the Option.

7.2. To the extent provided in the applicable Agreement or otherwise authorized by the Committee, payment of the Exercise Price may be made by delivery (including constructive delivery) of Shares (provided that such Shares, if acquired pursuant to an Option or other Award granted hereunder or under any other compensation plan maintained by the Company or any Affiliate, have been held by the Participant for such period, if any, as the Committee may specify) valued at Fair Market Value on the Date of Exercise.

7.3. To the extent provided in the applicable Agreement, an Option may be exercised by directing the Company to withhold from the Shares to be issued upon exercise of the Option (or portion thereof) being exercised a number of Shares having a Fair Market Value not in excess of the aggregate Exercise Price of the Option (or portion thereof being exercised), with payment of the balance of the Exercise Price, if any, being made pursuant to Section 7.1 and/or Section 7.2.

8. Performance Awards. Each Performance Award granted under the Plan shall be evidenced by an Agreement that (a) provides for the payment of cash or issuance of Shares to a Participant contingent upon the attainment of one or more specified Performance Goals over such period as the Committee may specify, and (b) contains such other terms and conditions as the Committee may specify. If the terms of a Performance Award provide for payment in the form of Shares, for purposes of Section 5.3, the Performance Award shall be deemed to cover a number of Shares equal to the maximum number of Shares that may be issued upon payment of the Award. If the terms of a Performance Award provide for payment in the form of cash, the maximum cash amount payable to any Employee pursuant to all Performance Awards granted to an Employee during a calendar year shall not exceed two million dollars \$2,000,000.

9. Restricted Stock Awards. Each Award of Restricted Stock under the Plan shall be subject to an Agreement specifying the terms and conditions of the Award. Restricted Stock granted under the Plan shall consist of Shares that are restricted as to transfer, subject to forfeiture, and subject to such other terms and conditions as the Committee may specify. Such terms and conditions may provide, in the discretion of the Committee, for the lapse of such transfer restrictions or forfeiture provisions to be contingent upon the achievement of one or more specified Performance Goals.

10. Restricted Stock Unit Awards. Each Award of Restricted Stock Units under the Plan shall be evidenced by an Agreement that (a) provides for the issuance of Shares (or the cash equivalent thereof) to a Participant at such time(s) as the Committee may specify and (b) contains such other terms and conditions as the Committee may specify, including terms that condition the issuance, vesting, or payment of Restricted Stock Unit Awards upon the achievement of one or more specified Performance Goals.

11. Stock Appreciation Rights.

11.1. Subject to the provisions of the Plan, the Committee may award SARs in tandem with an Option (at or after the award of the Option), or alone and unrelated to an Option. SARs in tandem with an Option shall terminate to the extent that the related Option is exercised, and the related Option shall terminate to the extent that the tandem SARs are exercised. SARs granted in tandem with Options shall have an Exercise Price not less than the Exercise Price of the related Option. SARs granted alone and unrelated to an Option shall have an Exercise Price not less than the Fair Market Value of a Share on the date of such Award.

11.2. Any SAR related to an Option, which SAR can only be exercised upon or during limited periods following a change in control of the Company, may entitle the Participant to receive an amount based upon the highest price paid or offered for Common Stock in any transaction relating to the change in control or paid during the thirty-day period immediately preceding the occurrence of the change in control in any transaction reported in the stock market in which the Common Stock is normally traded. No SAR may be exercised more than ten years from the date of Award.

12. Other Stock-Based Awards. The Committee may in its discretion grant stock-based awards of a type other than those otherwise provided for in the Plan, including the issuance or offer for sale of unrestricted Shares (“Other Stock-Based Awards”). Other Stock-Based Awards shall cover such number of Shares and have such terms and conditions as the Committee shall determine, including terms that condition the payment or vesting of the Other Stock-Based Award upon the achievement of one or more Performance Goals. Shares awarded in connection with Other Stock Awards shall be issued for no cash consideration or such minimum consideration as may be required by Applicable Laws.

13. Dividends and Dividend Equivalents. The terms of an Award may provide a Participant with the right, subject to such terms and conditions as the Committee may specify, to receive dividend payments or dividend equivalent payments with respect to Shares covered by such Award, which payments (a) may be either made currently or credited to an account established for the Participant, (b) may be made contingent upon the achievement of one or more Performance Goals, and (c) may be settled in cash or Shares, as determined by the Committee; provided, however, that any Shares or other securities distributed as a dividend or otherwise with respect to any Restricted Shares as to which the restrictions have not yet lapsed, shall be subject to the same restrictions as those on such Restricted Shares and provided further that for any such Restricted Shares that are part of a Performance Award any such dividends shall be earned by the Participant only to the extent the Performance Goals underlying such are achieved and such Award is earned.

14. Capital Events and Adjustments.

14.1. The purpose of the Plan is to attract and retain key Employees and Consultants of the Company and its Affiliates, to provide an incentive for them to achieve long-range performance goals, and to enable them to participate in the long-term growth of the Company.

15. Termination or Amendment. The Board may amend or terminate the Plan in any respect at any time; provided, however, that after the stockholders of the Company have approved the Plan, the Board shall not amend or terminate the Plan without approval of (a) the Company’s stockholders to the extent Applicable Laws require stockholder approval of the amendment or termination, and (b) each affected Participant if the amendment or termination would adversely affect the Participant’s rights or obligations under any Award granted prior to the date of the amendment or termination.

16. Modification, Substitution of Awards.

16.1. Subject to the terms and conditions of the Plan, the Committee may modify the terms of any outstanding Awards; provided, however, that (a) no modification of an Award shall, without the consent of the Participant, alter or impair any of the Participant’s rights or obligations under such Award, and (b) except as approved by the Company’s stockholders pursuant to Section 17, or in connection with a Adjustment Event, the Committee may not modify the terms of outstanding Awards to reduce the Exercise Price of outstanding Options or SARs or cancel outstanding Options or SARs in exchange for cash, other Awards or Options or SARs with an exercise price that is less than the exercise price of the original Options or SARs.

16.2. Anything contained herein to the contrary notwithstanding, Awards may, in the discretion of the Committee, be granted under the Plan in substitution for stock options and other awards covering capital stock of another corporation which is merged into, consolidated with, or all or a substantial portion of the property or stock of which is acquired by, the Company or an Affiliate. The terms and conditions of the substitute Awards so granted may vary from the terms and conditions set forth in the Plan to such extent as the Committee may deem appropriate in order to conform, in whole or part, to the provisions of the awards in substitution for which they are granted. Such substitute Awards shall not be counted toward the Share limit imposed by Section 5.3, except to the extent the Committee determines that counting such Awards is required in order for Awards granted hereunder to be eligible to qualify as “performance-based compensation” within the meaning of Section 162(m) of the Code.

17. Stockholder Approval. The Plan, and any amendments hereto requiring stockholder approval pursuant to Section 15 are subject to approval by vote of the stockholders of the Company at the next annual or special meeting of stockholders following adoption by the Board. If the adoption of the Plan is not so approved by the Company’s stockholders, any Awards granted under the Plan shall be cancelled and void *ab initio* immediately following such next annual or special meeting of stockholders.

18. Withholding. The Company’s obligation to issue or deliver Shares or pay any amount pursuant to the terms of any Award granted hereunder shall be subject to satisfaction of applicable federal, state, local, and foreign tax withholding requirements. To the extent authorized by the Committee, and in accordance with such rules as the Committee may prescribe, a Participant may satisfy any withholding tax requirements by one or any combination of the following means: (a) tendering a cash payment, (b) authorizing the Company to withhold Shares otherwise issuable to the Participant, or (c) delivering to the Company already-owned and unencumbered Shares.

19. Term of Plan. Unless sooner terminated by the Board pursuant to Section 15, the Plan shall terminate on the date that is ten (10) years after the Effective Date, and no Awards may be granted or awarded after such date. The termination of the Plan shall not affect the validity of any Award outstanding on the date of termination.

20. Indemnification of Committee. In addition to such other rights of indemnification as they may have as members of the Board or Committee, the Company shall indemnify members of the Committee against all reasonable expenses, including attorneys’ fees, actually and reasonably incurred in connection with the defense of any action, suit or proceeding, or in connection with any appeal therein, to which they or any of them may be a party by reason of any action taken or failure to act under or in connection with the Plan or any Award granted hereunder, and against all amounts reasonably paid by them in settlement thereof or paid by them in satisfaction of a judgment in any such action, suit or proceeding, if such members acted in good faith and in a manner which they believed to be in, and not opposed to, the best interests of the Company.

21. General Provisions.

21.1. The establishment of the Plan shall not confer upon any Eligible Person any legal or equitable right against the Company, any Affiliate or the Committee, except as expressly provided in the Plan. Participation in the Plan shall not give an Eligible Person any right to be retained in the service of the Company or any Affiliate.

21.2. Neither the adoption of the Plan nor its submission to the Company’s stockholders shall be taken to impose any limitations on the powers of the Company or its Affiliates to issue, grant or assume options, warrants, rights, restricted stock or other awards otherwise than under the Plan, or to adopt other stock option, restricted stock, or other plans, or to impose any requirement of stockholder approval upon the same.

21.3. The interests of any Eligible Person under the Plan and/or any Award granted hereunder are not subject to the claims of creditors and may not, in any way, be transferred, assigned, alienated or encumbered except to the extent provided in an Agreement.

21.4. The Plan shall be governed, construed and administered in accordance with the laws of the State of Delaware without giving effect to conflict of laws principles.

21.5. Notwithstanding any other provision of the Plan or any Agreement to the contrary, Awards and any Shares issued or payments made under Awards shall be subject to any compensation claw-back or recoupment policy (or policies) that the Company may have in effect from time to time, subject to such terms and conditions of such policy (or policies).

21.6. The Committee may require each person acquiring Shares pursuant to Awards granted hereunder to represent to and agree with the Company in writing that such person is acquiring the Shares without a view to distribution thereof. The certificates for such Shares may include any legend which the Committee deems appropriate to reflect any restrictions on transfer. All certificates for Shares issued pursuant to the Plan shall be subject to such stock transfer orders and other restrictions as the Committee may deem advisable under Applicable Laws. The Committee may place a legend or legends on any such certificates to make appropriate reference to such restrictions.

21.7. The Company shall not be required to issue any certificate or certificates for Shares with respect to Awards granted under the Plan, or record any person as a holder of record of Shares, without obtaining, to the complete satisfaction of the Committee, the approval of all regulatory bodies the Committee deems necessary, and without complying to the Board's or Committee's complete satisfaction, with all Applicable Laws.

21.8. To the extent that the Plan provides for issuance of stock certificates to reflect the issuance of Shares, the issuance may be given effect on a non-certificated basis, to the extent not prohibited by Applicable Laws. No fractional Shares shall be issued or delivered pursuant to the Plan or any Award. The Committee shall determine whether cash, other Awards, or other property shall be issued or paid in lieu of any fractional Shares or whether any fractional Shares or any rights thereto shall be forfeited or otherwise eliminated.

21.9. Each type of Award may be made alone, in addition to or in relation to any other type of Award. The terms of each type of Award need not be identical, and the Committee need not treat Participants uniformly. Except as otherwise provided by the Plan or a particular Award, any determination with respect to an Award may be made by the Committee at the time of award or at any time thereafter.

21.10. Except as specifically provided herein or in the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any Shares to be distributed under the Plan until he or she becomes the holder thereof. A Participant to whom Common Stock is awarded shall be considered the holder of the Share at the time of the Award except as otherwise provided in the applicable Award.

21.11. Awards granted under this Plan are intended to comply with the requirements of Section 409A of the Code (including the exceptions thereto), to the extent applicable, and shall be interpreted in accordance with such requirements. Notwithstanding anything to the contrary herein, if the issuance of shares or payment of cash under an Agreement constitutes the payment to a Participant of nonqualified deferred compensation for purposes of Section 409A of the Code and the Participant is a "specified employee" (as determined under Treas. Reg. § 1.409A-1(i)), then such issuance of Shares or payment of cash shall, to the extent necessary to comply with the requirements of Section 409A of the Code, be made on the later of (a) the date specified in the Agreement or (b) the date that is six (6) months after the date of the Participant's separation from service (or, if earlier, the date of the Participant's death). In no event shall the Company or any of its Affiliates have any liability to any Participant with respect to any Award failing to qualify for any specific tax treatment (such as an Option designated as an incentive stock option failing to qualify for treatment as an incentive stock option under Section 422 of the Code) or for any taxes or penalties incurred by a Participant under Section 409A of the Code with respect to any Award. The Committee may grant Awards that qualify as performance-based compensation under Section 162(m) and awards that do not so qualify.

The Board of Directors amended this Plan on March 6, 2018 to increase the number of authorized shares of common stock available for issuance hereunder by 3,750,000.

Stockholders approved this amendment on _____, 2018.



ARQULE, INC.
ONE WALL STREET
BURLINGTON, MA 01803

VOTE BY INTERNET - www.proxyvote.com

Use the Internet to transmit your voting instructions and for electronic delivery of information up until 5:00 P.M. Eastern Daylight Savings Time, May 7, 2018. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS

If you would like to reduce the costs incurred by ArQule, Inc. in mailing proxy materials, you can consent to receiving all future proxy statements, proxy cards and annual reports electronically via e-mail or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903

Use any touch-tone telephone to transmit your voting instructions up until 5:00 P.M. Eastern Daylight Savings Time, May 7, 2018. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL

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

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

E37308-P03743

KEEP THIS PORTION FOR YOUR RECORDS

DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

ARQULE, INC.

The Board of Directors recommends a vote "FOR" the election of the nominees listed below and "FOR" proposals 2, 3, 4, 5 and 6.

For All Withhold All For All Except

To withhold authority to vote for any individual nominee(s), mark "For All Except" and write the name(s) of the nominee(s) on the line below.

1. To elect Timothy C. Barabe, Ran Nussbaum and Paolo Pucci as directors to hold office for a term of three years and until their respective successors are elected and qualified.

- | | For | Against | Abstain |
|---|--------------------------|--------------------------|--------------------------|
| 2. To approve an amendment to our Restated Certificate of Incorporation to increase the number of authorized shares of our Common Stock, \$0.01 par value per share, from 100,000,000 to 200,000,000. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. To approve our new 2018 Employee Stock Purchase Plan and the authorization of 500,000 shares of our Common Stock to be available for issuance under the plan. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. To approve an amendment to our 2014 Equity Incentives Plan to increase the number of shares of our Common Stock available for issuance pursuant to future awards made under the plan by 3,750,000. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. To ratify the selection of PricewaterhouseCoopers LLP as our independent registered public accounting firm for the year ending December 31, 2018. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. To approve, by non-binding vote, the compensation of our named executive officers. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Please sign exactly as name appears on this Proxy. When shares are held by joint tenants, both should sign. When signing as attorney, executor, administrator, trustee, or guardian, please give full title as such. If a corporation, please sign in full corporate name by President or other authorized officer. If a partnership, please sign in partnership name by authorized person.

Signature [PLEASE SIGN WITHIN BOX] _____ Date _____

Signature (Joint Owners) _____ Date _____

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The Notice and Proxy Statement, Form 10-K and Stockholder Letter are available at www.proxyvote.com.

E37309-P03743

**THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS
OF ARQULE, INC.
ANNUAL MEETING OF STOCKHOLDERS
May 8, 2018**

The undersigned stockholder of ArQule, Inc. hereby appoints Peter S. Lawrence as proxy with the power to appoint his substitute, and hereby authorizes him to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of ArQule, Inc. that the undersigned is entitled to vote at the Annual Meeting of Stockholders to be held at the Boston Burlington Marriot, One Mall Road, Burlington, Massachusetts 01803 at 10:00 a.m. Eastern Daylight Savings Time on May 8, 2018 and any adjournment or postponement thereof.

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED AS DIRECTED BY THE UNDERSIGNED STOCKHOLDER. IF NO SUCH DIRECTIONS ARE GIVEN, THIS PROXY WILL BE VOTED "FOR" THE ELECTION OF THE NOMINEES LISTED ON THE REVERSE SIDE AND "FOR" PROPOSALS 2, 3, 4, 5 AND 6.

PLEASE MARK, SIGN, DATE AND RETURN THIS PROXY CARD PROMPTLY USING THE ENCLOSED REPLY ENVELOPE.

Continued and to be signed on reverse side