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

SCHEDULE 14A INFORMATION

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

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, For Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to Rule 14a-11(c) or rule 14a-12

OPGEN, INC.

(Name of Registrant as Specified In Its Charter)

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

Payment of Filing Fee (Check the appropriate box):

- No fee required.**
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
- (1) Title of each class of securities to which transaction applies:
- (2) Aggregate number of securities to which transaction applies:
- (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11:
- (4) Proposed maximum aggregate value of transaction:
- (5) Total fee paid:
- Fee paid previously with preliminary materials:
- Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the form or schedule and the date of its filing.
- (1) Amount previously paid:
- (2) Form, Schedule or Registration Statement no.:
- (3) Filing Party:
- (4) Date Filed:
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9717 Key West Ave, Suite 100
Rockville, MD 20850

**SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON MAY 9, 2024**

April 26, 2024

Dear Stockholders of OpGen, Inc.:

You are cordially invited to a Special Meeting of Stockholders (the "Special Meeting") of OpGen, Inc. (the "Company") to be held on May 9, 2024, beginning at 10:00 a.m. Eastern Time. This Special Meeting will be a "virtual meeting" of stockholders, which will be conducted exclusively via online audio-only broadcast. You will be able to participate in the Special Meeting, vote your shares and submit your questions during the meeting via the Internet by visiting www.virtualshareholdermeeting.com/OPGN2024SM. The Special Meeting will be held in virtual format only.

On March 25, 2024, OpGen entered into a Securities Purchase Agreement (the "Purchase Agreement") with David E. Lazar, pursuant to which he agreed to acquire 3,000,000 shares of Series E Convertible Preferred Stock ("Series E Preferred Stock") of the Company at a price of \$1.00 per share for aggregate gross proceeds of \$3.0 million. Each share of Series E Preferred Stock is convertible into 24 shares of the Company's common stock ("Common Stock"); provided, that, in no event, will the Series E Preferred Stock be convertible into Common Stock in a manner that would result in Mr. Lazar or his transferees or their affiliates holding more than the lesser of (i) 19.99% (together with any other shares of Common Stock otherwise held by them or their affiliates) and (ii) such lower percentage as may be required by applicable stock exchange rules of the then issued and outstanding Common Stock (the "Ownership Limitation"), prior to the date that the Company's stockholders approve the issuance of shares of Common Stock to Mr. Lazar upon conversion of the Series E Preferred Stock; and provided further, however, that even following a vote of the stockholders of the Company in accordance with the rules and regulations of the trading market on which the Common Stock trades on such date and applicable securities laws to approve the removal of the Ownership Limitation, the Company shall not effect any conversion of the Series E Preferred Stock, and a holder of Series E Preferred Stock shall not have the right to convert any portion of the Series E Preferred Stock, to the extent that, after giving effect to the conversion, such holder (together with any other shares of Common Stock otherwise held by such holder(s) or their affiliates) would beneficially own the number of shares of Common Stock, which would be in excess of any statutory threshold pursuant to which the acquisition of such shares would trigger a compulsory offer requirement under applicable federal or state tender offer rules for the holder and its affiliates to make a tender offer for all the shares of the Company.

Under the applicable Nasdaq rules and the Purchase Agreement, in the absence of stockholder approval, we may not issue shares of Common Stock to Mr. Lazar upon conversion of the Series E Preferred Stock, and Mr. Lazar may not vote shares of Series E Preferred Stock, in each case, in excess of the Ownership Limitation.

In the Purchase Agreement, we agreed to call a meeting of stockholders for purposes of soliciting approval of an amendment to the Certificate of Designations for the Series E Preferred Stock (the "Certificate of Designations") in order to remove the Ownership Limitations from the Series E Preferred Stock. Accordingly, we are calling this special meeting in order to solicit approval from stockholders for the removal of the Ownership Limitations. In addition, the issuance of shares of our common stock upon the conversion of the Series E Preferred Stock would result in a "change of control" under applicable rules of The Nasdaq Capital Market ("Nasdaq"). We are therefore also seeking approval from stockholders for the "change of control" that would result under Nasdaq rule upon the conversion of the Series E Preferred Stock.

If the removal of the Ownership Limitations with respect to the issuance of the Series E Preferred Stock to Mr. Lazar (or to a transferee of Mr. Lazar) is approved by our stockholders, Mr. Lazar (or his transferee) will become our majority stockholder, owning approximately 85% of our Common Stock (based on the conversion of all outstanding shares of preferred stock held by Mr. Lazar and all shares of preferred stock that are expected to be issued to Mr. Lazar pursuant to the Purchase Agreement). Our Common Stock will continue to be listed on Nasdaq, and the Company will continue as a public reporting company under the rules of the Securities and Exchange Commission (the "SEC").

In light of the foregoing, the Special Meeting has been called by the Board of Directors to submit to stockholders for approval of the following matters:

1. The approval of (i) the issuance to Mr. Lazar of the Common Stock issuable upon conversion of the Series E Preferred Stock in excess of the Ownership Limitations, the issuance of which would result in a "change of control" under Nasdaq rules and (ii) an amendment of the Certificate of Designations removing the Ownership Limitations. We refer to this proposal as the "Share Issuance and Change of Control Proposal" or "Proposal 1."
2. The approval of the adoption of an amendment to the Company's Amended and Restated Certificate of Incorporation, as amended, to effect a reverse stock split at a ratio not less than two-to-one and not more than ten-to-one, or the "Reverse Stock Split," such ratio and the implementation and timing of such Reverse Stock Split to be determined in the discretion of our Board of Directors (the "Reverse Stock Split Proposal"). We refer to this proposal as the "Reverse Split Proposal" or "Proposal 2.;" and
3. The approval of the adjournment of the Special Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes to approve any of the above Proposals. We refer to this proposal as the "Adjournment Proposal" or "Proposal 3."

The proxy statement attached to this letter provides you with more specific information concerning the Special Meeting, the Purchase Agreement, the transactions contemplated by the Purchase Agreement, the Reverse Stock Split and other related matters, including information as to how to cast your vote. We encourage you to read the entire proxy statement and the Purchase Agreement, a copy of which was previously filed as Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on March 29, 2024, and the other appendices to the proxy statement carefully and in their entirety. The proposals being presented for approval of our stockholders are more fully described in the Proxy Statement accompanying this Notice. Please refer to the Proxy Statement for further information with respect to the business to be transacted at the Special Meeting. No other matters will be considered at the Special Meeting.

Your vote is important. The close of business on April 26, 2024 has been fixed as the record date for the determination of stockholders of the Company entitled to notice of, and to vote at, the Special Meeting. Only stockholders of record at the close of business on April 26, 2024 are entitled to notice of, and to vote at, the Special Meeting and any adjournment or postponement thereof.

Enclosed is a proxy that will entitle you to vote your shares on the matters presented at the Special Meeting, even if you are unable to attend. Please mark the proxy to indicate your vote, date and sign the proxy and return it in the enclosed envelope as soon as possible for receipt prior to the Special Meeting, or follow the instructions in the accompanying proxy materials to vote via the internet. Regardless of the number of shares you own, please be sure you are represented at the Special Meeting either by attending virtually or by returning your proxy or voting on the internet as soon as possible.

On behalf of OpGen, Inc., I thank you for your ongoing interest and investment in our company.

Sincerely,

David Lazar
Chairman of the Board of Directors



9717 Key West Ave, Suite 100
Rockville, MD 20850

**NOTICE OF SPECIAL MEETING OF STOCKHOLDERS
TO BE HELD ON MAY 9, 2024**

April 26, 2024

Dear Stockholders of OpGen, Inc.:

The Board of Directors (the "Board") of OpGen, Inc., a Delaware corporation (the "Company"), has called for a Special Meeting of stockholders (the "Special Meeting"), to be held on May 9, 2024, beginning at 10:00 a.m. Eastern Time. This Special Meeting will be a "virtual meeting" of stockholders, which will be conducted exclusively via online audio-only broadcast. You will be able to participate in the Special Meeting, vote your shares and submit your questions during the meeting via the Internet by visiting www.virtualshareholdermeeting.com/OPGN2024SM. The Special Meeting will be held in virtual format only. The Special Meeting has been called for the following purposes:

1. The approval of (i) the issuance to Mr. Lazar of the Common Stock issuable upon conversion of the Series E Preferred Stock, the issuance of which would result in a "change of control" under Nasdaq rules and (ii) an amendment of the Certificate of Designations removing the Ownership Limitations. We refer to this proposal as the "Share Issuance and Change of Control Proposal" or "Proposal 1."
2. The approval of the adoption of an amendment to the Company's Amended and Restated Certificate of Incorporation, as amended, to effect a reverse stock split at a ratio not less than two-to-one and not more than ten-to-one, or the "Reverse Stock Split," such ratio and the implementation and timing of such Reverse Stock Split to be determined in the discretion of our Board of Directors (the "Reverse Stock Split Proposal"). We refer to this proposal as the "Reverse Split Proposal" or "Proposal 2.;" and
3. The approval of the adjournment of the Special Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes to approve any of the above Proposals. We refer to this proposal as the "Adjournment Proposal" or "Proposal 3."

No other matters will be considered at the Special Meeting.

Pursuant to the Company's Amended and Restated Bylaws, as amended (the "Bylaws"), the Board has fixed the close of business on April 26, 2024 as the record date for determination of the stockholders entitled to vote at the Special Meeting and any adjournments or postponements thereof. **Please complete, sign and submit your proxy, which is solicited by the Board of Directors, as soon as possible so that your shares can be voted at the Special Meeting in accordance with your instructions. You can ensure that your shares are voted at the Special Meeting by voting via the internet or by completing, signing and returning the enclosed proxy.** If you do attend the Special Meeting, you may then withdraw your proxy and vote your shares at the meeting. In any event, you may revoke your proxy prior to its exercise. Shares represented by proxies that are returned properly signed but unmarked will be voted in favor of proposals made by us.

This Notice of Special Meeting of Stockholders, Proxy Statement and the proxy card are available online at: <https://annualgeneralmeetings.com/opgnsp2024>.

BY ORDER OF THE BOARD OF DIRECTORS,

David Lazar
Chairman of the Board of Directors

SPECIAL MEETING OF STOCKHOLDERS

PROXY STATEMENT

Table of Contents

	<u>Page</u>
<u>IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON MAY 9, 2024</u>	1
<u>QUESTIONS AND ANSWERS ABOUT THE SPECIAL MEETING</u>	2
Q: <u>What is the purpose of the Special Meeting?</u>	2
Q: <u>Who is entitled to vote at the Special Meeting?</u>	2
Q: <u>How do I vote?</u>	2
Q: <u>What shares may I vote?</u>	3
Q: <u>What is the difference between holding shares as a stockholder of record and as a beneficial owner?</u>	3
Q: <u>What constitutes a quorum at the Special Meeting?</u>	3
Q: <u>What vote is required to approve each proposal?</u>	3
Q: <u>What is the effect of abstentions and broker non-votes?</u>	4
Q: <u>May I change my vote?</u>	4
Q: <u>Who is paying for this proxy solicitation?</u>	4
Q: <u>Am I entitled to dissenters' rights?</u>	4
Q: <u>How can I find out the results of the voting at the Special Meeting?</u>	4
Q: <u>If stockholders approve the proposals, will we remain a public company?</u>	4
Q: <u>What is the effect to us and our other stockholders of having David Lazar as our largest stockholder?</u>	5
Q: <u>Does the Board recommend stockholder approval of the Share Issuance and Change of Control Proposal?</u>	5
Q: <u>What factors did the Board consider and what were its reasons for recommending that the stockholders approve the Share Issuance and Change of Control Proposal?</u>	5
Q: <u>What happens if I sell my shares of Common Stock or Preferred Stock before the Special Meeting?</u>	6
Q: <u>How do the Company's insiders intend to vote their shares?</u>	6
<u>CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING INFORMATION</u>	7
<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</u>	8
<u>PROPOSALS TO BE ACTED UPON AT THE SPECIAL MEETING</u>	9
<u>PROPOSAL NO. ONE – SHARE ISSUANCE AND CHANGE OF CONTROL PROPOSAL</u>	9
<u>PROPOSAL NO. TWO – REVERSE STOCK SPLIT PROPOSAL</u>	12
<u>PROPOSAL NO. THREE – ADJOURNMENT PROPOSAL</u>	18
<u>OTHER MATTERS</u>	19
<u>DELIVERY OF DOCUMENTS TO STOCKHOLDERS SHARING AN ADDRESS</u>	20
<u>STOCKHOLDER PROPOSALS</u>	21



9717 Key West Ave, Suite 100
Rockville, MD 20850

SPECIAL MEETING PROXY STATEMENT

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE
SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON MAY 9, 2024**

The Notice of Special Meeting, Proxy Statement and Proxy are available at: <https://annualgeneralmeetings.com/opgnsp2024>

We are making these proxy materials available to you in connection with the solicitation of proxies by the Board of Directors (the “Board”) of OpGen, Inc. (the “Company”) for a Special Meeting of Stockholders (the “Special Meeting”) and for any adjournment or postponement of the Special Meeting. The mailing of the notice of internet availability of these proxy materials will commence on April 26, 2024.

This Special Meeting will be a “virtual meeting” of stockholders, which will be conducted exclusively via online audio-only broadcast. You will be able to participate in the Special Meeting, vote your shares and submit your questions during the meeting via the Internet by visiting www.virtualshareholdermeeting.com/OPGN2024SM. The Special Meeting will be held in virtual format only.

In this Proxy Statement, “we,” “us,” “our,” “OpGen” and the “Company” refer to OpGen, Inc.

This Proxy Statement is being made available to you because you own shares of our common stock, par value \$0.01 per share, or preferred stock, par value \$0.01 per share, as of the record date, which entitles you to vote at the Special Meeting. By use of a proxy, you can vote whether or not you attend the Special Meeting. This Proxy Statement describes the matters we would like you to vote on and provides information on those matters.

QUESTIONS AND ANSWERS ABOUT THE SPECIAL MEETING

What is the purpose of the Special Meeting?

The purpose of the Special Meeting is to hold a stockholder vote on the following matters:

1. The approval of (i) the issuance to Mr. Lazar of our common stock, par value \$0.01 (the “Common Stock”) issuable upon conversion of the Series E Preferred Stock (“Series E Preferred Stock”), the issuance of which would result in a “change of control” under Nasdaq rules and (ii) an amendment of the Certificate of Designations removing the Ownership Limitations. We refer to this proposal as the “Share Issuance and Change of Control Proposal” or “Proposal 1.”
2. The approval of the adoption of an amendment to the Company’s Amended and Restated Certificate of Incorporation, as amended (the “Certificate”), to effect a reverse stock split at a ratio not less than two-to-one and not more than ten-to-one, or the “Reverse Stock Split,” such ratio and the implementation and timing of such Reverse Stock Split to be determined in the discretion of our Board of Directors (the “Reverse Stock Split Proposal”). We refer to this proposal as the “Reverse Split Proposal” or “Proposal 2.”; and
3. The approval of the adjournment of the Special Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes to approve any of the above Proposals. We refer to this proposal as the “Adjournment Proposal” or “Proposal 3.”

Other than these proposals, no other proposals will be presented for a vote at the Special Meeting.

Who is entitled to vote at the Special Meeting?

Holders of record of our common stock and preferred stock as of the close of business on April 26, 2024, the record date for the Special Meeting, or the Record Date, will be entitled to notice of and to vote at the Special Meeting and at any adjournments or postponements thereof. Holders of record of shares of common stock or preferred stock are entitled to vote on all matters brought before the Special Meeting.

As of the Record Date, there were 12,624,902 shares of common stock, 250 shares of our Series D Convertible Preferred Stock (“Series D Preferred Stock” and together with our Series E Preferred Stock, the “Preferred Stock”) and 550,000 shares of our Series E Preferred Stock outstanding and entitled to vote. Holders of our common stock are entitled to one vote for each share of common stock outstanding as of the Record Date. Holders of our Preferred Stock will vote together with the holders of our Common Stock on the proposals on an as-converted to Common Stock basis. As of the Record Date, holders of our Series D Preferred Stock are entitled to 2,444 votes for each share of Series D Preferred Stock outstanding, and holders of our Series E Preferred Stock are entitled to 24 votes for each share of Series E Preferred Stock outstanding.

You do not need to attend the Special Meeting to vote your shares. Instead, you may vote your shares by marking, signing, dating and returning the enclosed proxy card or voting through the internet.

How do I vote?

You may vote virtually at the Special Meeting, vote by proxy through the internet or vote by proxy using the enclosed proxy card. To vote through the internet, go to <https://annualgeneralmeetings.com/opgnsp2024> and complete an electronic proxy card. You will be asked for a Control Number, which has been provided with the Notice of Internet Availability.

Whether you plan to attend the Special Meeting or not, we urge you to vote by proxy to ensure your vote is counted. Voting by proxy will not affect your right to attend the Special Meeting and vote. If you vote via the internet or properly complete your proxy card and submit it to us in time, the “proxy” (one of the individuals named on the proxy card) will vote your shares as you have directed. If you sign the proxy card but do not make specific choices, the proxy will vote your shares as recommended by the Board and, as to any other matters properly brought before the Special Meeting, in the sole discretion of the proxy.

What shares may I vote?

You may vote all shares of Common Stock and Preferred Stock of the Company that you owned as of the close of business on the Record Date. These shares include:

1. those held directly in your name as the *stockholder of record*; and
2. those held for you as the *beneficial owner* through a bank, broker or other financial intermediary at the close of business on the record date.

Each share of common stock is entitled to one vote.

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

Most stockholders hold their shares through a bank, broker or other financial intermediary rather than directly in their own name. As summarized below, there are some distinctions between shares held of record and shares held beneficially.

Stockholder of Record: If your shares are registered directly in your name with the Company's transfer agent, Pacific Stock Transfer Company, or the Transfer Agent, you are considered, with respect to those shares, the stockholder of record. As the stockholder of record, you have the right to grant your proxy directly to the Company or to vote your shares at the Special Meeting.

Beneficial Owner: If you hold shares in a stock brokerage account or through a bank or other financial intermediary, you are considered the beneficial owner of shares held in street name. Your bank, broker or other financial intermediary is considered, with respect to those shares, the stockholder of record. As the beneficial owner, you have the right to direct your bank, broker or other financial intermediary on how to vote your shares, but because you are not the stockholder of record, you may not vote these shares at the Special Meeting unless you obtain a signed proxy from the stockholder of record giving you the right to vote the shares. As a beneficial owner, you are, however, welcome to attend the Special Meeting.

What constitutes a quorum at the Special Meeting?

The presence in person or by proxy of the holders of thirty-four percent (34%) of the votes represented by the outstanding Common Stock and Preferred Stock is necessary to constitute a quorum at the Special Meeting. As of the Record Date, there were 26,436,148 votes represented by outstanding shares of our Common Stock and Preferred Stock. Accordingly, the presence of the holders of at least 8,988,291 of the votes entitled to be cast at the meeting will be required to establish a quorum. Both abstentions and broker non-votes, if any, are counted as present for determining the presence of a quorum.

What vote is required to approve each proposal?

Each proposal has its own vote requirement as follows:

Proposal No. One: Share Issuance and Change of Control Proposal. The Share Issuance and Change of Control Proposal requires the affirmative vote of a majority of the votes cast by all stockholders present in person or represented by proxy at the Special Meeting and entitled to vote on the proposal.

Proposal No. Two: Reverse Stock Split Proposal. Pursuant to our Certificate, the Reverse Stock Split Proposal requires the affirmative vote of at least a majority of the voting power of outstanding shares of capital stock of the Company.

Proposal No. Three: Adjournment. The approval of the adjournment requires the affirmative vote of a majority of the votes cast by all stockholders present in person or represented by proxy at the Special Meeting and entitled to vote on the proposal.

What is the effect of abstentions and broker non-votes?

An “abstention” occurs when a stockholder sends in a proxy with explicit instructions to decline to vote regarding a particular matter or attends the Special Meeting and elects not to vote or fails to cast a ballot. Abstentions are treated as shares present in person or by proxy and entitled to vote, so abstaining has the same effect as a negative vote for purposes of determining whether our stockholders approved Proposal 2 but will have no effect on Proposal 1 and Proposal 3.

A “broker non-vote” occurs when a broker has not received voting instructions from the beneficial owner and the broker does not have discretionary authority to vote the shares because the proposal is non-routine. We believe that Proposals 1, 2 and 3 will be considered non-routine matters under applicable rules. Broker non-votes will have no effect on the outcome of Proposals 1 and 3 but will have the same effect as a negative vote for purposes of determining whether our stockholders approved Proposal 2.

May I change my vote?

Yes. You may change your proxy instructions or revoke your proxy at any time prior to the vote at the Special Meeting. For shares held directly in your name, you may accomplish this by: (a) delivering a written notice of revocation to the Secretary of the Company or the Secretary’s designated agent bearing a later date than the proxy being revoked, (b) signing and delivering a later dated written proxy relating to the same shares, or (c) attending the Special Meeting and voting in person (although attendance at the Special Meeting will not in and of itself constitute a revocation of a proxy). For shares held in street name, you may change your vote by submitting new voting instructions to your broker, trustee or nominee.

Who is paying for this proxy solicitation?

We are paying for this proxy solicitation. Our officers and other regular employees may solicit proxies by mail, in person or by telephone or telecopy. These officers and other regular employees will not receive additional compensation. The Company may retain a third party proxy solicitor for the Special Meeting, whose costs, if retained, we estimate would be approximately \$10,000. We will reimburse banks, brokers, nominees, custodians and fiduciaries for their reasonable out-of-pocket expenses incurred in sending the proxy materials to beneficial owners of the shares.

Am I entitled to dissenters’ rights?

No dissenters’ rights are available under the General Corporation Law of the State of Delaware, our Certificate, or our bylaws to any stockholder with respect to any of the matters proposed to be voted on at the Special Meeting.

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

Preliminary voting results will be announced at the Special Meeting. In addition, final voting results will be published in a Current Report on Form 8-K that we expect to file within three business days after the completion of the Special Meeting.

If stockholders approve the proposals, will we remain a public company?

Whether or not any of the proposals are approved, we will continue to remain a public company and the requirement to file our annual reports (including the audited financial statements contained therein) and other reports with the SEC, although our listing on Nasdaq may be affected if the Reverse Stock Split Proposal is not approved.

What is the effect to us and our other stockholders of having David Lazar as our largest stockholder?

Because of Mr. Lazar's significant ownership of our Preferred Stock and Common Stock, any transaction or arrangement between us, on the one hand, and Mr. Lazar or any of their respective affiliates, on the other hand, will need to be approved by the Board consistent with its fiduciary duties to all of our stockholders. This will entail full disclosure of any relationships, transactions or other arrangements between us and Mr. Lazar and/or their respective affiliates in our filings with the SEC.

Following the approval of the Share Issuance and Change of Control Proposal, and the removal of the Ownership Limitations from the Series E Preferred Shares, Mr. Lazar will be our largest stockholder, and he would own a majority of the outstanding shares of our voting Preferred Stock and Common Stock and we would be treated as a "controlled company" under the rules of Nasdaq. As a controlled company, we would not be required to have a majority independent Board and our Compensation Committee would no longer be required to be composed solely of independent directors. Further, if Mr. Lazar owns a majority of our voting Preferred Stock and Common Stock, he will then have sufficient votes to elect all of our directors and to approve any other corporate action requiring the affirmative vote of holders of a majority of the outstanding shares of our voting Preferred Stock and Common Stock.

Does the Board recommend stockholder approval of the Share Issuance and Change of Control Proposal?

After careful consideration, the Board determined that the Purchase Agreement and the transactions contemplated thereby, including the issuances of Series E Preferred Stock to Mr. Lazar and the removal of the Ownership Limitations thereupon, are advisable and in the best interests of the Company and its stockholders.

Accordingly, the Board unanimously recommends that our stockholders vote "FOR" Proposal 1.

What factors did the Board consider and what were its reasons for recommending that the stockholders approve the Share Issuance and Change of Control Proposal?

After careful consideration, the Board determined that the Purchase Agreement and the transactions contemplated thereby, including the issuance of Series E Preferred Stock and the removal of the Ownership Limitations thereupon, are advisable and in the best interests of the Company and its stockholders, and determined to recommend that our stockholders approve the matters which need to be approved pursuant to the Purchase Agreement.

In making its determination, the Board considered various factors, including:

- The immediate and long-term benefit to the Company's financial condition of receiving \$3.0 million in cash from the sale of the Series E Preferred Stock, in light of the Company's current cash position and longer-term liquidity needs.
- The likelihood of securing alternative sources of capital, of a potential public or private sale of common stock, warrants, or convertible or nonconvertible debt securities and the likely price and other terms and conditions of such sales, which revealed a low likelihood of consummation of any alternatives, as well as a significant cost of such financing, assuming it could be obtained, to the Company and the associated significant dilution to its stockholders, which the Board determined was substantially less favorable to the Company than pursuing the transactions contemplated by the Purchase Agreement.
- The significant likelihood that, without the consummation of the transactions contemplated by the Purchase Agreement, the Company would need to seek bankruptcy protection in the near term, which may result in the Company's stockholders receiving no or very little value in respect of their shares of the Company's stock.
- The funding that Mr. Lazar has provided would allow us to explore strategic alternatives to maximize stockholder value.

- The recent performance of the Company's stock price on Nasdaq and the capital markets as a whole, including the Company's inability to secure any alternative offers to finance the Company via an investment in the Company's equity or to acquire the Company outright.
- The Company's extensive exploration, both by the Company's management as well as through its strategic advisors of opportunities for strategic partnership and/or investment, based on which the Board determined that the Purchase Agreement offered the best opportunity with greatest financial benefit, including after considering the risks that any such anticipated benefits could ultimately not materialize.
- The fact that we have covenanted under the Purchase Agreement to solicit approval of the proposals from our stockholders.
- The terms and conditions of the Purchase Agreement, including, among other things, the representations, warranties, covenants and agreements of the parties, the conditions to closing, the form and governance of the Company post-closing and the termination rights of the parties, taken as a whole, which the Board determined were more favorable to the Company and its stockholders than those terms and conditions which could have been negotiated with or offered by other potential strategic partners and/or investors.
- The fact that the Certificate of Designations provides that the Company will redeem the Series E Preferred Stock for the fair value (as defined in the Certificate of Designations) of such shares if we do not obtain approval for the removal of the Ownership Limitation after four (4) stockholder meetings.
- Potential risks associated with alternatives to the Purchase Agreement, including the potential impact on the price of the Company's common stock and ability to generate sufficient capital to support our ongoing operation.
- Potential risks associated with Mr. Lazar's significant ownership percentage following the Closing, including their right to designate a majority of directors to the Board, which will enable them to affect the outcome of, or exert significant influence over, all matters requiring Board or stockholder approval, including the election and removal of directors and any change in control, and could have the effect of delaying or preventing a change in control of the Company or otherwise discouraging or preventing a potential acquirer from attempting to obtain control of the Company, which, in turn, could have a negative effect on the market price of the Company's Common Stock and could impact the low trading volume and volatility of the Company's Common Stock.

What happens if I sell my shares of Common Stock or Preferred Stock before the Special Meeting?

The Record Date for stockholders entitled to vote at the Special Meeting is earlier than the date of the Special Meeting. If you transfer your shares of Common Stock or Preferred Stock after the Record Date but before the Special Meeting, you will, unless special arrangements are made to confer the voting rights with respect to such shares to the transferee, retain your right to vote at the Special Meeting.

How do the Company's insiders intend to vote their shares?

All of the Company's current directors and executive officers are expected to vote their shares of Common Stock and Preferred Stock in favor of all proposals set forth in this Proxy Statement. On the Record Date, the Company's current directors and executive officers were entitled to cast an aggregate of 3,581,984 votes (which amount is determined by applying the Ownership Limitation to shares of Series E Preferred Stock held by Mr. Lazar), representing approximately 22% of the Company's issued and outstanding voting power of the Company's capital stock as of the Record Date.

If Proposal 1 passes, then Mr. Lazar will be permitted to vote his shares of Series E Preferred Stock on the remaining proposals without regard to the Ownership Limitation. Accordingly, assuming Proposal 1 passed, then, on the Record Date, the Company's current directors and executive officers would be entitled to cast an aggregate of 13,600,000 votes on Proposals 2 and 3, representing approximately 51% of the Company's issued and outstanding voting power of the Company's capital stock as of the Record Date.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING INFORMATION

This Proxy Statement contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. All statements in this Proxy Statement other than statements of historical fact could be deemed forward looking including, but not limited to, statements regarding the Company's future expectations, plans and prospects, including statements about our beliefs or current expectations of our future financial prospects, operations and corporate governance procedures following the completion of the transactions with Mr. Lazar and the approval of the proposals, as well as our current beliefs of our future prospects if the approval of the proposals does not occur, whether as a result of a failure of our stockholders to approve the Share Issuance and Change of Control Proposal or otherwise. Words such as "plans," "expects," "will," "shall," "anticipates," "continue," "expand," "advance," "believes," "guidance," "target," "may," "remain," "project," "outlook," "intend," "estimate," "could," "should," and other words and terms of similar meaning and expression are intended to identify forward-looking statements, although not all forward-looking statements contain such terms. Forward-looking statements are based on management's current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors. Given these risks and uncertainties, you are cautioned not to place undue reliance on such forward-looking statements. For a discussion of other risks and uncertainties, and other important factors, any of which could cause the Company's actual results to differ from those contained in the forward-looking statements, see the section titled "Risk Factors" in the Company's 2022 Annual Report on Form 10-K for the year ended December 31, 2022, filed with the SEC on March 30, 2023. All information in this Proxy Statement is as of the date of the release, and the Company undertakes no duty to update this information or to publicly announce the results of any revisions to any of such statements to reflect future events or developments, except as required by law.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The number of shares of the Company's Common Stock outstanding at the close of business on April 15, 2024 was 12,624,902 shares. In addition, as of April 15, 2024, there were 250 shares of Series D Preferred Stock outstanding and 400,000 shares of Series E Preferred Stock outstanding. Each share of Series D Preferred Stock is convertible into 2,444 shares of Common Stock, and each share of Series E Preferred Stock is convertible into 24 shares of Common Stock, in each case, subject to applicable ownership limitations that restrict a holder's ability to convert in excess of designated percentages. The following table sets forth the beneficial ownership of the Company's common stock, as of April 15, 2024, by each Company director and executive officer, and by all directors and executive officers as a group. Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act. In computing the number of shares beneficially owned by a person or a group and the percentage ownership of that person or group, shares of our common stock subject to options and warrants currently exercisable or exercisable within 60 days after April 15, 2024 are deemed outstanding, but are not deemed outstanding for the purpose of computing the percentage ownership of any other person. To the knowledge of the directors and executive officers of the Company, as of April 15, 2024, there are no persons and/or companies who or which beneficially own, directly or indirectly, shares representing more than 5% of the voting rights attached to all outstanding shares of the Company, other than as set forth below. Unless otherwise indicated, the address of each beneficial owner listed below is c/o OpGen, Inc., 9717 Key West Ave, Suite 100, Rockville, MD 20850.

Name and Address of Beneficial Owner	Number of Shares of common stock	Percentage Beneficially Owned
5% Stockholders		
David Lazar ⁽¹⁾	9,700,000	42.48%
Directors and Officers		
David Lazar ⁽¹⁾	9,700,000	42.48%
Avraham Ben-Tzvi ⁽²⁾	100,000	*
Matthew McMurdo ⁽³⁾	100,000	*
David Natan ⁽⁴⁾	100,000	*
All directors and officers as a group (4 persons)	10,000,000	43.80%

* Less than one percent of shares outstanding.

(1) Consists of: (i) 400,000 shares of Series E Preferred Stock; and (ii) 100,000 shares of restricted stock that were issued upon Mr. Lazar's appointment to the Board. Each share of Series E Preferred Stock converts into 24 shares of Common Stock; provided, that Mr. Lazar may not vote shares of Series E Preferred Stock representing, or convert shares of Series E Preferred Stock that would result in, Mr. Lazar or his transferees voting or holding, in excess of the Ownership Limitation.

(2) Consists of 100,000 shares of restricted stock that were issued upon Mr. Ben-Tzvi's appointment to the Board.

(3) Consists of 100,000 shares of restricted stock that were issued upon Mr. McMurdo's appointment to the Board.

(4) Consists of 100,000 shares of restricted stock that were issued upon Mr. Natan's appointment to the Board.

PROPOSALS TO BE ACTED UPON AT THE SPECIAL MEETING

PROPOSAL NO. 1 - SHARE ISSUANCE AND CHANGE OF CONTROL PROPOSAL

We are seeking stockholder approval for (i) the issuance to Mr. Lazar of the Common Stock issuable upon conversion of the Series E Preferred Stock, the issuance of which would result in a “change of control” under Nasdaq rules and (ii) an amendment of the Certificate of Designations removing the Ownership Limitations, including any approvals required under Nasdaq Rule 5635. A copy of the amended and restated Certificate of Designations removing the Ownership Limitations is attached to this proxy statement as Appendix A. We encourage stockholders to read such amended and restated Certificate of Designations in its entirety.

Under the Purchase Agreement, we agreed sell to Mr. Lazar 3,000,000 shares of Series E Preferred Stock of the Company at a price of \$1.00 per share for aggregate gross proceeds of \$3.0 million. Each share of Series E Preferred Stock is convertible into 24 shares of Common Stock; provided, that, in no event, can the Series E Preferred Stock be convertible into Common Stock in a manner that would result in Mr. Lazar or his transferees or their affiliates holding more than the lesser of (i) 19.99% (together with any other shares of Common Stock otherwise held by them or their affiliates) and (ii) such lower percentage as may be required by applicable stock exchange rules of the then issued and outstanding Common Stock (referred to herein as the “Ownership Limitation”), prior to the date that the Company’s stockholders approve the issuance of shares of Common Stock to Mr. Lazar upon conversion of the Series E Preferred Stock, including the “change of control” (as described in Nasdaq rules) that would result thereby; and provided further, however, that even following a vote of the stockholders of the Company in accordance with the rules and regulations of the trading market on which the Common Stock trades on such date and applicable securities laws to approve the removal of the Ownership Limitation, the Company shall not effect any conversion of the Series E Preferred Stock, and a holder of Series E Preferred Stock shall not have the right to convert any portion of the Series E Preferred Stock, to the extent that, after giving effect to the conversion, such holder (together with any other shares of Common Stock otherwise held by such holder(s) or their affiliates) would beneficially own the number of shares of Common Stock, which would be in excess of any statutory threshold pursuant to which the acquisition of such shares would trigger a compulsory offer requirement under applicable federal or state tender offer rules for the holder and its affiliates to make a tender offer for all the shares of the Company.

Under the applicable Nasdaq rules and the Purchase Agreement, in the absence of stockholder approval, we may only issue to Mr. Lazar upon conversion of the Series E Preferred Stock such number of shares of Common Stock, equal to the lower of either, (X) the maximum percentage of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Preferred Stock that can be issued to the Holder without requiring a vote of our shareholders under the rules and regulations of the Trading Market on which the Common Stock trades on such date and applicable securities laws; or, (Y) 19.99% of the number of shares of the Common Stock outstanding immediately prior to the date of issuance.

The Purchase Agreement contains customary representations, warranties and agreements of the Company and Mr. Lazar, limitations and conditions regarding sales of the Series E Preferred Stock or underlying Common Stock, indemnification rights and other obligations of the parties. Furthermore, the Purchase Agreement contains certain covenants, including our commitment to call a meeting of stockholders for purposes of soliciting approval of an amendment to the Certificate of Designations in order to remove the Ownership Limitations from the Series E Preferred Stock.

In the Purchase Agreement, Mr. Lazar has agreed that he will not engage in or effect, directly or indirectly, any short sales involving the Company’s securities or any hedging transaction that transfers the economic risk of ownership of the Series E Preferred Stock. Additionally, prior to the transaction, the Board of Directors of the Company unanimously adopted resolutions (i) exempting Mr. Lazar’s acquisition of the Series E Preferred Stock from Section 16(b) of the Exchange Act pursuant to Rule 16b-3 and (ii) granting Mr. Lazar the right to sell, assign or otherwise transfer either the Series E Preferred Stock (as well as any Common Stock underlying any such Series E Preferred Stock) or its rights to acquire the Series E Preferred Stock (as well as any Common Stock underlying any such securities) pursuant to the Purchase Agreement (the “Securities Purchase Rights”).

We encourage you to read the Purchase Agreement in its entirety, a copy of which was previously filed as Exhibit 10.1 to the Company’s Current Report on Form 8-K filed with the Securities and Exchange Commission on March 29, 2024.

At the Special Meeting, for purposes of complying with Nasdaq Listing Rule 5635, we will ask stockholders to authorize the issuance of the Series E Preferred Stock and the potential issuance of shares of our Common Stock that may be issued upon the conversion of the Series E Preferred Stock, in an amount that ultimately may equal or be in excess of 20% of our Common Stock outstanding before the issuance of the Series E Preferred Stock (including by the operation of anti-dilution provisions contained in the Series E Preferred Stock) and which may constitute a “change of control” under Nasdaq rules. In addition, we will ask stockholders to authorize an amendment to the Certificate of Designations to remove the Ownership Limitation. We may also transact any other business that may properly come before the Special Meeting or at any adjournments or postponements of the Special Meeting.

In the event that we do not receive approval from the stockholders for the removal of the Ownership Limitation after holding four (4) stockholders meetings, the Certificate of Designations provides that the Company will redeem the Series E Preferred Stock by paying the holder the fair value of such shares. Fair value is defined in the Certificate of Designations as the last reported closing stock price on Nasdaq on the day of the last such stockholder meeting. Upon the redemption of the Series E Preferred Stock, the outstanding shares of Series E Preferred Stock will be deemed cancelled.

The Certificate of Designations attached hereto as Appendix B reflects the filing previously submitted to the Secretary of State of the State of Delaware. In the event stockholders approval this proposal, the Company will file the amended and restated Certificate of Designations, in the form attached hereto as Appendix A, with the Secretary of State of the State of Delaware, which will thereafter set forth the rights, privileges and terms of the Series E Preferred Stock.

Whether or not any of the Proposals are approved, we will continue to remain a public company and the requirement to file our annual reports (including the audited financial statements contained therein) and other reports with the SEC, although our listing on Nasdaq may be affected if the Reverse Stock Split Proposal is not approved.

Because of Mr. Lazar’s significant ownership of our Common Stock, any transaction or arrangement between us, on the one hand, and Mr. Lazar or any of their respective affiliates, on the other hand, will need to be approved by the Board consistent with its fiduciary duties to all of our stockholders. This will entail full disclosure of any relationships, transactions or other arrangements between us and Mr. Lazar and his respective affiliates in our filings with the SEC.

Following the approval of the Share Issuance and Change of Control Proposal and approval of the removal of the Ownership Limitations from the Series E Preferred Shares, Mr. Lazar will be our largest stockholder, and he would own a majority of the outstanding shares of our voting Preferred Stock and Common Stock and we would be treated as a “controlled company” under the rules of Nasdaq. As a controlled company, we would not be required to have a majority independent Board and our Compensation Committee would no longer be required to be composed solely of independent directors. Further, if Mr. Lazar owns a majority of our Common Stock, he will then have sufficient votes to elect all of our directors and to approve any other corporate action requiring the affirmative vote of holders of a majority of the outstanding shares of our Common Stock.

After careful consideration, the Board determined that the Purchase Agreement and the transactions contemplated thereby, including the issuances of Series E Preferred Shares and the removal of the Ownership Limitations therefrom, are advisable and in the best interests of the Company and its stockholders, and determined to recommend that our stockholders approve Proposal No. 1.

In making its determination, the Board considered various factors, including:

The immediate and long-term benefit to the Company’s financial condition of receiving \$3.0 million in cash from the sale of the Series E Preferred Stock, in light of the Company’s current cash position and longer-term liquidity needs.

The likelihood of securing alternative sources of capital, of a potential public or private sale of common stock, warrants, or convertible or nonconvertible debt securities and the likely price and other terms and conditions of such sales, which revealed a low likelihood of consummation of any alternatives, as well as a significant cost of such financing, assuming it could be obtained, to the Company and the associated significant dilution to its stockholders, which the Board determined was substantially less favorable to the Company than pursuing the transactions contemplated by the Purchase Agreement.

The significant likelihood that, without the consummation of the transactions contemplated by the Purchase Agreement, the Company would need to seek bankruptcy protection in the near term, which may result in the Company’s stockholders receiving no or very little value in respect of their shares of the Company’s stock.

The funding that Mr. Lazar has provided would allow us to explore strategic alternatives to maximize stockholder value.

The recent performance of the Company's stock price on Nasdaq and the capital markets as a whole, including the Company's inability to secure any alternative offers to finance the Company via an investment in the Company's equity or to acquire the Company outright.

The Company's extensive exploration, both by the Company's management as well as through its strategic advisors of opportunities for strategic partnership and/or investment, based on which the Board determined that the Purchase Agreement offered the best opportunity with greatest financial benefit, including after considering the risks that any such anticipated benefits could ultimately not materialize.

The fact that we have covenanted under the Purchase Agreement to solicit approval of the proposals from our stockholders.

The terms and conditions of the Purchase Agreement, including, among other things, the representations, warranties, covenants and agreements of the parties, the conditions to closing, the form and governance of the Company post-closing and the termination rights of the parties, taken as a whole, which the Board determined were more favorable to the Company and its stockholders than those terms and conditions which could have been negotiated with or offered by other potential strategic partners and/or investors.

Potential risks associated with alternatives to the Purchase Agreement, including the potential impact on the price of the Company's common stock and ability to generate sufficient capital to support our ongoing operation.

Potential risks associated with Mr. Lazar's significant ownership percentage following the Closing, including their right to designate a majority of directors to the Board, which will enable them to affect the outcome of, or exert significant influence over, all matters requiring Board or stockholder approval, including the election and removal of directors and any change in control, and could have the effect of delaying or preventing a change in control of the Company or otherwise discouraging or preventing a potential acquirer from attempting to obtain control of the Company, which, in turn, could have a negative effect on the market price of the Company's Common Stock and could impact the low trading volume and volatility of the Company's Common Stock.

Vote Required

The affirmative vote, in person or by proxy, by the holders on the Record Date of a majority of the voting power of the outstanding shares of capital stock of the Company is required to approve the Share Issuance and Change of Control Proposal. Abstentions and broker non-votes, if any, will have no effect on the Share Issuance and Change of Control Proposal.

Recommendation of the Board of Directors

The Board of Directors unanimously recommends that you vote "**FOR**" Proposal No. 1 to approve the Share Issuance and Change of Control Proposal.

PROPOSAL NO. 2 – REVERSE STOCK SPLIT PROPOSAL

We are seeking stockholder approval for an amendment to the Company's Amended and Restated Certificate of Incorporation, as amended (the "Certificate"), authorizing a Reverse Stock Split of the issued and outstanding shares of our common stock, at a ratio within a range of two-to-one and not more than ten-to-one, such ratio and the implementation and timing of such Reverse Stock Split to be determined in the discretion of our Board. The form of the proposed amendment to the Certificate, or the Amendment, is attached to this proxy statement as Appendix C.

On April 15, 2023, our Board approved the proposed Reverse Stock Split, and the Amendment in order to effect the Reverse Stock Split, subject to stockholder approval, and directed that the Amendment be submitted to a vote of the Company's stockholders at the Special Meeting. If approved by our stockholders, and if implemented by our Board of Directors, the Reverse Stock Split will become effective at the time specified in the Amendment, as filed with the Secretary of State of the State of Delaware. The exact ratio of the Reverse Stock Split, within the two-to-one to ten-to-one range, would be determined by the Board and publicly announced by the Company prior to filing the Amendment. In determining the appropriate ratio for the Reverse Stock Split, our Board of Directors will consider, among other things, factors such as:

- the minimum price per share requirements of The Nasdaq Capital Market;
- the historical trading price and trading volume of our common stock;
- the number of shares of our common stock outstanding and anticipated equity financing transactions during 2024;
- the then-prevailing trading price and trading volume of our common stock and the anticipated impact of the Reverse Stock Split on the trading market for our common stock;
- business developments affecting us; and
- prevailing general market and economic conditions.

Background and Reasons for the Reverse Stock Split

Our Board authorized the Reverse Stock Split of our common stock with the primary intent of increasing the price of our common stock in order to meet the price criteria for continued listing on Nasdaq. Our Common Stock is publicly traded and listed on Nasdaq under the symbol "OPGN." Our Board believes that, in addition to increasing the price of our common stock, the Reverse Stock Split would make our Common Stock more attractive to a broader range of institutional and other investors. Accordingly, for these and other reasons discussed below, we believe that effecting the Reverse Stock Split is in OpGen's and our stockholders' best interests.

On June 5, 2023, we received a notice from the Listing Qualifications Staff of The Nasdaq Stock Market LLC (the "Staff") notifying us that, based upon the closing bid price of our common stock, for the 30 consecutive business days prior to the notice, the Company no longer met the requirement to maintain a minimum closing bid price of \$1.00 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). The Company was originally granted 180 calendar days, or until December 4, 2023, to regain compliance with the minimum bid price rule.

On December 6, 2023, the Company received written notification (the "December Notice") from the Staff indicating that, based upon (i) the Company's continued non-compliance with the minimum bid price rule and (ii) the Company's inability to meet Nasdaq's initial listing requirement for maintaining a minimum of stockholders' equity, the Staff determined that the Company was not eligible for an additional 180 day extension to meet the minimum bid price rule. As a result, the Staff determined to delist the Company's securities from Nasdaq, unless the Company timely requested an appeal to a Nasdaq Hearings Panel (the "Panel"), which the Company submitted on December 11, 2023. In response to the Company's request, on February 9, 2024, the Company received written notification from the Staff that the Panel had granted the Company's request for an additional period, during which the Company will remain listed on Nasdaq, to regain compliance with the minimum bid price rule. Pursuant to the notice, the Panel granted the Company an additional period until June 3, 2024 to regain compliance. The extension is subject to certain conditions specified by the Panel in the Notice.

If we are not in compliance with the minimum bid price requirement by June 3, 2024, we expect that Nasdaq will again proceed with delisting proceedings. There can be no assurances that we will be granted any further relief or additional time to regain compliance with the minimum bid price requirement and do not have certainty that any additional grace period would allow the Company to comply with the minimum closing bid price requirement unless a reverse stock split is approved. We believe effectuation of the Reverse Stock Split Proposal will help us avoid delisting from The Nasdaq Capital Market.

Our Board believes that the delisting of our common stock from The Nasdaq Capital Market would result in decreased liquidity and/or increased volatility in our common stock, and a diminution of institutional investor interest in our Company. Our Board also believes that a delisting could cause a loss of confidence of potential industry partners, lenders and employees, which could further harm our business and our future prospects.

Our Board continues to believe that an increased stock price could encourage investor interest and improve the marketability of our common stock to a broader range of investors, and thus enhance our liquidity. Because of the trading volatility often associated with low-priced stocks, many brokerage firms and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. Additionally, because brokers' commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stock, the current share price of our common stock may result in an investor paying transaction costs that represent a higher percentage of total share value than would be the case if our share price were higher. Our Board believes that the higher share price resulting from the Reverse Stock Split could enable institutional investors and brokerage firms with such policies and practices to invest in our common stock.

Although we expect that the Reverse Stock Split will result in an increase in the market price of our common stock, the Reverse Stock Split may not result in a permanent increase in the market price of our common stock, which is dependent on many factors, including general economic, market and industry conditions and other factors detailed from time to time in the reports we file with the SEC.

Certain Risks Associated with the Reverse Stock Split

Unexpected factors, such as our ability to successfully accomplish our business goals, market conditions and the market perception of our business may adversely affect the market price of our common stock. There can be no assurance that the total market capitalization of our common stock after the implementation of the Reverse Stock Split will be equal to or greater than the total market capitalization before the Reverse Stock Split or that the per share market price of our common stock following the Reverse Stock Split will increase in proportion to the reduction in the number of shares of our common stock outstanding before the Reverse Stock Split.

There can be no assurance that the market price per new share of our common stock after the Reverse Stock Split will remain unchanged or increase in proportion to the reduction in the number of old shares of our common stock outstanding before the Reverse Stock Split. For example, based on the closing price of our common stock on April 23, 2024 of \$0.613 per share, if the Board were to implement the Reverse Stock Split and utilize a ratio of two-to-one, we cannot assure you that the post-split market price of our common stock would remain greater than \$1.00. We are aware that in many cases, the market price of a company's shares declines after a reverse stock split is implemented.

Accordingly, the total market capitalization of our common stock after the Reverse Stock Split, when and if implemented, may be lower than the total market capitalization before the Reverse Stock Split. Moreover, in the future, the market price of our common stock following the Reverse Stock Split may not exceed or remain higher than the market price prior to the Reverse Stock Split.

Further, the liquidity of our capital stock may be harmed by the proposed Reverse Stock Split given the reduced number of shares that will be outstanding after the Reverse Stock Split, particularly if the stock price does not remain increased as a result of the Reverse Stock Split. In addition, the proposed Reverse Stock Split may increase the number of stockholders who own odd lots (less than 100 shares) of our common stock, creating the potential for such stockholders to experience an increase in the cost of selling their shares and greater difficulty effecting sales. If we effect the Reverse Stock Split, the resulting per-share stock price may not attract institutional investors and may not satisfy the investing guidelines of such investors and, consequently, the trading liquidity of our common stock may not improve.

While the Board proposes the Reverse Stock Split to bring the price of our common stock back above \$1.00 per share in order to meet the requirements for the continued listing of our common stock on The Nasdaq Capital Market, there is no guarantee that the price of our common stock will not decrease in the future, or that for any other reason our common stock will not remain in compliance with The Nasdaq Capital Market listing standards. There can be no guarantee that the closing bid price of our common stock will remain at or above \$1.00 for ten consecutive trading days, which would be required to cure our current listing standard deficiency.

Potential Effects of the Proposed Reverse Stock Split

If this proposal is approved and the Reverse Stock Split is effected, the Reverse Stock Split will be realized simultaneously and in the same ratio for all of our issued and outstanding shares of common stock. The immediate effect of the Reverse Stock Split would be to reduce the number of shares of our common stock outstanding and to increase the per-share trading price of our common stock.

However, we cannot predict the effect of any reverse stock split upon the market price of our common stock over an extended period, and in many cases, the market value of a company's common stock following a reverse stock split declines, in many cases, because of variables outside of a company's control (such as market volatility, investor response to the news of a proposed reverse stock split and the general economic environment). We cannot assure you that the trading price of our common stock after the Reverse Stock Split will rise in inverse proportion to the reduction in the number of shares of our common stock outstanding as a result of the Reverse Stock Split. Also, we cannot assure you that the Reverse Stock Split would lead to a sustained increase in the trading price of our common stock. The trading price of our common stock may change due to a variety of other factors, including our operating results and other factors related to our business and general market conditions. You should also keep in mind that the implementation of a reverse stock split does not have an effect on the actual or intrinsic value of our business or a stockholder's proportional ownership in our Company. However, should the overall value of our common stock decline after the proposed Reverse Stock Split, then the actual or intrinsic value of the shares of our common stock held by you will also proportionately decrease as a result of the overall decline in value.

Examples of Potential Reverse Stock Split at Various Ratios. The table below provides examples of reverse stock splits at various ratios up to ten-to-one, without giving effect to the treatment of fractional shares. The actual number of shares outstanding after giving effect to the Reverse Stock Split, if effected, will depend on the actual ratio that is determined by our Board in accordance with the Amendment to the Company's Charter.

Shares outstanding (on an as-converted to Common Stock basis) as of April 26, 2024	Reverse Stock Split Ratio	Shares outstanding after Reverse Stock Split
26,436,148	2 for 1	13,218,074
26,436,148	4 for 1	6,609,037
26,436,148	6 for 1	4,406,024
26,436,148	8 for 1	3,304,518
26,436,148	10 for 1	2,643,614

The resulting decrease in the number of shares of our common stock outstanding could potentially adversely affect the liquidity of our common stock, especially in the case of larger block trades.

Effects on Ownership by Individual Stockholders. If we implement the Reverse Stock Split, the number of shares of our common stock held by each stockholder would be reduced by multiplying the number of shares held immediately before the Reverse Stock Split by the appropriate ratio and then rounding down to the nearest whole share. We would pay cash to each stockholder in lieu of any fractional interest in a share to which each stockholder would otherwise be entitled as a result of the Reverse Stock Split, as described in further detail below. The cash amount to be paid to each stockholder would equal the stockholder's fractional interest in one share of our common stock to which the stockholder would otherwise be entitled, multiplied by the closing sale price of our common stock on The Nasdaq Capital Market on the trading day immediately prior to the effective date of the Reverse Stock Split. The Reverse Stock Split would not affect any stockholder's percentage ownership interest in our Company or proportionate voting power, except to the extent that interests in fractional shares would be paid in cash.

Effect on Restricted Stock Units, Stock Options, Warrants. In addition, we would adjust all outstanding shares of any restricted stock units, stock options and warrants entitling the holders to purchase shares of our common stock as a result of the Reverse Stock Split, as required by the terms of these securities. In particular, we would reduce the conversion ratio for each security, and would increase the exercise price in accordance with the terms of each security based on Reverse Stock Split ratio (i.e., the number of shares issuable under such securities would decrease by the ratio, and the exercise price per share would be multiplied by ratio). Also, we would reduce the number of shares reserved for issuance under our existing equity incentive plans, proportionately based on the ratio of the Reverse Stock Split. The Reverse Stock Split would not otherwise affect any of the rights currently accruing to holders of our common stock, or options or warrants exercisable for our common stock.

Other Effects on Issued and Outstanding Shares. If we implement the Reverse Stock Split, the rights pertaining to the issued and outstanding shares of our common stock would be unchanged after the Reverse Stock Split. Each share of our common stock issued following the Reverse Stock Split would be fully paid and non-assessable.

Reservation of Right to Abandon the Proposed Amendment to our Certificate

Our Board reserves the right not to file the Amendment to our Certificate without further action by our stockholders at any time before the effectiveness of the filing of the Amendment with the Secretary of State of the State of Delaware, even if the authority to effect the Amendment is approved by our stockholders at the Annual Meeting. By voting in favor of the Amendment, you are expressly also authorizing our Board to delay, not proceed with, and abandon, the proposed Amendment if it should so decide, in its sole discretion, that such action is in the best interests of the Company and its stockholders.

Procedure for Effecting the Proposed Stock Split and Exchange of Stock Certificates

If stockholders approve this proposal and our Board does not otherwise abandon the Amendment contemplating the Reverse Stock Split, we will file with the Delaware Secretary of State a Certificate of Amendment to our Certificate, in the form attached to this proxy statement as Appendix C. The Reverse Stock Split will become effective at the time and on the date of filing of, or at such later time as is specified in, the Amendment, which we refer to as the "effective time." Beginning at the effective time, each certificate representing shares of common stock will be deemed for all corporate purposes to evidence ownership of the number of whole shares into which the shares previously represented by the certificate were combined pursuant to the Reverse Stock Split.

Upon the Reverse Stock Split, we intend to treat stockholders holding our common stock in "street name," through a bank, broker or other nominee, in the same manner as registered stockholders whose shares are registered in their names. Banks, brokers or other nominees will be instructed to effect the Reverse Stock Split for their beneficial holders holding our common stock in "street name." However, these banks, brokers or other nominees may have different procedures than registered stockholders for processing the Reverse Stock Split. If you hold your shares with a bank, broker or other nominee and if you have any questions in this regard, we encourage you to contact your nominee.

Following the Reverse Stock Split, stockholders holding physical certificates must exchange those certificates for new certificates and a cash payment in lieu of any fractional shares.

The Company's transfer agent will advise registered stockholders of the procedures to be followed to exchange certificates in a letter of transmittal to be sent to stockholders. No new certificates will be issued to a stockholder until the stockholder has surrendered the stockholder's outstanding certificate(s), together with the properly completed and executed letter of transmittal, to the transfer agent. Any old shares submitted for transfer, whether pursuant to a sale, other disposition or otherwise, will automatically be exchanged for new shares. Stockholders should not destroy any stock certificate(s) and should not submit any certificate(s) until requested to do so.

No Appraisal Rights

No appraisal rights are available under the General Corporation Law of the State of Delaware or under our Certificate, or our Amended and Restated Bylaws, as amended, with respect to the Reverse Stock Split. There may exist other rights or actions under state law for stockholders who are aggrieved by reverse stock splits generally.

Potential Anti-Takeover Effect

Although the increased proportion of unissued authorized shares to issued shares could, under certain circumstances, have an anti-takeover effect (for example, by permitting issuances that would dilute the stock ownership of a person seeking to effect a change in the composition of the Board or contemplating a tender offer or other transaction for the combination of the Company with another company), other than with respect to the transactions contemplated by the Purchase Agreement, the Reverse Stock Split proposal is not being proposed in response to any effort of which we are aware to accumulate shares of our Common Stock or obtain control of the Company, nor is it part of a plan by management to recommend a series of similar amendments to the Board and stockholders. Other than the Reverse Stock Split proposal, the Board does not currently contemplate recommending the adoption of any other actions that could be construed to affect the ability of third parties to take over or change control of the Company.

Interests of Directors and Executive Officers

Our directors and executive officers have no substantial interests, directly or indirectly, in the matters set forth in this proposal except to the extent of their ownership of shares of our Common Stock or Preferred Stock.

Accounting Consequences

The par value of our common stock would remain unchanged at \$0.01 per share after the Reverse Stock Split. Also, our capital account would remain unchanged, and we do not anticipate that any other accounting consequences would arise as a result of the Reverse Stock Split.

No Going Private Transaction

Notwithstanding the decrease in the number of outstanding shares following the Reverse Stock Split, our Board of Directors does not intend for this transaction to be the first step in a "going private transaction" within the meaning of Rule 13e-3 of the Exchange Act.

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

The following is a summary of the material U.S. federal income tax consequences of the Reverse Stock Split to holders of our shares. This summary is based on the Internal Revenue Code of 1986, as amended, or the Code, the Treasury regulations promulgated thereunder, and administrative rulings and court decisions in effect as of the date of this document, all of which may be subject to change, possibly with retroactive effect. This summary only addresses holders who hold their shares as capital assets within the meaning of the Code and does not address all aspects of U.S. federal income taxation that may be relevant to holders subject to special tax treatment, such as financial institutions, dealers in securities, insurance companies, foreign persons and tax-exempt entities. In addition, this summary does not consider the effects of any applicable state, local, foreign or other tax laws.

We have not sought and will not seek any ruling from the Internal Revenue Service, or the IRS, or an opinion from counsel with respect to the U.S. federal income tax consequences discussed below. There can be no assurance that the tax consequences discussed below would be accepted by the IRS or a court. The tax treatment of the Reverse Stock Split to holders may vary depending upon a holder's particular facts and circumstances.

We urge holders to consult with their own tax advisors as to any U.S. federal, state, local or foreign tax consequences applicable to them that could result from the Reverse Stock Split.

Except as described below with respect to cash received in lieu of fractional shares, the receipt of common stock in the Reverse Stock Split should not result in any taxable gain or loss to a holder for U.S. federal income tax purposes. The aggregate tax basis of the common stock received by a holder as a result of the Reverse Stock Split (including the basis of any fractional share to which a holder is entitled) will be equal to the aggregate basis of the existing common stock exchanged for such stock. A holder's holding period for the common stock received in the Reverse Stock Split will include the holding period of the common stock exchanged therefor.

A holder who receives cash in lieu of a fractional share of common stock will be treated as first receiving such fractional share and then receiving cash in redemption of such fractional share. A holder generally will recognize capital gain or loss on such deemed redemption in an amount equal to the difference between the amount of cash received and the adjusted basis of such fractional share.

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is now and will remain Pacific Stock Transfer, Inc.

Listing

Our Common Stock is currently traded on The Nasdaq Capital Market under the symbol "OPGN". The principal reason for the Reverse Stock Split is to increase the per share trading price of our Common Stock in order to help ensure a share price high enough to satisfy the \$1.00 per share minimum bid price requirement for continued listing on The Nasdaq Capital Market. However, there can be no assurance that the trading price of our Common Stock would be maintained at such level or that we will be able to maintain the listing of our Common Stock on The Nasdaq Capital Market.

Required Vote

The affirmative vote of holders of at least a majority of the voting power of outstanding shares of capital stock of the Company as of April 26, 2024, the Record Date for the Special Meeting, is required for approval of this proposal. Therefore, abstentions and broker non-votes will have the same effect as votes against this proposal.

As of the Record Date, there were 12,624,902 shares of common stock, 250 shares of our Series D Convertible Preferred Stock ("Series D Preferred Stock" and together with our Series E Preferred Stock, the "Preferred Stock") and 550,000 shares of our Series E Preferred Stock outstanding and entitled to vote. Holders of our common stock are entitled to one vote for each share of common stock outstanding as of the Record Date. Holders of our Preferred Stock will vote together with the holders of our Common Stock on the proposals on an as-converted to Common Stock basis. As of the Record Date, holders of our Series D Preferred Stock are entitled to 2,444 votes for each share of Series D Preferred Stock outstanding, and holders of our Series E Preferred Stock are entitled to 24 votes for each share of Series E Preferred Stock outstanding. Assuming the stockholders approve Proposal No. 1 relating to the issuance of Series E Preferred Stock, the Ownership Limitations applicable to the Series E Preferred Stock will not apply to Mr. Lazar's ability to vote his shares of Series E Preferred Stock on the Reverse Stock Split Proposal. In such event, Mr. Lazar will have the right to cast 13,300,000 votes, representing approximately 50% of the total voting power of the Company's outstanding shares of capital stock, on such matter.

Recommendation of the Board of Directors

The Board of Directors unanimously recommends that you vote "**FOR**" Proposal No. 2 to approve the Reverse Stock Split.

PROPOSAL NO. 3 – ADJOURNMENT PROPOSAL

General

Our stockholders are being asked to consider and vote upon an adjournment of the Special Meeting, if necessary, if a quorum is present, to solicit additional proxies if there are insufficient votes in favor of approval of any of the above Proposals.

Required Vote

The affirmative vote of the holders of the majority of votes properly cast on this matter is required to approve the Adjournment Proposal.

Recommendation of the Board of Directors

The Board of Directors unanimously recommends that you vote “**FOR**” Proposal No. 3.

OTHER MATTERS

Management and the Board of the Company know of no matters to be brought before the Special Meeting other than as set forth herein.

DELIVERY OF DOCUMENTS TO STOCKHOLDERS SHARING AN ADDRESS

Only one Notice of Internet Availability of Proxy Materials is being delivered to stockholders sharing an address unless we have received contrary instructions from one or more of the stockholders. Upon the written or oral request of a stockholder, we will deliver promptly a separate copy of the Notice of Internet Availability of Proxy Materials to a stockholder at a shared address to which a single copy was delivered. Stockholders desiring to receive a separate copy now or in the future may contact us at our corporate offices located at 9717 Key West Ave, Suite 100, Rockville, MD 20850, or by telephone: (301) 869-9683.

Stockholders who share an address but are receiving multiple copies of the Notice of Internet Availability of Proxy Materials may contact us through our corporate offices at 9717 Key West Ave, Suite 100, Rockville, MD 20850, or by telephone: (301) 869-9683 to request that a single copy be delivered.

STOCKHOLDER PROPOSALS

Proposals from stockholders intended to be presented at the next annual meeting of stockholders should be addressed to OpGen, Inc., Attention: Corporate Secretary, 9717 Key West Ave, Suite 100, Rockville, MD 20850. We must have received the proposals by no earlier than 120 days and no later than 90 days prior to the first anniversary of the date on which the proxy statement was first made available to our stockholders in connection with the 2023 annual meeting of stockholders, or no earlier than December 28, 2023 and no later than January 27, 2024. If we change the date of the next annual meeting by more than 30 days from the anniversary of the 2023 annual meeting of stockholders, stockholder proposals must be received a reasonable time before we begin to print and mail the proxy materials for the next annual meeting and not later than 10 days following the announcement or public disclosure of such meeting date in order to be considered for inclusion in the proxy materials. Upon receipt of any such proposal, we shall determine whether or not to include any such proposal in the proxy statement and proxy for next year's annual meeting in accordance with applicable law. It is suggested that stockholders forward such proposals by Certified Mail—Return Receipt Requested. Any nominations for director positions will be accepted in accordance with the procedures described in the Company's proxy statement for its 2023 annual meeting of stockholders under the heading "Procedures for Nominating a Director Candidate."

BY ORDER OF THE BOARD OF DIRECTORS OF OPGEN, INC.

David Lazar,
Chairman of the Board of Directors

Appendix A

OPGEN, INC.

AMENDED AND RESTATED CERTIFICATE OF DESIGNATIONS, PREFERENCES,

RIGHTS AND LIMITATIONS

OF

SERIES E CONVERTIBLE PREFERRED STOCK

PURSUANT TO SECTION 151 OF THE

DELAWARE GENERAL CORPORATION LAW

The undersigned, David Lazar, does hereby certify that:

1. He is the Chief Executive Officer of OpGen, Inc., a Delaware corporation (the “**Corporation**”).
2. The Corporation is authorized to issue 10,000,000 shares of preferred stock.
3. The following resolutions were duly adopted by the board of directors of the Corporation (the “**Board of Directors**”):

WHEREAS, the Amended and Restated Certificate of Incorporation of the Corporation, as amended, provides for a class of its authorized capital stock known as preferred stock, consisting of 10,000,000 shares, \$0.01 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to provide for the issuance of the shares of preferred stock in series and to establish, from time to time, the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of the shares of each such series and any qualifications, limitations or restrictions thereon; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock to be designated the “Series E Convertible Preferred Stock” and does hereby fix and determine the number, rights, preferences, restrictions and other matters relating to such series of preferred stock as follows:

TERMS OF PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“**Affiliate**” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

“**Business Day**” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“**Commission**” means the United States Securities and Exchange Commission.

“**Common Stock**” means the Corporation’s common stock, par value \$0.01 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

“**Common Stock Equivalents**” means any securities of the Corporation or its subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“**Conversion Amount**” means the sum of the Stated Value at issue.

“**Conversion Date**” shall have the meaning set forth in **Section 6(a)**.

“**Conversion Shares**” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock in accordance with the terms hereof.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Fundamental Transaction**” shall have the meaning set forth in **Section 7(d)**.

“**GAAP**” means United States generally accepted accounting principles.

“**Holder**” shall have the meaning set forth in **Section 2**.

“**Liquidation**” shall have the meaning set forth in **Section 5**.

“**New York Courts**” shall have the meaning set forth in **Section 8(d)**.

“**Notice of Conversion**” shall have the meaning set forth in **Section 6(a)**.

“**Original Issue Date**” means the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“**Person**” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“**Preferred Stock**” shall have the meaning set forth in **Section 2**.

“**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“**Share Delivery Date**” shall have the meaning set forth in **Section 6(b)**.

“**Stated Value**” shall have the meaning set forth in **Section 2**, as the same may be increased pursuant to Section 3.

“**Successor Entity**” shall have the meaning set forth in **Section 7(d)**.

“**Trading Day**” means a day on which the principal Trading Market is open for business.

“**Trading Market**” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the NYSE MKT or the New York Stock Exchange (or any successors to any of the foregoing).

“**Transfer Agent**” means Pacific Stock Transfer, Inc., and any successor transfer agent of the Corporation.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as the Series E Convertible Preferred Stock (the “Preferred Stock”) and the number of shares so designated shall be 3,000,000 (which shall not be subject to change without the written consent of a majority of the holders of the Preferred Stock (each, a “Holder” and collectively, the “Holders”). Each share of Preferred Stock shall have a par value of \$0.01 per share and a stated value equal to \$1.00 (the “Stated Value”).

Section 3. Dividends. Except for stock dividends or distributions for which adjustments are to be made pursuant to **Section 7**, Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of Preferred Stock equal (on an as-if-converted-to-Common-Stock basis, without regard to conversion limitations herein) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Common Stock. No other dividends shall be paid on shares of Preferred Stock. The Corporation shall not pay any dividends on the Common Stock unless the Corporation simultaneously complies with this provision.

Section 4. Voting Rights. The Preferred Stock shall be counted for purposes of determining a quorum at a meeting of stockholders and shall vote on matters of the Corporation on an as-if-converted-to-Common-Stock basis.

Section 5. Liquidation Preference.

(a) In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, subject to the rights of any existing series of preferred stock or to the rights of any series of preferred stock which may from time to time hereafter come into existence, the holders of the Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of Common Stock by reason of their ownership thereof, the Stated Value per share of Preferred Stock then held by them, plus declared but unpaid dividends. If, upon the occurrence of any liquidation, dissolution or winding up of the Corporation, the assets and funds thus distributed among the holders of the Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, subject to the rights of any existing series of preferred stock or to the rights of any series of preferred stock which may from time to time hereafter come into existence, the entire assets and funds of the corporation legally available for distribution shall be distributed ratably among the holders of the each series of preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive.

(b) Upon the completion of the distribution required by Section 5(a) above and any other distribution that may be required with respect to the rights of any existing series of preferred stock or to the rights of any series of preferred stock which may from time to time hereafter come into existence, if assets remain in the Corporation, the remaining assets shall be distributed to the holders of the Common Stock until such time as the holders of the Common stock shall have received a return of the capital originally contributed thereby. Thereafter, if assets remain in the Corporation, all remaining assets shall be distributed to all holders of Common Stock and to each series of Preferred Stock, pro rata based on the number of shares of Common Stock held by each (assuming conversion of all such Preferred Stock into Common Stock).

(c) For purposes of this Section 5, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation, but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation); or (ii) a sale of all or substantially all of the assets of the Corporation, unless the Corporation’s stockholders of record as constituted immediately prior to such acquisition or sale will, immediately after such acquisition or sale (by virtue of securities issued as consideration for the Corporation’s acquisition or sale or otherwise) hold at least fifty percent (50%) of the voting power of the surviving or acquiring entity in approximately the same relative percentages after such acquisition or sale as before such acquisition or sale.

(d) In any of the events specified in subsection (c) above, if the consideration received by the corporation is other than cash, its value will be deemed its fair market value. Any securities shall be valued as follows:

- (i) Securities not subject to restrictions on free marketability:

(A) If traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange over the thirty-day period ending three (3) days prior to the closing;

(B) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the thirty-day period ending three (3) days prior to the closing; and

(C) If there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board of Directors.

(ii) The method of valuation of securities subject to restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as above in (i) (A), (B) or (C) to reflect the approximate fair market value thereof, as mutually determined by the Corporation and the holders of at least a majority of the voting power of all then outstanding shares of Preferred Stock.

(iii) In the event the requirements of Section 2(c) are not complied with, the Corporation shall forthwith either:

(A) cause such closing to be postponed until such time as the requirements of this Section 5 have been complied with; or

(B) cancel such transaction, in which event the rights, preferences and privileges of the holders of the Preferred Stock shall revert to and be the same as such rights, preferences and privileges existing immediately prior to the date of the first notice referred to in Section 5(c)(iv) hereof.

(iv) The Corporation shall give each holder of record of Preferred Stock written notice of such impending transaction not later than twenty (20) days prior to the stockholders' meeting called to approve such transaction, or twenty (20) days prior to the closing of such transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such transaction. The first of such notices shall describe the material terms and conditions of the impending transaction and the provisions of this Section 5, and the Corporation shall thereafter give such holders prompt notice of any material changes. The transaction shall in no event take place sooner than twenty (20) days after the Corporation has given the first notice provided for herein or sooner than ten (10) days after the corporation has given notice of any material changes provided for herein; provided, however, that time periods set forth in this paragraph may be shortened upon the written consent of the holders of Preferred Stock that are entitled to such notice rights or similar notice rights and that represent at least a majority of the voting power of all then outstanding shares of such Preferred Stock.

Section 6. Conversion.

a) Conversions at Option of Holder. Each one share of Preferred Stock shall be convertible, at any time and from time to time from and after the Original Issue Date at the option of the Holder thereof, into twenty four (24) shares of Common Stock (subject to the limitations set forth in **Section 6(c)**) (the "Conversion Ratio"). Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as **Annex A** (a "Notice of Conversion"). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile or email such Notice of Conversion to the Corporation (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock in accordance with the terms hereof shall be canceled and shall not be reissued.

b) Mechanics of Conversion.

i. Delivery of Conversion Shares Upon Conversion. Not later than the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) after each Conversion Date (the “Share Delivery Date”), the Corporation shall deliver, or cause to be delivered, to the converting Holder (A) the number of Conversion Shares being acquired upon the conversion of the Preferred Stock and (B) a bank check in the amount of accrued and unpaid dividends, if any. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Corporation’s primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Conversion. Notwithstanding the foregoing, with respect to any Notice(s) of Conversion delivered by 12:00 pm (New York time) on the Original Issue Date, the Corporation agrees to deliver the Conversion Shares subject to such notice(s) by 4:00 pm (New York time) on the Original Issue Date.

ii. Failure to Deliver Conversion Shares. If, in the case of any Notice of Conversion, such Conversion Shares are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such Conversion Shares, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Conversion Shares issued to such Holder pursuant to the rescinded Notice of Conversion.

iii. Obligation Absolute; Partial Liquidated Damages. The Corporation’s obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to **Section 6(b)(i)** by the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$1.00 of Stated Value of Preferred Stock being converted, \$0.01 per Trading Day for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder’s right to pursue actual damages for the Corporation’s failure to deliver Conversion Shares within the period specified herein, and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

iv. Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to **Section 6(b)(i)**, and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder’s brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a “Buy-In”), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder’s total purchase price (including any brokerage commissions) for

the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(b)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver Conversion Shares upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

v. Reservation of Shares Issuable Upon Conversion. Until no shares of Preferred Stock remain outstanding, the Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall be issuable (taking into account the adjustments and restrictions of Section 7) upon the conversion of the then outstanding shares of Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.

vi. RESERVED

vii. Transfer Taxes and Expenses. The issuance of Conversion Shares on conversion of the Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such Conversion Shares, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such Conversion Shares upon conversion in a name other than that of the Holders of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the DTC (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.

c) Conversion Limitation. Notwithstanding anything to the contrary herein, the Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates (such Persons, "Attribution Parties")) would beneficially own the number of shares of Common Stock which would be in excess of any statutory threshold pursuant to which the acquisition of such shares would trigger a compulsory offer requirement under applicable federal or state tender offer rules for the Holder and its Affiliates and Attribution Parties to make a tender offer for all the shares of the Company. For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the

unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Preferred Stock) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this **Section 6(c)**, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this **Section 6(c)** applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of the Preferred Stock are convertible. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such conversion will not violate the restriction set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such representation. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this **Section 6(c)**, in determining the number of outstanding shares of Common Stock, a Holder may rely solely on the number of outstanding shares of Common Stock as stated in a written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request (which may be via email) of a Holder, the Corporation shall within two Trading Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this **Section 6(c)** to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, this Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the number of shares of Common Stock each share of Preferred Stock shall be convertible into shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder's Preferred Stock (without regard to any limitations on exercise hereof) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights.

c) Pro Rata Distributions. During such time as this Preferred Stock is outstanding, if the Corporation declares or makes any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “Distribution”), at any time after the issuance of this Preferred Stock, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Preferred Stock (without regard to any limitations on conversion hereof) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution.

d) Fundamental Transaction. If, at any time while any shares of Preferred Stock are outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent conversion of the Preferred Stock by the Holder thereof, the Holder shall receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in **Section 6(c)** on the conversion of the Preferred Stock), the number of shares of common stock (as applicable) of the successor or acquiring corporation or the number of shares of Common Stock of the Corporation (as applicable), if it is the surviving corporation, and all additional securities (equity or debt), cash, property or other consideration (all such additional consideration, the “Alternate Consideration”), receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which such Holder’s Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in **Section 6(c)** on the conversion of the Preferred Stock). If holders of Common Stock are entitled to elect the proportion of securities, cash, property or other consideration to be received by holders of Common Stock in a Fundamental Transaction, then each Holder of Preferred Stock shall be given the same choice as to the proportion of securities, cash, property or other consideration such Holder is entitled to receive upon any conversion of such Holder’s shares of Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designations in respect of a new series of preferred stock of the successor or acquiring corporation, or the Corporation, if it is the surviving corporation, setting forth the same rights, preferences, privileges and other terms contained in this Amended and Restated Certificate of Designations in respect of the Preferred Stock, including, without limitation, the provisions contained in this **Section 7(d)** and evidencing, among other things, the Holders’ right to convert such new preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Corporation under this Amended and Restated Certificate of Designations in accordance with the provisions of this **Section 7(d)** pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of a Holder of Preferred Stock, deliver to such Holder in exchange for such Holder’s Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of the Preferred Stock (without regard to any limitations on the conversion of the Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to

such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of the Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder(s) thereof. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Amended and Restated Certificate of Designations referring to the "Corporation" shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Amended and Restated Certificate of Designations with the same effect as if such Successor Entity had been named as the Corporation herein. For the avoidance of doubt, if, at any time while any shares of Preferred Stock are outstanding, a Fundamental Transaction occurs, pursuant to the terms of this **Section 7(d)**, a Holder of Preferred Stock shall not be entitled to receive any consideration in such Fundamental Transaction in respect of such Holder's shares of Preferred Stock, except as provided for in this Amended and Restated Certificate of Designations (or any new Certificate of Designations in respect of a new series of preferred stock issued to the Holders of Preferred Stock as contemplated hereby).

e) Full Ratchet Protection.

If at any time after the date of filing of this Amended and Restated Certificate of Designations (x) the Corporation shall issue shares of Common Stock (or other shares of capital stock or other securities convertible into Common Stock), and (y) the consideration per share payable to the Corporation for the Common Stock (or other share of capital stock or other securities convertible into Common Stock) reflects a pre-money imputed equity value of the Corporation of less than Ten Million United States Dollars (US\$10,000,000), then in each such case (subject to Section 7(e)(ii)), the Preferred Stock Conversion Ratio shall be adjusted by increasing the Stated Value reflecting the lowest price per share at which any such share of Common Stock (or other share of capital stock or other securities convertible into Common Stock) has been so issued or sold.

(ii) Adjustments Only After Stock Issued; Determination of Consideration.

(A) The mere issuance of options, warrants or other securities (other than capital stock) convertible into capital stock of the Corporation shall not require an adjustment hereunder until such securities are exercised or converted into Common Stock capital stock of the Corporation (or capital stock convertible into Common Stock of the Corporation).

(B) For purposes of Section 7(e)(i), the reference to the consideration received by the Corporation for an issuance of capital stock convertible into Common Stock shall mean the aggregate of the consideration received for the issuance of such capital stock, plus the consideration that will be payable to the Corporation upon its conversion into Common Stock.

(iii) Exceptions. The provisions of Section 7(e)(i) shall not apply to the following issuances:

(A) any issuance otherwise covered by Sections 7(a) through 7(d);

(B) any stock options, stock or other securities granted to employees, consultants or directors of the Corporation or the issuance of shares upon exercise thereof;

(C) any issuance as consideration for mergers or acquisitions;

(D) any issuance upon the exercise of warrants outstanding as of the date hereof;

(E) any issuance in connection with the formation of joint ventures, strategic business relationships, or corporate partnering transactions; or

(F) any issuance of shares in a public offering.

(iv) Effectiveness. Any adjustment made pursuant to Section 7(e)(i) above shall be made on the next Business Day following the date on which any such issuance is made and shall be effective retroactively immediately after the close of business on such date. Calculations. All calculations under this **Section 7** shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this **Section 7**, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

f) Notice to the Holders.

i. Adjustment to Conversion Amount. Whenever the number of shares of Common Stock that the shares of Preferred Stock are convertible into is adjusted pursuant to any provision of this **Section 7**, the Corporation shall promptly deliver to each Holder a notice setting forth the number of shares of Common Stock after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Conversion by Holder. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of this Preferred Stock, and shall cause to be delivered to each Holder at its last address as it shall appear upon the stock books of the Corporation, at least fifteen (15) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Corporation or any of the Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert the Conversion Amount of this Preferred Stock (or any part hereof) during the 15-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 8. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, email address or sent by a nationally recognized overnight courier service, addressed to the Corporation at:

OpGen Inc.

Attention: Chief Executive Officer

Email: _____

or such other facsimile number or address (physical or email) as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this **Section 8**. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, by email attachment or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, email address or address of such Holder appearing on the books of the Corporation, or if no such facsimile number, email address or address appears on the books of the Corporation, at the principal place of business of such Holder. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the time of transmission, if such notice or communication is delivered via facsimile or email attachment at the facsimile number or email address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or email attachment at the facsimile number or email address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the Person to whom such notice is required to be given. Notwithstanding any other provision of this Amended and Restated Certificate of Designations, where this Amended and Restated Certificate of Designations provides for notice of any event to a Holder, if the Preferred Stock is held in global form by DTC (or any successor depository), such notice may be delivered via DTC (or such successor depository) pursuant to the procedures of DTC (or such successor depository).

b) Absolute Obligation. Except as expressly provided herein, no provision of this Amended and Restated Certificate of Designations shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay liquidated damages and accrued dividends, as applicable, on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

c) Lost or Mutilated Preferred Stock Certificate. If a Holder's Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Amended and Restated Certificate of Designations shall be governed by and construed and enforced in accordance with the internal laws of the State of Delaware, without regard to the principles of conflict of laws thereof. Each of the Corporation and each Holder agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by this Amended and Restated Certificate of Designations (whether brought against the Corporation, a Holder or any of their respective Affiliates, directors, officers, stockholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of Wilmington, Delaware (the "Delaware Courts"). Each of the Corporation and each Holder hereby irrevocably submits to the exclusive jurisdiction of the Delaware Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such Delaware Courts, or such Delaware Courts are improper or inconvenient venue for such proceeding. Each of the Corporation and each Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such Person at the address in effect for notices to it under this Amended and Restated Certificate of Designation and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. Each of the Corporation and each Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Amended and Restated Certificate of Designations or the transactions contemplated hereby. If the Corporation or any Holder shall commence an action or proceeding to enforce any provisions of this Amended and Restated Certificate of Designations, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

e) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Amended and Restated Certificate of Designations shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Amended and Restated Certificate of Designations or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Amended and Restated Certificate of Designations on one or more occasions shall not be considered a waiver or deprive that Person (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Amended and Restated Certificate of Designations on any other occasion. Any waiver by the Corporation or a Holder must be in writing.

f) Severability. If any provision of this Amended and Restated Certificate of Designations is invalid, illegal or unenforceable, the balance of this Amended and Restated Certificate of Designations shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

g) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

h) Headings. The headings contained herein are for convenience only, do not constitute a part of this Amended and Restated Certificate of Designations and shall not be deemed to limit or affect any of the provisions hereof.

i) Status of Converted Preferred Stock. If any shares of Preferred Stock shall be converted or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series E Convertible Preferred Stock.

RESOLVED, FURTHER, that the chief executive officer, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Amended and Restated Certificate of Designations, Preferences, Rights and Limitations in accordance with the foregoing resolution and the provisions of Delaware law.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have executed this Amended and Restated Certificate this __ day of May, 2024.

OPGEN, INC.

By:

Name: David Lazar

Title: CEO

ANNEX A

NOTICE OF CONVERSION

To:

Date:

OpGen, Inc. (the “Company”) hereby notifies you of the conversion of the shares of Series E Convertible Preferred Stock held by _____ (the “Preferred Shares”) pursuant to Section 6(a) of the Company’s Amended and Restated Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Preferred Stock. OpGen will instruct its transfer agent to convert the Preferred Shares and issue the shares of Common Stock underlying such Preferred Shares as of _____.

OPGEN, INC.

By: _____
Name: _____
Title: _____

Appendix B
OPGEN, INC.
CERTIFICATE OF DESIGNATIONS, PREFERENCES,
RIGHTS AND LIMITATIONS
OF
SERIES E CONVERTIBLE PREFERRED STOCK
PURSUANT TO SECTION 151 OF THE
DELAWARE GENERAL CORPORATION LAW

The undersigned, Oliver Schacht, does hereby certify that:

1. He is the Chief Executive Officer of OpGen, Inc., a Delaware corporation (the “**Corporation**”).
2. The Corporation is authorized to issue 10,000,000 shares of preferred stock.
3. The following resolutions were duly adopted by the board of directors of the Corporation (the “**Board of Directors**”):

WHEREAS, the Amended and Restated Certificate of Incorporation of the Corporation, as amended, provides for a class of its authorized capital stock known as preferred stock, consisting of 10,000,000 shares, \$0.01 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to provide for the issuance of the shares of preferred stock in series and to establish, from time to time, the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of the shares of each such series and any qualifications, limitations or restrictions thereon; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, restrictions and other matters relating to a series of the preferred stock;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock to be designated the “Series E Convertible Preferred Stock” and does hereby fix and determine the number, rights, preferences, restrictions and other matters relating to such series of preferred stock as follows:

TERMS OF PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“**Affiliate**” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

“**Beneficial Ownership Limitation**” shall have the meaning set forth in **Section 6(d)**.

“**Business Day**” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“**Commission**” means the United States Securities and Exchange Commission.

“**Common Stock**” means the Corporation’s common stock, par value \$0.01 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

“**Common Stock Equivalents**” means any securities of the Corporation or its subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“**Conversion Amount**” means the sum of the Stated Value at issue.

“**Conversion Date**” shall have the meaning set forth in **Section 6(a)**.

“**Conversion Shares**” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock in accordance with the terms hereof.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Fundamental Transaction**” shall have the meaning set forth in **Section 7(d)**.

“**GAAP**” means United States generally accepted accounting principles.

“**Holder**” shall have the meaning set forth in **Section 2**.

“**Liquidation**” shall have the meaning set forth in **Section 5**.

“**New York Courts**” shall have the meaning set forth in **Section 8(d)**.

“**Notice of Conversion**” shall have the meaning set forth in **Section 6(a)**.

“**Original Issue Date**” means the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“**Person**” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“**Preferred Stock**” shall have the meaning set forth in **Section 2**.

“**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“**Share Delivery Date**” shall have the meaning set forth in **Section 6(c)**.

“**Stated Value**” shall have the meaning set forth in **Section 2**, as the same may be increased pursuant to Section 3.

“**Successor Entity**” shall have the meaning set forth in **Section 7(d)**.

“**Trading Day**” means a day on which the principal Trading Market is open for business.

“**Trading Market**” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the NYSE MKT or the New York Stock Exchange (or any successors to any of the foregoing).

“**Transfer Agent**” means Pacific Stock Transfer, Inc., and any successor transfer agent of the Corporation.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as the Series E Convertible Preferred Stock (the “**Preferred Stock**”) and the number of shares so designated shall be 3,000,000 (which shall not be subject to change without the written consent of a majority of the holders of the Preferred Stock (each, a “**Holder**” and collectively, the “**Holders**”). Each share of Preferred Stock shall have a par value of \$0.01 per share and a stated value equal to \$1.00 (the “**Stated Value**”).

Section 3. Dividends. Except for stock dividends or distributions for which adjustments are to be made pursuant to **Section 7**, Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of Preferred Stock equal (on an as-if-converted-to-Common-Stock basis, without regard to conversion limitations herein) to and in the same form as dividends actually paid on shares of the Common Stock when, as and if such dividends are paid on shares of the Common Stock. No other dividends shall be paid on shares of Preferred Stock. The Corporation shall not pay any dividends on the Common Stock unless the Corporation simultaneously complies with this provision.

Section 4. Voting Rights. The Preferred Stock shall be counted for purposes of determining a quorum at a meeting of stockholders and shall vote on matters of the Corporation on an as-if-converted-to-Common-Stock basis, subject to the Beneficial Ownership Limitation; provided, however, that the Beneficial Ownership Limitation shall be disregarded for purposes of establishing the requisite quorum required for convening a meeting the stockholders of the Corporation.

Section 5. Liquidation Preference.

(a) In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, subject to the rights of any existing series of preferred stock or to the rights of any series of preferred stock which may from time to time hereafter come into existence, the holders of the Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets of the Corporation to the holders of Common Stock by reason of their ownership thereof, the Stated Value per share of Preferred Stock then held by them, plus declared but unpaid dividends. If, upon the occurrence of any liquidation, dissolution or winding up of the Corporation, the assets and funds thus distributed among the holders of the Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, subject to the rights of any existing series of preferred stock or to the rights of any series of preferred stock which may from time to time hereafter come into existence, the entire assets and funds of the corporation legally available for distribution shall be distributed ratably among the holders of the each series of preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive.

(b) Upon the completion of the distribution required by Section 5(a) above and any other distribution that may be required with respect to the rights of any existing series of preferred stock or to the rights of any series of preferred stock which may from time to time hereafter come into existence, if assets remain in the Corporation, the remaining assets shall be distributed to the holders of the Common Stock until such time as the holders of the Common stock shall have received a return of the capital originally contributed thereby. Thereafter, if assets remain in the Corporation, all remaining assets shall be distributed to all holders of Common Stock and to each series of Preferred Stock, pro rata based on the number of shares of Common Stock held by each (assuming conversion of all such Preferred Stock into Common Stock).

(c) For purposes of this Section 5, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (i) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation, but excluding any merger effected exclusively for the purpose of changing the domicile of the Corporation); or (ii) a sale of all or substantially all of the assets of the Corporation, unless the Corporation’s stockholders of record as constituted immediately prior to such acquisition or sale will, immediately after such acquisition or sale (by virtue of securities issued as consideration for the Corporation’s acquisition or sale or otherwise) hold at least fifty percent (50%) of the voting power of the surviving or acquiring entity in approximately the same relative percentages after such acquisition or sale as before such acquisition or sale.

(d) In any of the events specified in subsection (c) above, if the consideration received by the corporation is other than cash, its value will be deemed its fair market value. Any securities shall be valued as follows:

(i) Securities not subject to restrictions on free marketability:

(A) If traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange over the thirty-day period ending three (3) days prior to the closing;

(B) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the thirty-day period ending three (3) days prior to the closing; and

(C) If there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board of Directors.

(ii) The method of valuation of securities subject to restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as above in (i) (A), (B) or (C) to reflect the approximate fair market value thereof, as mutually determined by the Corporation and the holders of at least a majority of the voting power of all then outstanding shares of Preferred Stock.

(iii) In the event the requirements of Section 2(c) are not complied with, the Corporation shall forthwith either:

(A) cause such closing to be postponed until such time as the requirements of this Section 5 have been complied with; or

(B) cancel such transaction, in which event the rights, preferences and privileges of the holders of the Preferred Stock shall revert to and be the same as such rights, preferences and privileges existing immediately prior to the date of the first notice referred to in Section 5(c)(iv) hereof.

(iv) The Corporation shall give each holder of record of Preferred Stock written notice of such impending transaction not later than twenty (20) days prior to the stockholders' meeting called to approve such transaction, or twenty (20) days prior to the closing of such transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such transaction. The first of such notices shall describe the material terms and conditions of the impending transaction and the provisions of this Section 5, and the Corporation shall thereafter give such holders prompt notice of any material changes. The transaction shall in no event take place sooner than twenty (20) days after the Corporation has given the first notice provided for herein or sooner than ten (10) days after the corporation has given notice of any material changes provided for herein; provided, however, that time periods set forth in this paragraph may be shortened upon the written consent of the holders of Preferred Stock that are entitled to such notice rights or similar notice rights and that represent at least a majority of the voting power of all then outstanding shares of such Preferred Stock.

Section 6. Conversion.

a) Conversions at Option of Holder. Each one share of Preferred Stock shall be convertible, at any time and from time to time from and after the Original Issue Date at the option of the Holder thereof, into twenty four (24) shares of Common Stock (subject to the limitations set forth in **Section 6(d)**) (the "Conversion Ratio"). Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as **Annex A** (a "Notice of Conversion"). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be

converted, the number of shares of Preferred Stock owned prior to the conversion at issue, the number of shares of Preferred Stock owned subsequent to the conversion at issue and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Holder delivers by facsimile or email such Notice of Conversion to the Corporation (such date, the “Conversion Date”). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. Shares of Preferred Stock converted into Common Stock in accordance with the terms hereof shall be canceled and shall not be reissued.

b) Mechanics of Conversion.

i. Delivery of Conversion Shares Upon Conversion. Not later than the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) after each Conversion Date (the “Share Delivery Date”), the Corporation shall deliver, or cause to be delivered, to the converting Holder (A) the number of Conversion Shares being acquired upon the conversion of the Preferred Stock and (B) a bank check in the amount of accrued and unpaid dividends, if any. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Corporation’s primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Conversion. Notwithstanding the foregoing, with respect to any Notice(s) of Conversion delivered by 12:00 pm (New York time) on the Original Issue Date, the Corporation agrees to deliver the Conversion Shares subject to such notice(s) by 4:00 pm (New York time) on the Original Issue Date.

ii. Failure to Deliver Conversion Shares. If, in the case of any Notice of Conversion, such Conversion Shares are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such Conversion Shares, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation and the Holder shall promptly return to the Corporation the Conversion Shares issued to such Holder pursuant to the rescinded Notice of Conversion.

. Obligation Absolute; Partial Liquidated Damages. The Corporation’s obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to **Section 6(c)(i)** by the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$1.00 of Stated Value of Preferred Stock being converted, \$0.01 per Trading Day for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder’s right to pursue actual damages for the Corporation’s failure to deliver Conversion Shares within the period specified herein, and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

i. Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to **Section 6(c)(i)**, and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under **Section 6(c)(i)**. For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver Conversion Shares upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

ii. Reservation of Shares Issuable Upon Conversion. Until no shares of Preferred Stock remain outstanding, the Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock as herein provided, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall be issuable (taking into account the adjustments and restrictions of Section 7) upon the conversion of the then outstanding shares of Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.

iii. RESERVED

iv. Transfer Taxes and Expenses. The issuance of Conversion Shares on conversion of the Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such Conversion Shares, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such Conversion Shares upon conversion in a name other than that of the Holders of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the DTC (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.

c) Beneficial Ownership Limitation. Notwithstanding anything to the contrary herein, the Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or

any of such Holder's Affiliates (such Persons, "Attribution Parties") would beneficially own in excess of the Beneficial Ownership Limitation (as defined below); provided, however that following a vote of the stockholders of the Company in accordance with the rules and regulations of the Trading Market on which the Common Stock trades on such date and applicable securities laws to approve the removal of the Beneficial Ownership Limitation, the Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates and Attribution Parties) would beneficially own the number of shares of Common Stock which would be in excess of any statutory threshold pursuant to which the acquisition of such shares would trigger a compulsory offer requirement under applicable federal or state tender offer rules for the Holder and its Affiliates and Attribution Parties to make a tender offer for all the shares of the Company. For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Preferred Stock) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this **Section 6(d)**, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this **Section 6(d)** applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of the Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such conversion will not violate the restrictions set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such representation. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this **Section 6(d)**, in determining the number of outstanding shares of Common Stock, a Holder may rely solely on the number of outstanding shares of Common Stock as stated in a written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request (which may be via email) of a Holder, the Corporation shall within two Trading Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall mean, as of any date, the lower of (X) the maximum percentage of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of the Preferred Stock that can be issued to the Holder without requiring a vote of the stockholders of the Company under the rules and regulations of the Trading Market on which the Common Stock trades on such date and applicable securities laws; and, (Y) 19.99% of the number of shares of the Common Stock outstanding immediately before the Original Issue Date. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this **Section 6(d)** to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

d) Redemption. If, at any time after the Company holds four (4) meetings of the stockholders of the Company to approve the removal of the Beneficial Ownership Limitation, and such approval does not pass, the Holder may request that the Company pay an amount equal to the Fair Value (defined below) of such unconvertible shares, with such payment to be made within two Business Days from the date of request by the Holder, whereupon the unconvertible shares shall automatically be deemed cancelled and extinguished without further action on the part of the Holder or the Company and the Holder shall have no further rights relating thereto. Notwithstanding the foregoing, the Holder shall promptly return and deliver to the Company any certificate or certificates representing such unconvertible shares or deliver such other documentation reasonably requested by the Company evidencing such cancellation of the unconvertible shares. For purposes of this Section the "Fair Value" of shares shall be fixed with reference to the last reported closing stock price on the principal Trading Market on which the Common Stock is listed as of the day of the applicable fourth (4th) stockholders' meeting described in this section above.

Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of, or payment of a dividend on, this Preferred Stock), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the number of shares of Common Stock each share of Preferred Stock shall be convertible into shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder's Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) Pro Rata Distributions. During such time as this Preferred Stock is outstanding, if the Corporation declares or makes any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Preferred Stock, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Preferred Stock (without regard to any limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Fundamental Transaction. If, at any time while any shares of Preferred Stock are outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person, (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent conversion of the Preferred Stock by the Holder thereof, the Holder shall receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in **Section 6(d)** on the conversion of the Preferred Stock), the number of shares of common stock (as applicable) of the successor or acquiring corporation or the number of shares of Common Stock of the Corporation (as applicable), if it is the surviving corporation, and all additional securities (equity or debt), cash, property or other consideration (all such additional consideration, the "Alternate Consideration"), receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which such Holder's Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in **Section 6(d)** on the conversion of the Preferred Stock). If holders of Common Stock are entitled to elect the proportion of securities, cash, property or other consideration to be received by holders of Common Stock in a Fundamental Transaction, then each Holder of Preferred Stock shall be given the same choice as to the proportion of securities, cash, property or other consideration such Holder is entitled to receive upon any conversion of such Holder's shares of Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designations in respect of a new series of preferred stock of the successor or acquiring corporation, or the Corporation, if it is the surviving corporation, setting forth the same rights, preferences, privileges and other terms contained in this Certificate of Designations in respect of the Preferred Stock, including, without limitation, the provisions contained in this **Section 7(d)** and evidencing, among other things, the Holders' right to convert such new preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Corporation under this Certificate of Designations in accordance with the provisions of this **Section 7(d)** pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of a Holder of Preferred Stock, deliver to such Holder in exchange for such Holder's Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of the Preferred Stock (without regard to any limitations on the conversion of the Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of the Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder(s) thereof. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designations referring to the "Corporation" shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designations with the same effect as if such Successor Entity had been named as the Corporation herein. For the avoidance of doubt, if, at any time while any shares of Preferred Stock are outstanding, a Fundamental Transaction occurs, pursuant to the terms of this **Section 7(d)**, a Holder of Preferred Stock shall not be entitled to receive any consideration in such Fundamental Transaction in respect of such Holder's shares of Preferred Stock, except as provided for in this Certificate of Designations (or any new Certificate of Designations in respect of a new series of preferred stock issued to the Holders of Preferred Stock as contemplated hereby).

e) Full Ratchet Protection.

If at any time after the date of filing of this Certificate of Designations (x) the Corporation shall issue shares of Common Stock (or other shares of capital stock or other securities convertible into Common Stock), and (y) the consideration per share payable to the Corporation for the Common Stock (or other share of capital stock or other securities convertible into Common Stock) reflects a pre-money imputed equity value of the Corporation of less than Ten Million United States Dollars (US\$10,000,000), then in each such case (subject to Section 7(e)(ii)), the Preferred Stock Conversion Ratio shall be adjusted by increasing the Stated Value reflecting the lowest price per share at which any such share of Common Stock (or other share of capital stock or other securities convertible into Common Stock) has been so issued or sold.

(ii) Adjustments Only After Stock Issued; Determination of Consideration.

(A) The mere issuance of options, warrants or other securities (other than capital stock) convertible into capital stock of the Corporation shall not require an adjustment hereunder until such securities are exercised or converted into Common Stock capital stock of the Corporation (or capital stock convertible into Common Stock of the Corporation).

(B) For purposes of Section 7(e)(i), the reference to the consideration received by the Corporation for an issuance of capital stock convertible into Common Stock shall mean the aggregate of the consideration received for the issuance of such capital stock, plus the consideration that will be payable to the Corporation upon its conversion into Common Stock.

(iii) Exceptions. The provisions of Section 7(e)(i) shall not apply to the following issuances:

(A) any issuance otherwise covered by Sections 7(a) through 7(d);

(B) any stock options, stock or other securities granted to employees, consultants or directors of the Corporation or the issuance of shares upon exercise thereof;

(C) any issuance as consideration for mergers or acquisitions;

(D) any issuance upon the exercise of warrants outstanding as of the date hereof;

(E) any issuance in connection with the formation of joint ventures, strategic business relationships, or corporate partnering transactions; or

(E) any issuance of shares in a public offering.

(iv) Effectiveness. Any adjustment made pursuant to Section 7(e)(i) above shall be made on the next Business Day following the date on which any such issuance is made and shall be effective retroactively immediately after the close of business on such date. Calculations. All calculations under this **Section 7** shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this **Section 7**, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

f) Notice to the Holders.

i. Adjustment to Conversion Amount. Whenever the number of shares of Common Stock that the shares of Preferred Stock are convertible into is adjusted pursuant to any provision of this **Section 7**, the Corporation shall promptly deliver to each Holder a notice setting forth the number of shares of Common Stock after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Conversion by Holder. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of this Preferred Stock, and shall cause to be delivered to each Holder at its last address as it shall appear upon the stock books of the Corporation, at least fifteen (15) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Corporation or any of the Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert the Conversion Amount of this Preferred Stock (or any part hereof) during the 15-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 8. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, email address or sent by a nationally recognized overnight courier service, addressed to the Corporation at:

OpGen Inc.
9717 Key West Ave. – Suite 100
Rockville, MD 20850
Attention: Company Secretary
Email: oschacht@opgen.com

or such other facsimile number or address (physical or email) as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this **Section 8**. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, by email attachment or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, email address or address of such Holder appearing on the books of the Corporation, or if no such facsimile number, email address or address appears on the books of the Corporation, at the principal place of business of such Holder. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the time of transmission, if such notice or communication is delivered via facsimile or email attachment at the facsimile number or email address set forth in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or email attachment at the facsimile number or email address set forth in this Section on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (iii) the second Trading Day following the date of mailing,

if sent by U.S. nationally recognized overnight courier service, or (iv) upon actual receipt by the Person to whom such notice is required to be given. Notwithstanding any other provision of this Certificate of Designations, where this Certificate of Designations provides for notice of any event to a Holder, if the Preferred Stock is held in global form by DTC (or any successor depository), such notice may be delivered via DTC (or such successor depository) pursuant to the procedures of DTC (or such successor depository).

b) Absolute Obligation. Except as expressly provided herein, no provision of this Certificate of Designations shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay liquidated damages and accrued dividends, as applicable, on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

c) Lost or Mutilated Preferred Stock Certificate. If a Holder's Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Certificate of Designations shall be governed by and construed and enforced in accordance with the internal laws of the State of Delaware, without regard to the principles of conflict of laws thereof. Each of the Corporation and each Holder agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by this Certificate of Designations (whether brought against the Corporation, a Holder or any of their respective Affiliates, directors, officers, stockholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of Wilmington, Delaware (the "Delaware Courts"). Each of the Corporation and each Holder hereby irrevocably submits to the exclusive jurisdiction of the Delaware Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such Delaware Courts, or such Delaware Courts are improper or inconvenient venue for such proceeding. Each of the Corporation and each Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such Person at the address in effect for notices to it under this Certificate of Designation and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. Each of the Corporation and each Holder hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Certificate of Designations or the transactions contemplated hereby. If the Corporation or any Holder shall commence an action or proceeding to enforce any provisions of this Certificate of Designations, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

e) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designations shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designations or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designations on one or more occasions shall not be considered a waiver or deprive that Person (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designations on any other occasion. Any waiver by the Corporation or a Holder must be in writing.

f) Severability. If any provision of this Certificate of Designations is invalid, illegal or unenforceable, the balance of this Certificate of Designations shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

g) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

h) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designations and shall not be deemed to limit or affect any of the provisions hereof.

i) Status of Converted Preferred Stock. If any shares of Preferred Stock shall be converted or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series E Convertible Preferred Stock.

RESOLVED, FURTHER, that the chief executive officer, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Certificate of Designations, Preferences, Rights and Limitations in accordance with the foregoing resolution and the provisions of Delaware law.

IN WITNESS WHEREOF, the undersigned have executed this Certificate this 25th day of March, 2024.

OPGEN, INC.

By: /s/ Oliver Schacht

Name: Oliver Schacht

Title: CEO of the Company

ANNEX A

NOTICE OF CONVERSION

To:

Date:

OpGen, Inc. (the “Company”) hereby notifies you of the conversion of the shares of Series E Convertible Preferred Stock held by _____ (the “Preferred Shares”) pursuant to Section 6(a) of the Company’s Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Preferred Stock. OpGen will instruct its transfer agent to convert the Preferred Shares and issue the shares of Common Stock underlying such Preferred Shares as of _____.

OPGEN, INC.

By: _____
Name: _____
Title: _____

Appendix C

**CERTIFICATE OF AMENDMENT
OF THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION, AS AMENDED
OF
OPGEN, INC.**

OpGen, Inc., a corporation duly organized and validly existing under and by virtue of the General Corporation Law of the State of Delaware (the “DGCL”);

DOES HEREBY CERTIFY AS FOLLOWS:

FIRST: The name of the corporation (the “Corporation”) is: OpGen, Inc.

SECOND: The Amended and Restated Certificate of Incorporation of the Corporation was filed with the office of the Secretary of State of Delaware on May 7, 2015 (the “Restated Certificate”), a Certificate of Correction of the Restated Certificate was filed with the office of the Secretary of State of Delaware on June 6, 2016 (the “Certificate of Correction”), a Certificate of Amendment of the Restated Certificate was filed with the office of the Secretary of State of Delaware on January 17, 2018 (the “2018 Amendment”), a Certificate of Amendment of the Restated Certificate was filed with the office of the Secretary of State of Delaware on August 28, 2019 (the “2019 Amendment”), a Certificate of Amendment of the Restated Charter was filed with the office of the Secretary of State of Delaware on December 8, 2021 (the “First 2021 Amendment”), a second Certificate of Amendment of the Restated Charter was filed with the office of the Secretary of State of Delaware on December 8, 2021 (the “Second 2021 Amendment”), and Certificate of Amendment of the Restated Charter was filed with the office of the Secretary of State of Delaware on January 4, 2023 (the “2023 Amendment,” and together with the Restated Certificate, the Certificate of Correction, the 2018 Amendment, the 2019 Amendment, the First 2021 Amendment and the Second 2021 Amendment, the “Charter”).

THIRD: The Charter is hereby amended as follows:

(a) Article FOURTH of the Charter, is hereby supplemented by addition of the following paragraphs as new sixth and seventh paragraphs under “A. Common Stock.”:

Upon this Certificate of Amendment becoming effective pursuant to the General Corporation Law of the State of Delaware (the “Effective Time”), the shares of Common Stock issued and outstanding or held in treasury immediately prior to the Effective Time (the “Old Common Stock”) shall be reclassified into a different number of shares of Common Stock (the “New Common Stock”) such that each [●] shares of Old Common Stock shall, at the Effective Time, be automatically reclassified into one share of New Common Stock. From and after the Effective Time, certificates representing the Old Common Stock shall represent the number of whole shares of New Common Stock into which such Old Common Stock shall have been reclassified pursuant to the immediately preceding sentence. No fractional shares of Common Stock shall be issued as a result of such reclassification. In lieu of any fractional shares to which the stockholder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair value of the Common Stock as determined in good faith by the Board of Directors of the Corporation.

From and after the Effective Time, the term “New Common Stock” as used in this Article FOURTH shall mean the Common Stock as provided in this Amended and Restated Certificate of Incorporation, as amended and corrected and as further amended by this Certificate of Amendment. The par value of the New Common Stock shall be \$0.01 per share.

FOURTH: The foregoing amendment was duly adopted in accordance with the provisions of Section 242 of the DGCL.

FIFTH: This Certificate of Amendment shall be deemed effective upon its filing with the Secretary of State of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has duly executed this Certificate of Amendment on this ____ day of _____, 2024.

OPGEN, INC.

By: _____
Name: _____
Title: _____

OPGEN, INC.
9717 Key West Ave, Suite 100
Rockville, MD 20850

SPECIAL MEETING OF STOCKHOLDERS – MAY 9, 2024

PROXY SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

The undersigned stockholder of OpGen, Inc. hereby constitutes and appoints David Lazar and David Caplon as attorneys and proxies, with full power of substitution, to appear, attend and vote all of the shares of common stock and preferred stock standing in the name of the undersigned at the Special Meeting of Stockholders to be held exclusively via online audio-only broadcast and which can be attended by visiting www.virtualshareholdermeeting.com/OPGN2024SM, and at any adjournments or postponements thereof, upon the following:

Proposal One: Share Issuance and Change of Control Proposal

FOR AGAINST ABSTAIN

Proposal Two: Reverse Stock Split Proposal

FOR AGAINST ABSTAIN

Proposal Three: Adjournment Proposal

FOR AGAINST ABSTAIN

The undersigned hereby revokes any proxies as to said shares heretofore given by the undersigned and ratifies and confirms all that said proxy lawfully may do by virtue hereof.

THE SHARES REPRESENTED HEREBY WILL BE VOTED AS SPECIFIED HEREON WITH RESPECT TO THE ABOVE PROPOSALS, BUT IF NO SPECIFICATION IS MADE THEY WILL BE VOTED FOR THE PROPOSALS LISTED ABOVE.

Please mark, date and sign exactly as your name appears hereon, including designation as executor, trustee, etc., if applicable, and return the proxy in the enclosed postage-paid envelope as promptly as possible. It is important to return this proxy properly signed in order to exercise your right to vote if you do not attend the meeting and vote at the meeting. A corporation must sign in its name by the president or other authorized officer. All co-owners and each joint owner must sign.

Please check if you intend to be present at the meeting:

Date: _____
Signature: _____
Signature: _____
Title: _____

I agree to receive all future communications related to these holdings electronically via the email address provided below. I understand I am able to change this selection at any time in the future.

EMAIL ADDRESS:

Voting Instructions

You may vote your proxy in the following ways:

Via Internet:

Login to <http://annualgeneralmeetings.com/opgen-specialmeeting>

Enter your control number (12 digit number located below)

Via Mail:

Pacific Stock Transfer Company
c/o Proxy Department
6725 Via Austi Pkwy, Suite 300
Las Vegas, Nevada 89119

CONTROL NUMBER

You may vote by Internet 24 hours a day, 7 days a week. Internet voting is available through 11:59 p.m., prevailing time, on May 8, 2024.
