

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

March 25, 2024
Date of Report (date of earliest event reported)

OpGen, Inc.
(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

001-37367
(Commission
File Number)

06-1614015
(I.R.S. Employer
Identification Number)

9717 Key West Ave, Suite 100
Rockville, MD 20850
(Address of principal executive offices)(Zip code)

(240) 813-1260
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	OPGN	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01 Entry into a Material Definitive Agreement.

On March 25, 2024, OpGen, Inc. (the “Company”) entered into a Securities Purchase Agreement (the “Purchase Agreement”) with David E. Lazar, pursuant to which he will 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. The proceeds of the transaction will be used to repay and settle outstanding indebtedness and liabilities of the Company and for other general corporate and operating purposes.

On March 25, 2024, Mr. Lazar paid \$200,000 at the initial closing of the transactions under the Purchase Agreement in exchange for 200,000 shares of Series E Preferred Stock. Subject to the satisfaction of certain closing conditions, Mr. Lazar will pay an additional \$200,000 on or before April 8, 2024, and the balance of \$2.6 million will be paid no later than May 1, 2024. 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.

Pursuant to the Purchase Agreement, the Company filed a certificate of designation (the “Certificate of Designation”) with the Secretary of State of Delaware designating the rights, preferences and limitations of the shares of Series E Preferred Stock on March 25, 2024. The Certificate of Designation provides, in particular, that the Preferred Stock will vote together with the Common Stock on an as-converted basis, subject to the Ownership Limitation, and other restrictions as set forth in the Certificate of Designations for the Series E Preferred Stock.

The holders of Series E Preferred Stock will be entitled to participate in any dividends made on shares of Common Stock (on an as-converted basis) if and when such dividends are declared. Upon any liquidation or sale of the Company or all or substantially all of its assets, the holders of the Series E Preferred Stock will be entitled to receive, prior to and in preference to any distribution to holders of Common Stock, an amount equal to \$1.00 per share, the stated value of the Series E Preferred Stock, then held by them plus any accrued but unpaid dividends. Thereafter, the remaining assets of the Company will be distributed to the holders of Common Stock until such holders receive a return of their capital originally contributed, and thereafter, any remaining assets will be distributed to all holders of Common Stock and Preferred Stock pro rata based on the number of shares held on an as-converted basis.

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”).

The Company agreed in the Purchase Agreement to not issue any additional shares of Common Stock or securities convertible into common stock for a period of 180 days from the date of the final closing. The Company also agreed in the Purchase Agreement not to effect any variable rate transaction, including an at-the-market offering, until April 15, 2025.

In the Purchase Agreement, the Company committed to call a meeting of stockholders no later than May 17, 2024 for purposes of soliciting approval of an amendment to the Certificate of Designations in order to remove the Ownership Limitation. In the event such amendment is not approved at such meeting, then the Company must call three subsequent meetings every 70 days in order to solicit such approval. If the approval is not obtained at the fourth meeting, pursuant to the Certificate of Designations, the holder of Series E Preferred Stock can cause the Company to redeem such shares at a price equal to the last reported closing stock price on the Nasdaq Capital Market as of the date of such meeting.

The representations, warranties and covenants contained in the Purchase Agreement were made solely for the benefit of the parties to the Purchase Agreement and may be subject to limitations agreed upon by the contracting parties. Accordingly, the Purchase Agreement is incorporated herein by reference only to provide investors with information regarding the terms of the Purchase Agreement, and not to provide investors with any other factual information regarding the Company or its business, and should be read in conjunction with the disclosures in the Company's periodic reports and other filings with the Securities and Exchange Commission.

In connection with the transactions contemplated by the Purchase Agreement, the Company entered into settlement agreements (the "Settlement Agreements") with each of the European Investment Bank ("EIB") and Curetis GmbH, the Company's subsidiary ("Curetis"), and Curetis' trustee in insolvency, pursuant to which the Company settled outstanding liabilities amongst the parties. Pursuant to the settlement agreements and the Purchase Agreement, following the final closing of transactions contemplated by the Purchase Agreement, the Company will pay \$2 million of the proceeds to settle all outstanding debt of the Company to each of EIB and Curetis. The settlement agreement with EIB also terminated that certain Guarantee and Indemnity Agreement, dated as of July 9, 2020, by and between the EIB and the Company, pursuant to which the Company had guaranteed all of Curetis' debt to EIB.

On March 26, 2024, the Company entered into an Inducement Offer to Amend Common Stock Purchase Warrants (the "Offer") with an investor (the "Investor"). Pursuant to the Offer, the investor agreed to waive certain rights that would otherwise have been triggered under their warrants as a result of the transactions contemplated by the Purchase Agreement, in exchange for the Company entering into the Purchase Agreement.

The foregoing description of the Purchase Agreement, the Certificate of Designation, the Settlement Agreements, and the Offer do not purport to be complete and are qualified in their entirety by reference to the full text of the form of Purchase Agreement, the Certificate of Designation, the Settlement Agreements, and the Offer, which are filed as Exhibits 10.1, 3.1, 10.2, 10.3, and 10.5 respectively, to this Current Report on Form 8-K and incorporated herein by reference.

Item 3.02. Unregistered Sales of Equity Securities.

The disclosure required by this Item and included in Item 1.01 of this Current Report is incorporated herein by reference. The Series E Preferred Stock was sold without registration under the Securities Act of 1933, as amended (the "Securities Act"), in reliance on the exemptions provided by Section 4(a)(2) of the Securities Act as a transaction not involving a public offering and Regulation S promulgated under the Securities Act as sales to accredited investors and in reliance on similar exemptions under applicable state laws.

Item 3.03. Material Modifications to Rights of Security Holders.

The disclosure required by this Item and included in Item 1.01 of this Current Report is incorporated herein by reference.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On March 25, 2024, prior to the transactions contemplated by the Purchase Agreement, the current members of the Board of Directors (the “Board”) approved an increase in the size of the Board and appointed Mr. Lazar to the Board. On March 25, 2024, in connection with the initial closing of the transactions contemplated by the Purchase Agreement, the then current members of the Board of Directors (the “Board”) of the Company voted to appoint Avraham Ben-Tzvi, David Natan, and Matthew C. McMurdo as new, independent directors. The then current members of the Board thereafter resigned effective as of March 25, 2024. The initial term as director for Messrs. Ben-Tzvi, Natan, McMurdo, and Lazar will expire at the Company’s 2025 annual meeting of stockholders. At the time of the election, none of the new directors were appointed to any committees of the Board of Directors. The Board deemed Mr. Ben-Tzvi, Mr. Natan, and Mr. McMurdo as independent pursuant to Rule 5605 of the Nasdaq Listing Requirements. The Board intends to engage Mr. Lazar as an executive officer of the Company, and thereby does not deem him independent.

David E. Lazar (33) has served as the Chief Executive Officer of Titan Pharmaceuticals Inc. listed on the Nasdaq (TTNP) since August 2022, where he also served as a director and board chairman from August 2022 until October 2023. On December 28, 2023, Mr. Lazar was appointed Chief Executive Officer and to the board of directors of Minim, Inc. (NASDAQ: MINM). Mr. Lazar has successfully served as a custodian to numerous public companies across a wide range of industries, including without limitation, C2E Energy, Inc. (OTCMKTS: OOGI), China Botanic Pharmaceutical Inc. (OTCMKTS: CBPI), One 4 Art Ltd., Romulus Corp., Moveix, Inc., Arax Holdings Corp. (OTCMKTS: ARAT), ESP Resources, Inc. (OTCMKTS: ESPIQ), Adorbs, Inc., Exobox Technologies Corp. (OTCMKTS: EXBX), Petrone Worldwide, Inc. (OTCMKTS: PFWIQ), Superbox, Inc. (OTCMKTS: SBOX), Sino Green Land Corp. (OTCMKTS: SGLA), SIPP International Industries, Inc. (OTCMKTS: SIPN), Cereplast, Inc. (OTCMKTS: CERPQ), Energy 1 Corp. (OTCMKTS: EGOC), ForU Holdings, Inc. (OTCMKTS: FORU), China Yanyuan Yuhui National Education Group, Inc. (OTCMKTS: YYYH), Pan Global Corp. (OTCMKTS: PGLO), Shengtang International, Inc. (OTCMKTS: SHNL), Alternaturals, Inc. (OTCMKTS: ANAS), USA Recycling Industries, Inc. (OTCMKTS: USRI), Tele Group Corp., Xenioics Holdings, Inc. (OTCMKTS: XNNHQ), Richland Resources International Group, Inc. (OTCMKTS: RIGG), AI Technology Group, Inc., Reliance Global Group, Inc. (NASDAQ: RELI), Melt, Inc., Ketdarina Corp., 3D MarkerJet, Inc. (OTCMKTS: MRJT), Lvpai Group Ltd., Gushen, Inc., FHT Future Technology Ltd., Inspired Builders, Inc., Houmu Holdings Ltd. (OTCMKTS: HOMU), Born, Inc. (OTCMKTS: BRRN), Changsheng International Group Ltd., Sollensys Corp. (OTCMKTS: SOLS), Guozi Zhongyu Capital Holdings Co. (OTCMKTS: GZCC) and Cang Bao Tian Xia International Art Trade Center, Inc. Mr. Lazar currently serves as an Advisor to PROMAX Investments LLC, a position he has held since July 2022, and as an Ambassador at Large for the Arab African Council for Integration and Development, since March 2022.

He has also served as the CEO of Custodian Ventures LLC, a company which specializes in assisting distressed public companies through custodianship, since February 2018, and Activist Investing LLC, an actively managed private investment fund, since March 2018. Previously, Mr. Lazar served as Managing Partner at Zenith Partners International Inc., a boutique consulting firm, from July 2012 to April 2018. In his role as Chief Executive Officer of Custodian Ventures LLC, Mr. Lazar has successfully served as a custodian to numerous public companies across a wide range of industries. Based on Mr. Lazar’s diverse knowledge of financial, legal and operations management, public company management, accounting, audit preparation, due diligence reviews and SEC regulations, our Board believes that Mr. Lazar has the appropriate set of skills to serve as a member of the Board.

Avraham Ben-Tzvi (53) is the founder of ABZ Law Office, a boutique Israeli law firm specializing in corporate & securities laws, commercial law & contracts, and various civil law matters, as well as providing outsourced general counsel services for publicly traded as well as private companies and corporations, which he established in January 2017. Mr. Ben-Tzvi served as Chief Legal Officer and General Counsel of Purple Biotech Ltd. (formerly Kitov Pharma Ltd.) (NASDAQ/TASE: PPBT), a clinical-stage company advancing first-in-class therapies to overcome tumor immune evasion and drug resistance, from November 2015 until April 2020. Prior to that, Mr. Ben-Tzvi served as General Counsel and Company Secretary at Medigus Ltd. (NASDAQ/TASE: MDGS), a minimally invasive endosurgical tools medical device and miniaturized imaging equipment company, from April 2014 until November 2015. Prior to that he served as an attorney at one of Israel's leading international law firms where, amongst other corporate and commercial work, he advised companies and underwriters on various offerings by Israeli companies listing in the US and on various SEC related filings. Prior to becoming a lawyer, Mr. Ben-Tzvi worked in several business development, corporate finance and banking roles at companies in the financial services, lithium battery manufacturing and software development industries. Since December 2023, Mr. Ben-Tzvi has been serving as a member of the Board of Directors of Minim, Inc. (NASDAQ: MINM), a company which delivered smart software-driven communications products under the globally recognized Motorola brand and Minim® trademark. Since August 2022, Mr. Ben-Tzvi has been serving as a member of the Board of Directors of Titan Pharmaceuticals, Inc. (NASDAQ: TTNP), a pharmaceutical company, where he is also Chair of the Nominating Committee. Mr. Ben-Tzvi is a licensed attorney and member of the Israel Bar Association, and is also licensed as a Notary by the Israeli Ministry of Justice. Based on Mr. Ben-Tzvi's extensive legal experience and knowledge in the fields of civil-commercial law and corporate and securities law, and his previous public company and commercial business experience, our Board believes that Mr. Ben-Tzvi has the appropriate set of skills to serve as a member of the Board.

David Natan (70) currently serves as President and Chief Executive Officer of Natan & Associates, LLC, a consulting firm offering chief financial officer services to public and private companies in a variety of industries, since 2007. From February 2010 to May 2020, Mr. Natan served as Chief Executive Officer of ForceField Energy, Inc. (OTCMKTS: FNRG), a company focused on the solar industry and LED lighting products. From February 2002 to November 2007, Mr. Natan served as Executive Vice President of Reporting and Chief Financial Officer of PharmaNet Development Group, Inc., a drug development services company, and, from June 1995 to February 2002, as Chief Financial Officer and Vice President of Global Technovations, Inc., a manufacturer and marketer of oil analysis instruments and speakers and speaker components. Prior to that, Mr. Natan served in various roles of increasing responsibility with Deloitte & Touche LLP, a global consulting firm. Mr. Natan currently serves as a member of the Board of Directors and Chair of the Audit Committee of NetBrands Inc. f/k/a Global Diversified Marketing Group, Inc. (OTCMKTS: NBND), a manufacturer, marketer and distributor of food and snack products, since February 2021 and serves as a member of the Board of Directors and Chair of the Audit Committee of Sunshine Biopharma, Inc. (NASDAQ: SBFM), a pharmaceutical and nutritional supplement company, since February 2022. Additionally in November 2023, Mr. Natan was appointed to the board of directors and Audit Committee Chair of Minim, Inc. (NASDAQ: MINM). In December 2022, Mr. Natan was appointed to the board of Directors and Audit Committee Chair of Vivakor Inc. (NASDAQ: VIVK) and served until December 2023. Previously, Mr. Natan served as Chairman of the Board of Directors of ForceField Energy, Inc., from April 2015 to May 2020, and as a member of the Board of Directors of Global Technovations, Inc., from December 1999 to December 2001. Mr. Natan holds a B.A. in Economics from Boston University. Based on Mr. Natan's extensive experience, our Board believes that Mr. Natan has the appropriate set of skills to serve as a member of the Board.

Matthew C. McMurdo (52) has served as Managing Member of McMurdo Law Group, LLC, a corporate law practice, since 2010. Previously, Mr. McMurdo was a Partner at Nannarone & McMurdo, LLP, a boutique law firm, from 2008 to 2010. In addition, Mr. McMurdo served as General Counsel of Berkley Asset Management LLC, the general partner of a real estate fund focused on opportunistic and distressed real estate assets, from 2011 to 2013. Mr. McMurdo was Of-Counsel at Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., from 2007 to 2008 and an associate at Greenberg Traurig, LLP from 2006 to 2007. Since August 2022, Mr. McMurdo has served as a director of Titan Pharmaceuticals, Inc. (NASDAQ:TTNP), where he serves on the audit, compensation (chair), and nominating committees. On December 28, 2023, Mr. McMurdo was appointed to the board of directors of Minim Inc (NASDAQ: MINM), where he serves on the compensation and nominating committees. Mr. McMurdo holds a B.S. in Finance from Lehigh University and a J.D., cum laude, from Benjamin N. Cardozo School of Law. Based on Mr. McMurdo's extensive experience and knowledge in the fields of corporate and securities law, and his previous public company and commercial business experience, our Board believes that Mr. McMurdo has the appropriate set of skills to serve as a member of the Board.

In connection with such director appointments, the Company entered into director agreements with each of Messrs. Ben-Tzvi, Lazar, McMurdo and Natan. Pursuant to the director agreements, each director will be entitled to receive from the Company a cash fee of \$12,500 per quarter (pro-rated for any partial quarter) plus a one-time fee of \$50,000 upon signing their director agreement. Such cash fees will accrue until such time as the Company raises sufficient capital to pay the accrued but unpaid cash fees or the director elects to convert such unpaid fees into shares of common stock of the Company. The cash director fee would convert at a rate of \$4.00 per share for each \$1.00 of accrued and unpaid fee that is converted. In addition to the quarterly cash fee, under the director agreements, each director was granted 100,000 shares of restricted common stock. The foregoing description of the director agreements does not purport to be complete and is qualified in its entirety by reference to the full text of the form of director agreement, which is filed as Exhibits 10.4 hereto.

Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

The disclosure required by this Item and included in Item 1.01 of this Current Report is incorporated herein by reference.

Item 8.01. Other Events.

On March 25, 2024, the Company issued a press release announcing the entry into the Purchase Agreement. A copy of such press release is attached to this Current Report on Form 8-K as Exhibits 99.1.

Forward-Looking Statements

This Current Report on Form 8-K contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 that are intended to qualify for the safe harbor from liability established thereunder. Such forward-looking statements are subject to risks and uncertainties that are often difficult to predict, are beyond the Company's control, and which may cause results to differ materially from expectations, including the risk that the Company's intention to regain compliance with the Nasdaq Bid Price Rule will not be achieved. In addition, for a further discussion of factors that could materially affect the outcome of the Company's forward-looking statements and its future results and financial condition, see "Risk Factors" in Part I, Item 1A, of the Company's Annual Report on Form 10-K for the year ended December 31, 2022 and its other reports filed with the Securities and Exchange Commission. The Company does not undertake any obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Description
3.1	Certificate of Designation of Preferences, Rights and Limitations of Series E Preferred Stock
10.1	Form of Securities Purchase Agreement, dated as of March 25, 2024, by and between the Company and David Lazar
10.2	Settlement Agreement, dated March 25, 2024, by and between the European Investment Bank and the Company
10.3	Agreement, dated March 25, 2024, by and between Insolvency Administrator for Curetis GmbH and the Company
10.4	Form of Director Agreement.
10.5	Form of Inducement Offer to Amend Common Stock Purchase Warrants, dated March 26, 2024
99.1	Press release, dated March 25, 2024
104	Cover Page Interactive Data File

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 29, 2024

OpGen, Inc.

By: /s/ David Lazar
Name: David Lazar
Title: Chairman

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DESIGNATION OF "OPGEN, INC.," FILED IN THIS OFFICE ON THE TWENTY-FIFTH DAY OF MARCH, A.D. 2024, AT 9:38 O'CLOCK A.M.



A handwritten signature in black ink, appearing to read "JBULLOCK", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed in a small font.

3338364 8100
SR# 20241144455

Authentication: 203099203
Date: 03-25-24

You may verify this certificate online at corp.delaware.gov/authver.shtml

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.

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(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.

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(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.

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) 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

(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.
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:

SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this "Agreement") is dated as of March 25, 2024 (the "Effective Date"), between OpGen, Inc. a Delaware corporation (the "Company"), and Mr. David Lazar, an individual resident in the United Arab Emirates (the "Purchaser" or "Lazar").

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to the applicable regulations under the U.S. Securities Act of 1933, as amended (the "Securities Act"), the Company desires to issue and sell to Purchaser, and Purchaser desires to purchase from the Company, securities of the Company as more fully described in this Agreement.

WHEREAS, it is also understood by the parties that the Company is entering into this Agreement in order to provide for the issuance and sale by the Company of the Securities (as defined below) in an "offshore transaction" within the meaning of Regulation S.

WHEREAS, the directors of the Company (the "Company Directors") will appoint Lazar to the Company's Board of Directors (the "Board") prior to the execution and effectiveness this Agreement.

WHEREAS, it is the intention of the parties hereto that Lazar's acquisition of Securities under the Transaction Documents (as defined below) shall be exempt from Section 16(b) of the U.S. Securities Exchange of Act 1934, as amended (the "Exchange Act"), and, accordingly, prior to the date of this Agreement, the Board unanimously adopted resolutions accepting the resignation of Oliver Schacht as a Director, President and Chief Executive Officer of the Company and appointing Lazar as a Director of the Company, and subsequently approving Lazar's acquisition of Securities hereunder and exempting such acquisition from Section 16(b) of the Exchange Act pursuant to Rule 16b-3 (the "Rule 16b-3 Exemption Approvals").

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and Purchaser agree as follows:

**ARTICLE I.
DEFINITIONS**

I.1 Definitions. In addition to the terms defined elsewhere in this Agreement: (a) capitalized terms that are not otherwise defined herein have the meanings given to such terms in the Certificate of Designation (as defined herein), and (b) the following terms have the meanings set forth in this Section 1.1:

"Acquiring Person" shall have the meaning given such term in Section 4.7.

"Action" shall have the meaning given such term in Section 3.1(j).

"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 under the Securities Act.

“ARA” means, the Amendment and Restatement Agreement, dated as of July 9, 2020, by and among Curetis, as borrower, the Company, as guarantor, and Ares, as guarantor, and EIB.

“Ares” means Ares Genetics GmbH, an Austrian limited liability company in insolvency proceedings, and an indirect subsidiary of the Company, via the Company’s holdings in Curetis.

“Board of Directors” means the board of directors of the Company or any authorized committee thereof.

“Business Day” means any day other than Saturday, Sunday, any day which is a federal legal holiday in the United States or any other day on which commercial banks in The City of New York are authorized or required by law to remain closed; provided, however, for clarification, commercial banks shall not be deemed to be authorized or required by law to remain closed due to “stay at home”, “shelter-in-place”, “non-essential employee” or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems (including for wire transfers) of commercial banks in The City of New York are generally open for use by customers on such day.

“Certificate of Designations” means the Certificate of Designations to be filed prior to the Closing by the Company with the Secretary of State of Delaware, in the form of Exhibit A attached hereto.

“Closing” each has the meaning set forth in Section 2.3.

“Closing Date” means, with respect to each Closing, the Trading Day on which all of the Transaction Documents with respect to the applicable Closing, have been executed and delivered by the applicable parties thereto, and all conditions precedent to (i) the Purchaser’s obligations to pay the applicable portion of the Purchase Price and (ii) the Company’s obligations to deliver the applicable portion of the Securities, in each case, have been satisfied or waived, but in no event later than the second (2nd) Trading Day following the date hereof.

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

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

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant 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.

“Company Party” means all directors, officers, stockholders, employees, agents, and representatives, including, those directors comprising of the current board of the Company.

“Conversion Price” shall have the meaning given such term in the Certificate of Designation.

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

“Curetis” means, Curetis GmbH i.I. (in insolvency), a German limited liability company and subsidiary of the Company; it being clarified that the Company has no control over Curetis.

“Director’s Agreement” means the form of director’s agreement attached hereto as Exhibit C.

“Disclosure Schedules” means the Disclosure Schedules of the Company delivered concurrently herewith.

“Disclosure Time” means, (i) if this Agreement is signed on a day that is not a Trading Day or after 9:00 a.m. (New York City time) and before midnight (New York City time) on any Trading Day, 9:01 a.m. (New York City time) on the Trading Day immediately following the date hereof, and (ii) if this Agreement is signed between midnight (New York City time) and 9:00 a.m. (New York City time) on any Trading Day, no later than 9:01 a.m. (New York City time) on the date hereof.

“EIB” means, the European Investment Bank (Luxemburg).

“EIB Guarantee” means, the Guarantee and Indemnity Agreement, dated as of July 9, 2020, by and between EIB and the Company.

“EIB Guarantee Termination Agreement” means, that certain agreement by and among, the Company and EIB with respect to the transfer of the EIB Guarantee by EIB to the Purchaser, substantially in the form of Exhibit E attached hereto.

“Evaluation Date” shall have the meaning given such term in Section 3.1(s).

“Exchange Act” shall have the meaning given such term in the recitals.

“Exempt Issuance” means the issuance of (a) shares of Common Stock or options, restricted stock units or other equity awards to employees, consultants, contractors, advisors, officers or directors of the Company pursuant to any stock, option or equity plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors

established for such purpose for services rendered to the Company, (b) securities upon the exercise, exchange or conversion of any Securities issued hereunder, and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities (other than in connection with stock splits or combinations) or to extend the term of such securities, (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.12(a) herein, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, or (d) the issuance of shares of Common Stock to existing holders of the Company’s securities in compliance with the terms of agreements entered into with, or instruments issued to, such holders, which agreements and instruments are set forth on Schedule I.1 attached hereto, and provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.12(a) herein (other than shares of Common Stock issuable to holders of the Company’s outstanding warrants upon the exercise of such warrants, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities (other than in connection with stock splits or combinations) or to extend the term of such securities).

“Finance Contract” means, the Finance Contract, as amended and restated pursuant to the First Amendment and Restatement Agreement dated May 20, 2019 and the Second Amendment and Restatement Agreement dated as of July 9, 2020, by and between the EIB and Curetis.

“FCPA” means the Foreign Corrupt Practices Act of 1977, as amended.

“GAAP” shall have the meaning given such term in Section 3.1(h).

“Indebtedness” shall have the meaning given such term in Section 3.1(aa).

“Intellectual Property Rights” shall have the meaning given such term in Section 3.1(p).

“Liens” means an adverse claim, lien, charge, pledge, security interest, encumbrance, right of first refusal, or preemptive right.

“Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(b).

“Material Permits” shall have the meaning given such term in Section 3.1(n).

“Maximum Rate” shall have the meaning given such term in Section 5.17.

“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” means the number of shares of the Company’s Series E Convertible Preferred Stock issued as set forth in the Certificate of Designations, having the rights, preferences and privileges therein, in the of Exhibit A.

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or, to the Company’s knowledge, threatened in writing, against the Company before or by any court, arbitrator, governmental, or administrative agency or regulatory authority.

“Prospectus” means the final prospectus to be filed in accordance with the Registration Rights Agreement.

“Purchaser” shall have the meaning set forth in the preamble.

“Purchaser Party” shall have the meaning given to such term in Section 4.10.

“Purchase Price” means, three million United States dollars (U.S.\$3,000,000), payable in accordance with the terms herein in immediately available funds.

“Registration Rights Agreement” means the Registration Rights Agreement between the Company and the Purchaser dated as of the date hereof, in the form attached hereto as Exhibit B.

“Registration Statement” means the registration statement to be filed in accordance with the Registration Rights Agreement.

“Required Approvals” shall have the meaning given such term in Section 3.1(e).

“Required Minimum” means, as of any date, the maximum aggregate number of shares of Common Stock then issued or potentially issuable in the future pursuant to the Transaction Documents, including any Conversion Shares issuable upon conversion in full of all shares of Preferred Stock, ignoring any conversion limits set forth therein the Certificate of Designations.

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“SEC Reports” shall have the meaning given such term in Section 3.1(h).

“Securities” means the Preferred Stock and the Conversion Shares.

“Securities Act” shall have the meaning given such term in the recitals.

“Short Sales” means all “short sales” as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include locating and/or borrowing shares of Common Stock).

“Stated Value” means the Stated Value of Preferred Stock as set forth in the Certificate of Designation.

“Stockholder Approval” means all such approvals as may be required by the applicable rules and regulations of the Nasdaq Capital Market (or any successor entity) or under applicable law from the stockholders of the Company with respect to the transactions contemplated by the Transaction Documents.

“Subsidiary” means any subsidiary of the Company as set forth on Schedule 3.1(a) and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

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

“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 NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange (or any successors to any of the foregoing).

“Transaction Documents” means this Agreement, the Certificate of Designation, the Registration Rights Agreement, all exhibits and schedules thereto and hereto, and any other documents or agreements executed by all or any of the Parties hereto in connection with the transactions contemplated hereunder.

“Transfer Agent” means Pacific Stock Transfer, Inc., the current transfer agent of the Company, with a mailing address of: 6725 Via Austi Parkway, Suite 300, Las Vegas, Nevada 89119, and any successor transfer agent of the Company.

“Variable Rate Transaction” shall have the meaning given such term in Section 4.13(b).

“VWAP” means, for any date, the price determined as follows: (a) if the Common Stock is then listed or quoted on a Trading Market, the weighted average daily volume weighted average price of the Common Stock for the five (5) Trading Days immediately preceding such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)).

“Warrant Holder Amendment Agreement” means the letter of amendment between the Company and the holder(s) of certain warrants, as set forth in such letter of amendment, and dated as of the date hereof, in the form attached hereto as Exhibit D.

ARTICLE II. PURCHASE AND SALE

II.1 Purchase of Preferred Stock. Upon the terms and subject to the conditions set forth herein, the Company agrees to sell, and the Purchaser agrees to purchase three million (3,000,000) shares of Preferred Stock.

II.2 RESERVED

II.3 Closing. The Closings shall take place in up to three stages as set forth below (respectively, the “First Closing”, the “Second Closing”, and the “Final Closing”, and each a “Closing”). On each Closing Date, upon the terms and subject to the conditions set forth herein, Purchaser shall transfer the portion of the Purchase Price applicable to such Closing to the Company, and the Company shall deliver to Purchaser such number of shares of Preferred Stock, with respect to such Closing, all in accordance with Section 2.4, and the Company and Purchaser shall deliver the other items set forth in Section 2.4 that are deliverable at the applicable Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.1 and 2.4, each Closing shall take place remotely by electronic transfer of the Closing deliverables and documentation.

(a) First Closing. The First Closing shall be for \$200,000 cash of the Purchase Price, and shall occur no later than 17:00 EST on Friday March 22, 2024.

(b) Second Closing. The Second Closing shall be for up to \$200,000 cash of the Purchase Price, and shall occur no later than 17:00 EST on Monday April 8, 2024, provided that the Final Closing has not occurred as of such date.

(c) Final Closing. The Final Closing shall be for the remaining aggregate cash of the Purchase Price, and shall occur no later than 17:00 EST on Wednesday May 1, 2024.

II.4 Deliverables.

(a) On or prior to each Closing Date (except as indicated below), the Company shall deliver or cause to be delivered to Purchaser the following:

(i) as to the First Closing only, a copy of the Certificate of Designations certified by the Secretary of State of Delaware;

(ii) as of each Closing, a book-entry statement or share certificate evidencing issuance of a portion of the Preferred Stock based on the portion of the Purchase Price paid at the applicable Closing;

(iii) RESERVED;

(iv) as to the as to the Final Closing only, a duly executed Registration Rights Agreement;

(v) as to the Final Closing only, the EIB Guarantee Termination Agreement duly executed by all parties thereto, together with a duly executed EIB Guarantee Termination Agreement closing confirmation in the form attached hereto as Exhibit E.

(vi) as to the First Closing only, a copy of resolutions of Company's Board of Directors (A) authorizing Company's execution, delivery, and performance of this Agreement, including, *inter alia*, the authorization and issuance of the Securities as well as the authorization of a right for the Purchaser to sell, assign or otherwise transfer either the Securities (as well as any Common Stock underlying any such Securities) and/or its rights to acquire the Securities (as well as any Common Stock underlying any such Securities) pursuant to this agreement (the "Securities Purchase Rights"), including by way of option for Purchaser to sell and/or a transferee thereof to purchase, the Securities Purchase Rights (the "Securities Purchase Rights Transfer Right"), (B) with respect to Section 3.1(y), (C) the Rule 16b-3 Exemption Approvals, which resolutions shall be prepared and adopted in the form set forth on Schedule 2.4(a)(ix) attached hereto, (D) the appointment of the individuals listed on Schedule II.4(a) as members of the Board of Directors (the "New Directors"), which, by their terms, will be effective as of the date set forth on Schedule II.4(a), and the New Directors shall comprise a majority of the Board of Directors as of such date, (E) a Director's Agreement, in the form attached hereto as Exhibit C for the New Directors, and (F) copies of resignations of the individuals listed on Schedule II.4(a) as members of the Board of Directors, which, by their terms, will be effective as of the First Closing in the form reasonably satisfactory to the Purchaser;

(vii) as to the Final Closing only, assignment of the lease by the Company with consent of the Company's landlord to a new tenant relating to the outstanding Company lease agreement for 9717 Key West Avenue – Suite 100, Rockville, MD 20850, currently in place until 2032, in form reasonably satisfactory to the Purchaser;

(viii) as to the First Closing only, a legal opinion directed to the Purchaser in form and substance and signed by counsel to the Company reasonably acceptable to the Purchaser;

(ix) as to the First Closing only, a copy of the resignation of Oliver Schacht as an officer and/or director of the Company; and

(x) as to the First Closing only, a copy of the Warrant Holder Amendment Agreement duly executed by each of the Company and the applicable warrant holder(s).

(b) On or prior to each Closing Date (except as indicated below), Purchaser shall deliver or cause to be delivered to the Company, the following:

(i) the Purchase Price as to the applicable Closing by wire transfer to the account as specified in writing by the Company; it being clarified that (1) \$1,000,000 of the Purchase Price shall be for the benefit of the Company (the "Company Purchase Price Portion") and \$2,000,000 shall be for the benefit of EIB and Curetis as Company consideration to EIB and Curetis pursuant to the EIB Guarantee Termination Agreement (the "Creditor Purchase Price Portion"), and, (2) the applicable portion of the Purchase Price delivered at each of the First Closing and Second Closing, as applicable, shall be applied solely to the Company Purchase Price Portion, and that the Creditor Purchase Price Portion shall only be delivered by the Purchaser at the Final Closing, and subject to the Final Closing conditions being met;

(ii) as to the Final Closing only, a duly executed Registration Rights Agreement.

II.5 Closing Conditions.

(a) The obligations of the Company hereunder in connection with each Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on each Closing Date of the representations and warranties of the Purchaser contained herein (unless as of a specific date therein in which case they shall be accurate in all material respects (or, to the extent representations or warranties are qualified by materiality, in all respects) as of such date);

(ii) all obligations, covenants and agreements of Purchaser required to be performed at or prior to the applicable Closing Date shall have been performed; and

(iii) the delivery by Purchaser of the items set forth in Section II.4(b).

(b) The obligations of the Purchaser hereunder in connection with each Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on each Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein in which case they shall be accurate in all material respects or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) as of such date);

(ii) all obligations, covenants and agreements of the Company required to be performed at or prior to the applicable Closing Date shall have been performed;

(iii) the delivery by the Company of the items set forth in Section 2.4 (a);

(iv) there shall have been no Material Adverse Effect with respect to the Company;

(v) as to the Final Closing only, other than with respect to such notices previously disclosed on a Form 8-K, and which are set forth on Schedule II.5(b)(v) from the date hereof to the Final Closing Date, the Company shall not have received any new notice from the Trading Market that the Company is not in compliance with respect to any of the listing requirements applicable to the Company's Trading Market; and

(vi) from the date hereof to each applicable Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's Trading Market, and, at any time prior to the Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred after the date of this Agreement any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of Purchaser, makes it impracticable or inadvisable to purchase any of the Securities at the Closing.

**ARTICLE III.
REPRESENTATIONS AND WARRANTIES**

III.1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules, the Company hereby makes the following representations and warranties to Purchaser:

(a) Subsidiaries. All of the direct and indirect Subsidiaries of the Company, if any, and their respective jurisdictions of incorporation or organization are set forth on Schedule 3.1(a). Other than as set forth on Schedule 3.1(a), the Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any Liens, and, as of November 6, 2023, all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries or has no control over such subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) Organization and Qualification. The Company and, other than as set forth on Schedule 3.1(b), each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Other than as set forth on Schedule 3.1(b), neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company, and other than as set forth on Schedule 3.1(b), any Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, would not result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, liabilities or condition (financial or otherwise) of the Company and any Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect"); provided, that a change in the market price or trading volume of the Common Stock alone shall not be deemed to constitute a Material Adverse Effect; and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and

each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which the Company is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, anti-dilution or similar adjustments, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to receipt of the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filings required pursuant to Section 4.5, (ii) the receipt of consent from those parties set forth on Section 3.1(e)(ii) of the Company Disclosure Schedules, (iii) the notice and/or application(s) to each applicable Trading Market for the issuance and sale of the Securities and the listing of the Conversion Shares for trading thereon in the time and manner required thereby, (iv) the Stockholder Approval, and (v) such filings as are required to be made under applicable state securities laws (collectively, the "Required Approvals").

(f) Issuance of the Securities; Registration. The Preferred Stock is duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid, and nonassessable, free and clear of any Lien imposed by the Company. The Conversion Shares, when approved by the stockholders of the Company and issued in accordance with the terms of the Transaction Documents, will be duly and validly issued, fully paid, and nonassessable, free and clear of any Lien imposed by the Company. Except to the extent limited by the Company's authorized shares of Common Stock, the Company has reserved from its duly authorized capital stock a number of shares of Common Stock for issuance of the Conversion Shares at least equal to the Required Minimum on the date hereof.

(g) Capitalization. The capitalization of the Company as of the date hereof is as set forth on Schedule 3.1(g), which Schedule 3.1(g) shall also include the number of shares of Common Stock owned beneficially, and of record, by Affiliates of the Company as of the date hereof. Except as set forth on Schedule 3.1(g):

(i) The Company has not issued any capital stock since filing its Form 10-Q for the period ending September 30, 2023, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents.

(ii) Except as a result of the purchase and sale of the Securities there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock or the capital stock of any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or capital stock of any Subsidiary.

(iii) The issuance and sale of the Securities pursuant to this Agreement will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person (other than the Purchaser).

(iv) There are no outstanding securities or instruments of the Company or any Subsidiary with any provision that adjusts the exercise, conversion, exchange or reset price of such security or instrument upon an issuance of securities by the Company or any Subsidiary.

(v) There are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or such Subsidiary.

(vi) The Company does not have any stock appreciation rights or “phantom stock” plans or agreements or any similar plan or agreement.

(vii) All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities.

(viii) Except for the Required Approvals, no further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Preferred Stock; and, other than with respect to approval by the stockholders of the Company at a duly convened meeting thereof, no further approval or authorization of any stockholder is or will be required for the issuance of the Conversion Shares.

(ix) There are no stockholders’ agreements, voting agreements or other similar agreements with respect to the Company’s capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company’s stockholders.

(h) SEC Reports; Financial Statements. Other than as set forth on Schedule 3.1(h), the Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has never been an issuer subject to Rule 144(i) under the Securities Act. The financial statements of the Company included in the SEC Reports comply in all material respects

with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(i) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as set forth on Schedule 3.1(i): (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company’s financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting in any material respect, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement or as set forth on Schedule 3.1(i), no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or any Subsidiary, or their respective businesses, prospects, properties, operations, assets or financial condition, that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least 1 Trading Day prior to the date that this representation is made.

(j) Litigation. Except as set forth on Schedule 3.1(j), there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an “Action”). None of the Actions set forth on Schedule 3.1(j), (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty that could result in a Material Adverse Effect. Except as set forth on

Schedule 3.1(j), there has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or executive officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(k) Labor Relations. Except as set forth on Schedule 3(k), no labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's employees is a member of a union that relates to such employee's relationship with the Company, and the Company is not a party to a collective bargaining agreement, and the Company believes that its relationships with its employees are good. To the knowledge of the Company, no executive officer of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company to any liability with respect to any of the foregoing matters. The Company are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(l) Compliance. Except as set forth on Section 3.1(l) of the Company Disclosure Schedules, the Company: (i) is not in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is not in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has, to the Company's knowledge, not been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(m) Environmental Laws. To the knowledge of the Company, the Company (i) are in compliance with all federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use,

treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder (“Environmental Laws”); (ii) have received all permits licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) are in compliance with all terms and conditions of any such permit, license or approval where in each clause (i), (ii) and (iii), the failure to so comply would be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(n) Regulatory Permits. Except as set forth on Schedule 3.1(n), the Company possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct its business as currently conducted, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (“Material Permits”), and the Company has not received any notice of proceedings relating to the revocation or modification of any Material Permit.

(o) Title to Assets. The Company has good and marketable title in fee simple to all real property owned by it and good and marketable title in all personal property owned by them that is material to the business of the Company, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities currently held under lease by the Company are held by them under valid, subsisting and enforceable leases with which the Company are in compliance in all material respects.

(p) Intellectual Property. The Company has rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights as are necessary or required for use in connection with the Company’s business as currently contemplated and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). The Company has not received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement, except as could not have or reasonably be expected to not have a Material Adverse Effect. The Company has not received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as would not have or reasonably be expected to have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company has taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(q) Insurance. The Company and any Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage in an amount deemed commercially reasonable. Subject to the availability of sufficient proceeds from the transactions contemplated hereby and any other capital financing by the Company, neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(r) Offering Exemption. Subject to the accuracy of the representations of the Purchaser set forth in this Agreement, the offer, sale and issuance of the Securities to be issued in conformity with the terms of this Agreement constitute transactions which are exempt from the registration requirements of the Securities Act and from all applicable state registration or qualification requirements. The Company has implemented all necessary offering restrictions applicable to the transactions contemplated by this Agreement under Regulation S promulgated under the Securities Act. Subject to the receipt of the Required Approvals and assuming the accuracy of the Purchaser's representations and warranties set forth in Section 3.2, the issuance and sale of the Securities hereunder will not contravene the rules and regulations of the Trading Market. Assuming the accuracy of the Purchaser's representations and warranties set forth in Section 3.2, the issuance and sale of the Securities by the Company to the Purchaser is exempt from the prospectus requirements of applicable securities laws of the location of the Purchaser and no prospectus or other document is required to be filed, under such applicable securities laws and no proceeding is required to be taken and no approval, permit, consent or authorization of regulatory authorities is required to be obtained by the Company under such securities laws to permit such issuance and sale.

(s) Transactions With Affiliates and Employees. Except as set forth on Schedule 3.1(s), none of the officers or directors of the Company and, to the knowledge of the Company, none of the employees of the Company is presently a party to any transaction with the Company (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for: (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(t) Sarbanes-Oxley; Internal Accounting Controls. The Company and the Subsidiaries are in compliance with any and all applicable requirements of the Sarbanes- Oxley Act of 2002, as amended, that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date, except in each case as disclosed in the Company's SEC Reports. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d- 15(e)) for the Company and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company.

(u) Certain Fees. No brokerage or finder's fees or commissions are or will be payable by the Company to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchaser shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(v) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, required to register as an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not be required to register as an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

(w) Registration Rights. Except as set forth on Schedule 3.1(w), or as otherwise provided in the Transaction Documents, no Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiary.

(x) Listing and Maintenance Requirements. Except as set forth on Schedule 3.1(x), the Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to the Company's knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. Except as set forth in the SEC Reports or on Schedule 3.1(x), the Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company has taken commercially reasonable efforts to reach compliance with the listing or maintenance requirements in the foreseeable future. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(y) Application of Takeover Protections. The Company and the Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's certificate of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Purchaser as a result of the Purchaser's and the Company's fulfilling their obligations or exercising their rights under the Transaction Documents, including without limitation as a result of the Company's issuance of the Securities and the Purchaser's ownership of the Securities.

(z) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor any other Person acting on its behalf has provided the Purchaser or its agents or counsel with any information that it believes constitutes or might constitute material, non-public information which has not been otherwise disclosed. The Company understands and confirms that the Purchaser will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchaser regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including in the SEC Reports or the Disclosure Schedules to this Agreement, is true and correct, in all material respects, and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the

statements therein, in the light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that Purchaser neither makes nor has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

(aa) No Integrated Offering. Assuming the accuracy of the Purchaser's representations and warranties set forth in Section 3.2, neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of any applicable stockholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(bb) Solvency. Based on the financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, as well as the closing of the transactions contemplated by the EIB Guarantee Sale and Termination Agreement: the fair saleable value of the Company's assets (including the proceeds from the sale of Securities hereunder) exceeds the amount that will be required to be paid on or in respect of the Company's existing known debts and other liabilities (including known contingent liabilities) as they mature as of the Closing Date. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). Schedule 3.1(bb) sets forth as of the date hereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. For the purposes of this Agreement, "Indebtedness" means (x) any liabilities for borrowed money or amounts owed in excess of fifty thousand U.S. dollars (\$50,000) (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company's consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of fifty thousand U.S. dollars (\$50,000) due under leases required to be capitalized in accordance with GAAP. Except as set forth on Section 3.1(bb) of the Company Disclosure Schedule, the Company is not in default with respect to any Indebtedness.

(cc) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent

to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim.

(dd) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has: (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of FCPA.

(ee) Accountants. The Company's independent accounting firm is UHY, LLP, New York ("UHY"). To the knowledge and belief of the Company, such accounting firm: (i) is a registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company's Annual Report on Form 10-K for the fiscal year ending December 31, 2023.

(ff) Acknowledgment Regarding Purchaser's Purchase of Securities. The Company acknowledges and agrees that the Purchaser is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that Purchaser is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by Purchaser or any of Purchaser's representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchaser's purchase of the Securities. The Company further represents to Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(gg) Acknowledgment Regarding Purchaser's Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding (except for Sections 3.2(e) and 4.15), Purchaser and counter-parties in "derivative" transactions to which Purchaser is a party, directly or indirectly, may presently have a "short" position in the Common Stock and Purchaser shall not be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction. The Company further understands and acknowledges that (y) Purchaser may engage in hedging activities (in compliance with applicable law) at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value of the Conversion Shares deliverable with respect to Securities are being determined, and (z) such hedging activities (if any) could reduce the value of the existing stockholders' equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(hh) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company.

(ii) No General Solicitation or Directed Selling Efforts. Neither the Company nor any Person acting on behalf of the Company has offered or sold any of the Securities by any form of general solicitation or general advertising or “directed selling efforts” (as defined in Rule 902(c) of Regulation S). The Company has offered the Securities for sale only to the Purchaser.

(jj) Stock Option Plans. Each stock option granted by the Company under the Company’s equity incentive plans was granted (i) in accordance with the terms of the Company’s equity incentive plans and (ii) with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company’s equity incentive plans has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(kk) Cybersecurity. To the knowledge and belief of the Company, (i)(x) there has been no security breach or other compromise of or relating to any of the Company’s material information technology and computer systems, networks, hardware, software, data (including the data of its respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of the Company), equipment or technology (collectively, “IT Systems and Data”) and (y) the Company]have not been notified in writing of, and has no knowledge of any event or condition that would reasonably be expected to result in, any security breach or other compromise to its IT Systems and Data; (ii) the Company is presently in compliance in all material respects with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) the Company has implemented and maintained commercially reasonable safeguards to maintain and protect its material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and Data; and (iv) the Company has implemented backup and disaster recovery technology consistent with industry standards and practices.

(ll) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC").

(mm) U.S. Real Property Holding Corporation. The Company is not or has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon Purchaser's request.

(nn) Bank Holding Company Act. Neither the Company nor any of its Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(oo) Money Laundering. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance in all material respects with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the "Money Laundering Laws"), and no Action or Proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

III.2 Representations and Warranties of the Purchaser. Purchaser hereby represents and warrants as of the date hereof and as of the Closing Date to the Company as follows (unless as of a specific date therein, in which case they shall be accurate as of such date):

(a) Organization; Authority. Purchaser has the right and legal capacity to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. Each Transaction Document to which it is a party has been duly executed by Purchaser, and when delivered by Purchaser in accordance with the terms hereof or thereof, will constitute the valid and legally binding obligation of Purchaser, enforceable against it in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(b) Understandings or Arrangements. Purchaser is acquiring the Securities in compliance with applicable securities laws, and in the ordinary course of its business. Purchaser understands that the Securities are “restricted securities” and have not been registered under the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting such Purchaser’s right to act upon its Securities Purchase Rights Transfer Right, to sell such Securities pursuant to a registration statement or otherwise in compliance with applicable federal and state securities laws).

(c) Purchaser Status. At the time Purchaser was offered the Securities, it was, and as of the date hereof it is, it will be either (i) an “accredited investor” as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Securities Act, or (ii) a “qualified institutional buyer” as defined in Rule 144A(a) under the Securities Act. In addition Purchaser has purchased the Securities pursuant to Regulation S, and Purchaser represents and warrants that (i) at the time he, she or it was offered the Securities he, she or it was not, as of the date hereof it is not, and throughout the Closing Date he, she or it will continue not to be, a “U.S. Person” as that term is defined in Rule 902 of Regulation S, and (ii) he, she or it has, and will at all times have, executed all documents (including this Agreement) outside of the United States.

(d) General Solicitation. Purchaser is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or, to the knowledge of the Purchaser, any other general solicitation or general advertising. In addition, Purchaser is not purchasing the Securities as a result of any “directed selling efforts” (as defined in Rule 902(c) of Regulation S) in the United States.

(e) Experience of Purchaser. Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(f) Access to Information. The Purchaser acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Reports and has been afforded, (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities; (ii) access to information about the Company and its financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment.

(g) Certain Transactions and Confidentiality. Other than consummating the transactions contemplated hereunder, and/or (ii) a transfer made pursuant to the Securities Purchase Rights Transfer Right, Purchaser has not directly or indirectly, nor has any Person acting on behalf of or pursuant to any understanding with Purchaser, executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing as of the time that Purchaser first received a term sheet (written or oral) from the Company or any other Person representing the Company setting forth the material terms of the transactions contemplated hereunder and ending immediately prior to the execution hereof. Other than to other Persons party to this Agreement, to any transferee of Purchaser pursuant to the Securities Purchase Rights Transfer Right, or to such Purchaser's and/or transferee's representatives, including, without limitation, its officers, directors, partners, legal and other advisors, employees, agents and Affiliates, such Purchaser and/or transferee has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to locating or borrowing shares in order to effect Short Sales or similar transactions in the future.

(h) Director Independence. Each of the New Directors (other than the Purchaser), are, and, at the time of the First Closing, will be "independent" under the rules and regulations of the Trading Market and applicable securities laws.

The Company acknowledges and agrees that the representations contained in this Section 3.2 shall not modify, amend or affect Purchaser's right to rely on the Company's representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Document or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transactions contemplated hereby. Notwithstanding the foregoing, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to locating or borrowing shares in order to effect Short Sales or similar transactions in the future.

ARTICLE IV. OTHER AGREEMENTS OF THE PARTIES

IV.1 Restrictive Legends. The Purchaser agrees that the Preferred Stock, and, until the Registration Statement is declared effective, any Conversion Shares, issued pursuant to exemptions from registration under the Securities Act, shall each bear legends stating that transfer of those Securities is restricted, substantially as follows:

THIS SECURITY AND THE SECURITIES ISSUABLE UPON CONVERSION/EXERCISE OF THIS SECURITY ARE BEING OFFERED TO INVESTORS WHO ARE NOT U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT OF 1933, AS AMENDED (“THE SECURITIES ACT”)) AND WITHOUT REGISTRATION WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES ACT IN RELIANCE UPON REGULATION S PROMULGATED UNDER THE SECURITIES ACT. TRANSFER OF THIS SECURITY AND THE SECURITIES ISSUABLE UPON CONVERSION/EXERCISE OF THIS SECURITY IS PROHIBITED, EXCEPT PURSUANT TO REGISTRATION UNDER THE SECURITIES ACT OR PURSUANT TO AVAILABLE EXEMPTION FROM REGISTRATION. HEDGING TRANSACTIONS MAY NOT BE CONDUCTED UNLESS IN COMPLIANCE WITH THE SECURITIES ACT.

IV.2 Acknowledgment of Dilution. The Company acknowledges that the issuance of the Securities may result in dilution of the outstanding shares of Common Stock, which dilution may be substantial under certain market conditions. Subject to compliance with the terms of this Agreement, the Company further acknowledges that its obligations under the Transaction Documents, including, without limitation, its obligation to issue the Conversion Shares pursuant to the Transaction Documents when required in accordance with their terms, are unconditional and absolute and not subject to any right of set off, counterclaim, delay or reduction, regardless of the effect of any such dilution or any claim the Company may have against Purchaser or any transferee thereof, and regardless of the dilutive effect that such issuance may have on the ownership of the other stockholders of the Company.

I.2 Furnishing of Information; Public Information. The Company covenants to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act, except in the event that the Company consummates (in each case on or after the date as of which the Purchasers may sell all of their Securities without restriction or limitation pursuant to Rule 144): (a) any transaction or series of related transactions as a result of which any Person (together with its Affiliates) acquires then outstanding securities of the Company representing more than fifty percent (50%) of the voting control of the Company; (b) a merger or reorganization of the Company with one or more other entities in which the Company is not the surviving entity; or (c) a sale of all or substantially all of the assets of the Company, where the consummation of such transaction results in the Company no longer being subject to the reporting requirements of the Exchange Act.

IV.3 Integration. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require stockholder approval prior to the closing of such other transaction unless stockholder approval is obtained before the closing of such subsequent transaction.

IV.4 Conversion Procedures. The form of Notice of Conversion included in the Certificate of Designations sets forth the totality of the procedures required of the Purchaser or any transferee thereof in order to convert the Preferred Stock. Without limiting the preceding sentences, 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

in order to convert the Preferred Stock. No additional information or instructions shall be required of the Purchaser or transferee thereof to convert its Preferred Stock. The Company shall honor conversions of the Preferred Stock and shall deliver Conversion Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents.

IV.5 Securities Laws Disclosure; Publicity. The Company shall (a) by the Disclosure Time, issue a press release disclosing the material terms of the transactions contemplated hereby and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act. In addition, effective upon the issuance of such press release, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, agents, employees, Affiliates or agents, and the Purchaser or any transferee thereof, shall terminate and be of no further force or effect. The Company understands and confirms that Purchaser or any transferee thereof pursuant to the Securities Purchase Rights Transfer Right, shall be relying on the foregoing covenant in effecting transactions in securities of the Company. The Company and Purchaser (or any transferee thereof pursuant to the Securities Purchase Rights Transfer Right, as applicable) shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor Purchaser (nor any transferee thereof pursuant to the Securities Purchase Rights Transfer Right) shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of Purchaser (or any transferee thereof pursuant to the Securities Purchase Rights Transfer Right), or without the prior consent of Purchaser (or any transferee thereof pursuant to the Securities Purchase Rights Transfer Right), with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. Notwithstanding the foregoing, the Company shall not publicly disclose the name of Purchaser (nor of any transferee thereof pursuant to the Securities Purchase Rights Transfer Right), or include the name of Purchaser (or of any transferee thereof pursuant to the Securities Purchase Rights Transfer Right) in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of Purchaser (or of any transferee thereof pursuant to the Securities Purchase Rights Transfer Right, as applicable), except: (a) as required by federal securities law in connection with the filing of final Transaction Documents with the Commission and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchaser (or any transferee thereof pursuant to the Securities Purchase Rights Transfer Right) with prior notice of such disclosure permitted under this clause (b) and reasonably cooperate with Purchaser (or any transferee thereof pursuant to the Securities Purchase Rights Transfer Right) regarding such disclosure.

IV.6 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that Purchaser (or any transferee thereof pursuant to the Securities Purchase Rights Transfer Right) is an “Acquiring Person” under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents or under any other agreement between the Company and the Purchaser.

IV.7 Use of Proceeds. Other than with respect to the Creditor Purchase Price Portion, which shall be remitted by the Company directly to EIB and Curetis in accordance with the EIB Guarantee Termination Agreement immediately following the Closing, the Company shall use the remaining net proceeds from the sale of the Securities hereunder solely as set forth in Schedule 4.7, and, without prejudice to any limitations set forth on Schedule 4.7 or otherwise herein, shall not use such proceeds: (a) for the redemption of any Common Stock or Common Stock Equivalents, (b) for the settlement of any outstanding litigation or (c) in violation of FCPA or OFAC regulations.

IV.8 Indemnification of The Company. Subject to the subsections of this Section 4.8, the Purchaser will indemnify and hold the Company and each Company Party harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Company Party may suffer or incur as a result of or relating to (a) any inaccuracy in or breach of any of the representations, warranties, covenants or agreements made by the Purchaser in this Agreement or in the other Transaction Documents or (b) any action instituted against the Company in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is solely based upon a material breach of such Company Party's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Company Party may have with any such stockholder or any violations by such Company Party of state or federal securities laws or any conduct by such Company Party which is finally judicially determined to constitute fraud, gross negligence or willful misconduct) or (c) in connection with the Registration Statement of the Company to be filed providing for the resale by the Purchaser of the Conversion Shares, the Purchaser will indemnify the Company Party, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable attorneys' fees) and expenses, as incurred, arising out of or relating to any untrue or alleged untrue statement of a material fact contained in such Registration Statement, any Prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading, except to the extent, but only to the extent, that such untrue statements or omissions are based solely upon information regarding Purchaser furnished in writing to the Company by Purchaser expressly for use therein. If any action shall be brought against any Company Party in respect of which indemnity may be sought pursuant to this Agreement, such Company Party shall promptly notify the Purchaser in writing, and the Purchaser shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Company Party. Any Company Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Company Party except to the extent that (i) the employment thereof has been specifically authorized by the Purchaser in writing, (ii) the Purchaser has failed within ten days

after notice from the Company Party to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Purchaser and the position of such Company Party, in which case the Purchaser shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Purchaser will not be liable to any Company Party under this Agreement (y) for any settlement by a Company Party effected without the Purchaser's prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Company Party's breach of any of the representations, warranties, covenants or agreements made by such Company Party in this Agreement or in the other Transaction Documents. The indemnification required by this Section 4.8 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Company Party against the Purchaser or others and any liabilities the Purchaser may be subject to pursuant to law.

IV.9 Indemnification of Purchaser. Subject to the subsections of this Section 4.9, the Company will indemnify and hold Purchaser and its directors, officers, shareholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), (each, a "Purchaser Party") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any inaccuracy in or breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is solely based upon a material breach of such Purchaser Party's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such stockholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which is finally judicially determined to constitute fraud, gross negligence or willful misconduct) or (c) in connection with the Registration Statement of the Company to be filed providing for the resale by the Purchaser of the Conversion Shares, the Company will indemnify Purchaser, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable attorneys' fees) and expenses, as incurred, arising out of or relating to (i) any untrue or alleged untrue statement of a material fact contained in such Registration Statement, any Prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading, except to the extent, but only to the extent, that such untrue statements or omissions are based solely upon information regarding Purchaser furnished in writing to the Company by Purchaser expressly for use therein, or (ii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act or any state securities law, or any rule or regulation thereunder in connection

therewith. If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed within twenty (20) days after notice from the Purchaser Party to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (y) for any settlement by a Purchaser Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The indemnification required by this Section 4.9 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

IV.10 Reservation and Listing of Securities.

(a) Except to the extent limited by the Company's authorized shares of Common Stock, the Company shall maintain a reserve from its duly authorized shares of Common Stock for issuance pursuant to the Transaction Documents in such amount as may then be required to fulfill its obligations in full under the Transaction Documents.

(b) If, on any date, the number of authorized but unissued (and otherwise unreserved) shares of Common Stock is less than the Required Minimum on such date, then the Board of Directors shall use commercially reasonable efforts to amend the Company's certificate or by laws to increase the number of authorized but unissued shares of Common Stock to at least the Required Minimum at such time, as soon as possible and in any event not later than the 75th day after such date.

(c) The Company shall, if applicable: (i) in the time and manner required by the principal Trading Market, prepare and file with such Trading Market an additional shares listing application covering a number of shares of Common Stock at least equal to the Required Minimum on the date of such application, (ii) take all steps necessary to cause such shares of Common Stock to be listed on such Trading Market as soon as possible thereafter, (iii) provide to the Purchaser evidence of such listing and (iv) use commercially reasonable efforts to maintain the listing of such Common Stock on such Trading Market. The Company agrees to maintain the eligibility of the Common Stock for electronic transfer through the Depository Trust Company or another established clearing corporation, including, without limitation, by timely payment of fees to the Depository Trust Company or such other established clearing corporation in connection with such electronic transfer.

IV.11 Certain Company Actions.

(a) Until the next duly convened annual meeting of the Company stockholders, without Purchaser's consent, and except as contemplated by this Agreement, the Company shall not change the number of directors constituting the entire Board of Directors or fill any vacancy in the Board (except as set forth above in this Agreement), change the nature of Company's operations, incur any debt for borrowed money, guarantee any obligation of any third party, issue any capital stock other than pursuant to obligations to issue Common Stock listed on Schedule 3.1(g) or pursuant to any Company equity incentive plan, issue or grant any instrument exercisable for or convertible into capital stock, or otherwise enter into any transaction other than in the ordinary course of business, amend its certificate of incorporation, or bylaws, use the proceeds from sale of the Securities, except as set forth in Schedule 4.7, establish any account at any bank other than that set forth on Schedule 4.11 or change the banking signature authority from that set forth on Schedule 4.11, or agree to any of the foregoing.

(b) By no later than May 17, 2024, the Company will hold an annual or special meeting of the stockholders of the Company (the "Stockholders Meeting") for purposes of approving (i) a reverse stock split of the Common Stock of the Company at up to a ratio to be determined by the Board of Directors of the Company prior to finalizing the proxy statement for the Stockholders Meeting, and, following stockholder approval, to be implemented at the sole and absolute discretion of the Board of Directors, (ii) an amendment of the Certificate of Designations establishing the rights and preferences of the Series E Preferred Stock and removing the Beneficial Ownership Limitations and such other matters as Purchaser deems stockholder approval necessary to comply with Nasdaq listing standards, with respect to the transactions contemplated hereby, including any approvals required under Nasdaq Rule 5635, and (iii) an amendment to the Certificate of Incorporation of the Company removing the limitations on action by written consent of the stockholders in lieu of a meeting of the stockholders.

(c) In the event all of the actions in Section IV.11(b) are not approved by the stockholders at the Stockholders Meeting, the Company shall use its reasonable best efforts to call another stockholder meeting (the "Second Meeting") within seventy (70) days of the Stockholders Meeting for the purpose of obtaining the Required Approvals, with the recommendation of the Company's Board of Directors that such proposals are approved, and the Company shall solicit proxies from its stockholders in connection therewith in the same manner as all other management proposals in such proxy statement. If the Company does not obtain the Required Approvals at the Second Meeting, the Company shall call a meeting every seventy (70) days thereafter to seek the Required Approvals until there has been a total of four (4) meetings. Following the fourth (4th) such meeting, if the Required Approvals have yet to be obtained, the redemption rights of the Series E Preferred Stock, as set forth in the Certificate of Designations, shall be exercisable by the holder(s) of the Series E Preferred Stock.

IV.12 Subsequent Equity Sales.

(a) From the date hereof until one hundred and eighty (180) days after the Closing Date, without Purchaser's consent, neither the Company nor any Subsidiary shall issue, enter into any agreement to issue or announce the issuance or proposed issuance of any common Stock or Common Stock Equivalents.

(b) From the date hereof until April 15, 2025, the Company shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents (or a combination of units thereof) involving a Variable Rate Transaction. "Variable Rate Transaction" means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security (other than in connection with a stock split, stock dividend or similar event) or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit or an "at-the-market offering", whereby the Company may issue securities at a future determined price. Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(c) Unless Stockholder Approval has been obtained and deemed effective, neither the Company nor any Subsidiary shall make any issuance whatsoever of Common Stock or Common Stock Equivalents which would cause any adjustment of the Conversion Price to the extent the holders of Preferred Stock would not be permitted, pursuant to Section 6(c) of the Certificate of Designation to convert their respective outstanding shares of Preferred Stock, in full, ignoring for such purposes the other conversion limitations therein. Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages. Notwithstanding the foregoing the Company and its Subsidiaries shall not be precluded from issuing securities in a Subsequent Financing that does not require stockholder approval, but such Subsequent Financings are not excluded from the dilutive adjustment mechanisms of the Preferred Stock to the extent such are otherwise applicable.

(d) Notwithstanding the foregoing, this Section 4.12 shall not apply in respect of an Exempt Issuance, except that no Variable Rate Transaction shall be an Exempt Issuance.

IV.13 Participation in Future Financing.

(a) From the date hereof until nine (9) months after the Closing Date, upon any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents for cash consideration, Indebtedness or a combination of units thereof (a "Subsequent Financing"), Purchaser shall have the right to participate therein up to an amount equal to twenty five percent (25%) of the Subsequent Financing (the "Participation Maximum") on the same terms, conditions and price provided for in the Subsequent Financing.

(b) At least four (4) Trading Days prior to the closing of the Subsequent Financing, the Company shall deliver to Purchaser a written notice of its intention to effect a Subsequent Financing ("Pre-Notice"), which Pre-Notice shall ask Purchaser if it wants to review the details of such financing (such additional notice, a "Subsequent Financing Notice"). Upon the request of Purchaser, and only upon a request by Purchaser, for a Subsequent Financing Notice, the Company shall promptly, but no later than one (1) Trading Day after such request, deliver a Subsequent Financing Notice to Purchaser. The Subsequent Financing Notice shall describe in reasonable detail the proposed terms of such Subsequent Financing, the amount of proceeds intended to be raised thereunder and the Person or Persons through or with whom such Subsequent Financing is proposed to be effected and shall include a term sheet or similar document relating thereto as an attachment.

(c) To participate in such Subsequent Financing, Purchaser must provide written notice to the Company, by not later than 5:30 p.m. (New York City time) on the second (2nd) Trading Day after Purchaser has received the Pre-Notice, that Purchaser wishes to participate in the Subsequent Financing, the amount of Purchaser's participation, and representing and warranting that Purchaser has such funds ready, willing, and available for investment on the terms set forth in the Subsequent Financing Notice. If the Company receives no such notice from Purchaser as of such second (2nd) Trading Day, Purchaser shall be deemed to have notified the Company that it does not elect to participate.

(d) If by 5:30 p.m. (New York City time) on the second (2nd) Trading Day after the Purchaser has received the Pre-Notice, notification by the Purchaser of its wish to participate in the Subsequent Financing (or to cause its designees to participate) is, in the aggregate, less than the total amount of the Participation Maximum, then the Company may effect the remaining portion of such Subsequent Financing on the terms and with the Persons set forth in the Subsequent Financing Notice.

(e) The Company must provide the Purchaser with a second Subsequent Financing Notice, and the Purchaser will again have the right of participation set forth above in this Section 4.14, if the Subsequent Financing subject to the initial Subsequent Financing Notice is not consummated for any reason on the terms set forth in such Subsequent Financing Notice within thirty (30) Trading Days after the date of the initial Subsequent Financing Notice.

(f) The Company and Purchaser agree that if Purchaser elects to participate in a Subsequent Financing, the transaction documents related to the Subsequent Financing shall not include any term or provision that, directly or indirectly, will, or is intended to, exclude Purchaser from participating in a Subsequent Financing, including, but not limited to, provisions whereby Purchaser shall be required to agree to any restrictions on trading as to any of the Securities purchased hereunder or be required to consent to any amendment to or termination of, or grant any waiver, release or the like under or in connection with, this Agreement, without the prior written consent of Purchaser.

(g) Notwithstanding anything to the contrary in this Section 4.13 and unless otherwise agreed to by Purchaser, the Company shall either confirm in writing to Purchaser that the transaction with respect to the Subsequent Financing has been abandoned or shall publicly disclose its intention to issue the securities in the Subsequent Financing, in either case in such a manner such that Purchaser will not be in possession of any material, non- public information, by the tenth (10th) Business Day following delivery of the Subsequent Financing Notice. If by such tenth (10th) Business Day, no public disclosure regarding a transaction with respect to the Subsequent Financing has been made, and no notice regarding the abandonment of such transaction has been received by Purchaser, such transaction shall be deemed to have been abandoned and Purchaser shall not be deemed to be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries.

IV.14 Solvency. Purchaser covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it, intends to engage in any transaction following the Closing which is intended to negatively impact the solvency of the Company following the Closing.

IV.15 Certain Transactions and Confidentiality. Purchaser covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it will execute any purchases or sales, including Short Sales, of any of the Company's securities during the period commencing with the execution of this Agreement and ending at such time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.5. Purchaser covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company pursuant to the initial press release as described in Section 4.5, Purchaser will maintain the confidentiality of the existence and terms of this transaction and the information included in this Agreement and the Disclosure Schedules (other than as disclosed to its legal and other representatives). Notwithstanding the foregoing, and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) Purchaser makes no representation, warranty or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.5; (ii) Purchaser shall not be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to the initial press release as described in Section 4.5; and (iii) Purchaser shall have no duty of confidentiality or duty not to trade in the securities of the Company to the Company, any of its Subsidiaries, or any of their respective officers, directors, employees, Affiliates or agents after the issuance of the initial press release as described in Section 4.5. Notwithstanding the foregoing, if Purchaser is a

multi-managed investment vehicle whereby separate portfolio managers manage separate portions of Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of Purchaser's assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement.

IV.16 Insurance. Following the Closing, the Company shall, and the Purchaser shall cause the Company to, by no later than May 31, 2024, obtain, on commercially reasonable terms and taking into account the financial condition of the Company, either: (i) "tail" insurance policies with a claims period of six years from the Closing or (ii) extend the Company's existing director and officer insurance policies with coverage for the Company's directors and officers as of immediately prior to the First Closing, in each case, and to the extent reasonably feasible commercially, with at least the same coverage and amounts and containing terms and conditions that are not less advantageous to the parties covered by the Company's existing director and officer insurance policies and with respect to claims arising out of or relating to events which occurred before or at the First Closing (including in connection with the transactions contemplated by this Agreement).

ARTICLE V. MISCELLANEOUS

V.1 Fees and Expenses.

(a) The Company agrees to pay all costs and expenses incident to the performance of its obligations under this Agreement, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, including expenses, fees and taxes in connection with (i) the preparation and filing of registration statements pursuant to the Registration Rights Agreement, any prospectus with respect thereto, any issuer free writing prospectus, the proxy statement in connection with the Stockholder Meeting, and any amendments or supplements thereto, and the printing and furnishing of copies of each thereof to stockholders or any other parties requiring receipt of such (including costs of mailing and shipment), (ii) the preparation, issuance and delivery of the certificates for the Securities to the Purchaser, including any stock or other transfer taxes or duties payable upon the sale of the Securities to the Purchaser, (iii) the filing for any required review of the offering of the Securities by FINRA (including the legal fees and filing fees and other disbursements of counsel for the Purchaser relating thereto), (iv) the fees and expenses of any transfer agent or registrar for the Securities and miscellaneous expenses referred to in the Registration Statement, (v) the fees and expenses incurred in connection with the listing of the Conversion Shares on Nasdaq, and (vi) the performance of the Company's other obligations hereunder.

(b) The Company agrees to reimburse the Purchaser for all documented out-of-pocket expenses in connection with the fees and expenses reasonably incurred by Purchaser for the Purchaser's outside legal counsel or other advisors, accountants, appraisers, etc. in connection with this Agreement or the transactions contemplated herein (the "Expense Reimbursement"); provided, that in no event shall Expense Reimbursement exceed \$50,000.

(c) Except as expressly set forth in the Transaction Documents to the contrary, including, *inter alia*, each Party shall otherwise pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such Party incident to the negotiation, preparation, execution, delivery and performance of this Agreement.

(d) The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any conversion notice delivered by Purchaser), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchaser.

V.2 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

V.3 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the time of transmission, if such notice or communication is delivered via email attachment at the email address as set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the time of transmission, if such notice or communication is delivered via email attachment at the email address as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto.

V.4 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and Purchaser or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right. Any amendment effected in accordance with this Section 5.4 shall be binding upon Purchaser and holder of Securities and the Company.

V.5 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

V.6 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of Purchaser (other than by merger). Purchaser may assign any or all of its rights under this Agreement to any Person to whom Purchaser assigns or transfers any Securities, including, inter

alia, pursuant to the Securities Purchase Rights Transfer Right, provided that such transferee agrees in writing to be bound, with respect to the transferred Securities Purchase Rights and/or transferred Securities, by the provisions of the Transaction Documents that apply to the “Purchaser.”

V.7 No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced or waived by, any other Person, except for (i) a transferee or Purchaser pursuant to the Securities Purchase Rights Transfer Right, (ii) as otherwise set forth in Section 4.10; or (iii) the payment by the Company to EIB and Curetis of the Creditor Purchase Price Portion.

V.8 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal Proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any Action or Proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such Action or Proceeding is improper or is an inconvenient venue for such Proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such Action or Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement 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 law. If any party shall commence an Action or Proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Section 4.10, the prevailing party in such Action or Proceeding shall be reimbursed by the non-prevailing party for its reasonable attorneys’ fees and other costs and expenses incurred with the investigation, preparation and prosecution of such Action or Proceeding.

V.9 Survival. The representations and warranties contained herein shall survive the Closing and the delivery of the Securities for the period of the applicable statute of limitations.

V.10 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by e-mail delivery of a “.pdf” format data file or other electronic signing crated on an alectronic platform (such as DocuSign), such signature shall be deemed to have been duly and validly delivered and shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such “.pdf” signature page were an original thereof.

V.11 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

V.12 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever Purchaser exercises a right, election, demand or option under a Transaction Document, and the Company does not timely perform its related obligations within the periods therein provided, then Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights; provided, however, that in the case of a rescission of a conversion of the Preferred Stock, Purchaser shall be required to return any shares of Common Stock subject to any such rescinded conversion notice.

V.13 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

V.14 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, the Purchaser and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any Action for specific performance of any such obligation the defense that a remedy at law would be adequate.

V.15 Payment Set Aside. To the extent that the Company makes a payment or payments to Purchaser pursuant to any Transaction Document or Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any

bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

V.16 Usury. To the extent it may lawfully do so, the Company hereby agrees not to insist upon or plead or in any manner whatsoever claim, and will resist any and all efforts to be compelled to take the benefit or advantage of, usury laws wherever enacted, now or at any time hereafter in force, in connection with any Action or Proceeding that may be brought by Purchaser in order to enforce any right or remedy under any Transaction Document. Notwithstanding any provision to the contrary contained in any Transaction Document, it is expressly agreed and provided that the total liability of the Company under the Transaction Documents for payments in the nature of interest shall not exceed the maximum lawful rate authorized under applicable law (the "Maximum Rate"), and, without limiting the foregoing, in no event shall any rate of interest or default interest, or both of them, when aggregated with any other sums in the nature of interest that the Company may be obligated to pay under the Transaction Documents exceed such Maximum Rate. It is agreed that if the maximum contract rate of interest allowed by law and applicable to the Transaction Documents is increased or decreased by statute or any official governmental action subsequent to the date hereof, the new maximum contract rate of interest allowed by law will be the Maximum Rate applicable to the Transaction Documents from the Closing Date thereof forward, unless such application is precluded by applicable law. If under any circumstances whatsoever, interest in excess of the Maximum Rate is paid by the Company to Purchaser with respect to indebtedness evidenced by the Transaction Documents, such excess shall be applied by Purchaser to the unpaid principal balance of any such indebtedness or be refunded to the Company, the manner of handling such excess to be at Purchaser's election.

V.17 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

V.18 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken, or such right may be exercised on the next succeeding Business Day.

V.19 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

OPGEN, INC.

By: /s/ Oliver Schacht
Name: Oliver Schacht, Ph.D.
Title: Chief Executive Officer

Address for Notice:

OpGen, Inc.
9717 Key West Ave. – Suite 100
Rockville, MD 20850
Attention: Oliver Schacht,
President & CEO
Facsimile: n.a.
Email address:
oschacht@opgen.com

With a copy to (which shall not constitute notice):

Ballard Spahr LLP
1735 Market Street, 51st Floor
Philadelphia, PA 19103
Attention: Peter Jaslow, Esq.
Email: jaslowp@ballardspahr.com

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGE FOR PURCHASER FOLLOWS]

PURCHASER SIGNATURE PAGE TO SECURITIES PURCHASE AGREEMENT

PURCHASER:

DAVID LAZAR

Signature: /s/ David Lazar

Address for Notice:

Mr. David Lazar
5305, 392-Marsa
Dubai, U.A.E.

E-mail:

david@activistinvestingllc.com

With a copy to (which shall not constitute notice):

ABZ Law Offices

Attn: Avraham Ben-Tzvi, Adv.

28 General Pierre Koenig, Floor 3

Jerusalem, Israel

E-mail: abz@abz-law.com

EXHIBIT A
CERTIFICATE OF DESIGNATIONS

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.

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(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.

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(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.

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) 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

(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.
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:

EXHIBIT B
REGISTRATION RIGHTS AGREEMENT

EXHIBIT C
DIRECTOR'S AGREEMENT

DIRECTOR AGREEMENT

DIRECTOR AGREEMENT, dated as of March __, 2024, by and between OpGen Inc., a Delaware corporation (the “**Company**”), and _____ (the “**Director**”).

WITNESSETH:

WHEREAS, the Company wishes to engage the Director and the Director is willing to accept such engagement upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. Services. Upon the terms and subject to the conditions of this Agreement and with effect from the Effective Date (as defined below), the Company hereby engages the Director to act as an independent director and provide services on the terms and conditions provided in this Agreement. The Director agrees to devote appropriate time and attention to the execution of the services to be provided by the Director hereunder, which shall include the services listed on Exhibit A; or such other services as the Company and the Director may reasonably agree (hereinafter the services to be provided by the Director hereunder are referred to as the “**Services**”).

2. Term of Engagement. The term of the Director’s engagement by the Company under this Agreement shall commence on the __ day of March, 2024 (the “**Effective Date**”) and shall terminate on the earlier of (the “**Termination Date**”): (i) such day which is one year (the “**Contract Period**”) from the date thereof; (ii) the Director ceasing to be a member of the Board of Directors of the Company; and (iii) the occurrence of any of the events set forth in Section 5 below.

3. Independent Contractor. The Director would be an independent contractor, for his role as a Director, not an employee or agent of the Company.

4. Compensation.

(a) Fee. The Director shall be paid a fee of \$12,500 per quarter, payable quarterly, starting on March [], 2024 and pro-rated for a partial quarter during which the Director serves. Such fee shall be deferred and accrue until such time as the Company has raised sufficient funds to pay the accrued and unpaid fees (the “**Funding**”), or the Director exercises the option to convert all or part of such accrued and unpaid fees into shares of common stock of the Company, par value \$0.01 per share (the “**Conversion Option**”). The Conversion Option shall be at a rate of \$4.00 per share for each \$1.00 of accrued and unpaid fees so converted, and shall be at the sole option of the Director.

(b) Bonus. The Director shall be (i) issued 100,000 shares of restricted common stock upon execution hereof, and (ii) paid a one-time signing bonus of \$50,000, in cash, payable upon completion of the Funding, or the Director exercises the Conversion Option with respect to all of part of the cash portion of the Bonus.

(c) Purpose. It is understood by the parties hereto that the primary purpose of this Agreement is to assist the Company in its business operations, and not solicit to buy or sell securities.

(d) Benefits. During the Contract Period, the Director shall not receive or be eligible to participate in the Company's benefit programs in effect for the employees of the Company as in effect from time to time, on and after the Effective Date.

(e) Expenses. The Company shall reimburse the Director for all reasonable business travel expenses previously authorized in writing by the Company and reasonably and necessarily incurred by the Director in the performance of his duties, responsibilities, and authorities hereunder.

5. Termination Provisions. The Contract Period shall terminate, and the Director's engagement hereunder shall cease, effective upon the date of any of the occurrences set forth below (the "**Termination Date**"):

(a) Termination By Reason of Permanent Disability. If at any time during the Contract Period the Company reasonably determines that the Director has been or will be unable, as a result of physical or mental illness or incapacity, to perform his duties hereunder for one year, the Contract Period may be terminated by the Company upon written notice to the Director.

(b) Termination with Notice. Either party hereto may terminate the Contract Period for any reason upon thirty (30) days written notice to the other party. All Compensation earned upon such Termination Date shall be due and payable.

(c) Termination By Reason of Death. The Contract Period shall automatically terminate on the date of the Director's death (such date being the Termination Date).

Termination shall not occur if the parties hereto mutually agree to extend the term hereof, or if the terms hereof are renegotiated in good faith by the parties hereto.

6. Covenants of the Director.

(a) Non-solicitation of Employees of the Company, Directors of the Company or Customers or Suppliers of the Company. During the Contract Period and for a three (3) year period following the Contract Period (the "**Subject Period**"), the Director shall not, directly or indirectly on behalf of any business, firm, corporation, partnership, person, proprietorship or other entity, incorporated or otherwise, and shall use his best efforts to cause each business, firm, corporation, partnership, person, proprietorship and other entity with which he is or shall become associated in any capacity not to, (i) solicit for employment,

employ or otherwise engage any employee or Director of the Company, without the written consent of the Company, or (ii) except in connection with the performance of his duties hereunder and in accordance herewith, solicit, interfere with, endeavor to entice away from the Company or communicate with regarding the business of the Company any customer or supplier of the Company. The Director acknowledges and agrees in connection with the foregoing that the identities of the Company's employees, Directors, customers, suppliers and clients and other information gained during his period of employment with the Company with respect thereto is Confidential Information (as more fully defined in paragraph (b) below) of the Company.

(b) Confidentiality. During the Subject Period and at all times thereafter, the Director agrees and acknowledges that the Confidential Information (as defined below) of the Company is valuable, special and unique to its business; that such business depends on such Confidential Information; and that the Company wishes to protect such Confidential Information by keeping it confidential for the exclusive use and benefit of the Company. The Director further acknowledges that any use by him of the Confidential Information other than in strict accordance with the terms of this Agreement would be wrongful and would cause the Company irreparable injury. Based upon the foregoing, with respect to such Confidential Information, the Director agrees:

(i) to keep any and all Confidential Information in trust for the sole use and benefit of the Company;

(ii) except as required by applicable law or as required in furtherance of the business of the Company in accordance with the terms hereof, not to use or disclose or reproduce, directly or indirectly, any Confidential Information of the Company;

(iii) to take all steps necessary or reasonably requested by the Company to ensure that all Confidential Information is kept confidential for the sole use and benefit of the Company; and

(iv) in the event the Director's employment with the Company terminates for any reason whatsoever or at any time that the Company may in writing request, to deliver promptly to the Company all materials constituting Confidential Information (including all written, graphic, facsimile, encoded or recorded copies or duplicates thereof or notes regarding the same) of the Company that are in his possession or under his control without making or retaining any written graphic, facsimile, encoded or recorded copy or extract from such materials.

For purposes of this Section 6, "**Confidential Information**" means any and all information developed by or for or possessed by the Company prior to or during the Contract Period that is (A) not generally known in any industry in which the Company does business as of the date hereof or during the Contract Period or (B) not publicly available (including for this purpose information that is publicly available because of a breach by the Director of the provisions hereof). Confidential Information includes, but is not limited to, the information identified in Section 6(a) above (including, without limitation, personnel records and applications, employment and other Director agreements, medical records, Director appraisals, reviews and evaluations, general wage

and salary rates and individual salaries and bonuses and plans and records relating thereto, numbers of Directors in departments and divisions, Director benefit plans and incentive plans), and any and all other information developed by or for or possessed by the Company concerning information technology, marketing and sales methods, concepts, materials, products, processes, procedures, formulae, compounds, formulations, models, innovations, discoveries, improvements, inventions, protocols, computer programs, records, data, know-how, techniques, designs, machinery, devices, research and development projects, data, preparations, business forms, strategies, plans for development of products, services or expansion into new areas or markets, internal operations, product price lists, forecasts, projections, financial information (including the revenues, costs or profits associated with the products of the Company) and any other trade secrets and proprietary information of any type owned by or pertaining to the Company, together with all written, graphic, facsimile, encoded, recorded and other materials relating to all or any part of the same.

(c) Noncompetition, etc. During the Contract Period and any extension thereof, the Director shall not, directly or indirectly, engage in or be associated with, whether as a director, officer, employee, agent, Director, shareholder, partner, owner, independent contractor or otherwise, any business, firm, corporation, partnership, person, proprietorship or other entity, incorporated or otherwise (other than the Company), which is conducting, or plans to conduct, any business which competes with or will compete with, in the United States, (i) the business of the Company as constituted during the Contract Period, or (ii) the products of the Company manufactured, sold or under development by the Company during the Contract Period; provided, however, nothing herein shall prohibit the Director from being a shareholder in any entity that competes with the Company so long as the Director does not control such entity and does not hold more than a five percent (5%) equity interest therein.

(d) Compliance With Laws. In performing his duties hereunder, the Director agrees to comply with all applicable governmental laws, rules and regulations and all applicable policies and procedures of the Company.

(e) Miscellaneous. For purposes of Section 6 hereof, the term "Director" shall include the Director's affiliates and advisors.

7. Representations and Warranties.

(a) The Company. The Company hereby represents and warrants to the Director as follows:

- (i) the Company is duly incorporated, validly existing and in good standing under the laws of the State of Delaware; and
- (ii) this Agreement has been duly authorized, executed and delivered by the Company.

(b) The Director. The Director hereby represents and warrants to the Company as follows:

(i) the Director has full legal capacity to enter into this Agreement;

(ii) the execution, delivery and performance by the Director of this Agreement will not conflict with or result in a breach of any of the terms, conditions or provisions of, or constitute (with due notice or lapse of time or both) a default under, any agreement or instrument to which the Director is a party or by which he is bound;

(iii) this Agreement has been duly executed and delivered by the Director; and

(iv) the Director has made such investigations of the business and properties of the Company as he deems necessary or appropriate before entering into this Agreement and has been given a sufficient amount of time to review this Agreement with counsel and other professionals of his choice and has done so to the extent he desires.

Without limiting clause (ii) above, the Director hereby represents and warrants that he is not bound by the terms of any agreement with any other party to refrain from using or disclosing any trade secret or confidential or proprietary information in the course of his employment with the Company or to refrain from competing, directly or indirectly, with the business of such other party. The Director further represents and warrants that his performance of all the terms of this Agreement and as a Director of the Company does not and will not breach any agreement to keep in confidence proprietary information, knowledge or data acquired by him in confidence or in trust prior to his employment with the Company.

8. Director and Officer Insurance. The Company shall make all commercially reasonable efforts to procure suitable director and officer insurance for a company of substantially similar size and position. Such insurance shall cover and include the Director.

9. Indemnification. The Company shall indemnify the Director and each of his agents against any loss, liability, claim, damage, or expense arising from the actions or inactions of the Company (or any of its officers and directors), including, but not limited to, any and all out of pocket expense and reasonable attorneys' fees whatsoever reasonably incurred in investigating, preparing, or defending against any litigation, commenced or threatened, or any third party claim whatsoever), to which the Director may become subject arising out of or based on any actions or inactions or operations of the Company (or any of its officers and directors), to the fullest extent permitted by the Delaware Revised Statutes. Such indemnification does not include any claims resulting from the gross negligence or wilful misconduct of the Director. The indemnification provided for in this paragraph shall survive the Termination Date.

10. Successors; Assignment.

(a) The Company. This Agreement shall be binding upon and inure to the benefit of the Company and its successors and permitted assigns.

(b) The Director. Neither this Agreement, nor any right, obligation or interest hereunder, may be assigned by the Director, his beneficiaries, or his legal representatives without the prior written consent of the Company; provided, however, that nothing in this

paragraph (b) shall preclude (i) the Director from designating a beneficiary to receive any benefit payable hereunder upon his death, or (ii) the executors, administrators, or other legal representatives of the Director or his estate from assigning any such rights hereunder to distributees, legatees, beneficiaries, testamentary trustees or other legal heirs of the Director. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the Director and his executors and administrators.

11. Waiver of Breach. The waiver by the Company or the Director of a breach of any provision of this Agreement by the other party shall not be construed as a waiver of any continuing or subsequent breach of the same provision or of any other provision of this Agreement. It is also understood and agreed that no failure or delay by the Company in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or future exercise thereof or the exercise of any other right, power or privilege hereunder.

12. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been given when delivered by hand or courier service, or mailed by first-class certified mail, postage prepaid and return receipt requested, addressed as follows:

If to the Company:

OpGen, Inc.
9717 Key West Ave, Suite 100
Rockville, MD 20850

If to the Director:

or, in each case, at such other address as may from time to time be specified to the other party in a notice similarly given.

13. Governing Law; Litigation.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware applicable to agreements made and to be performed entirely within such State.

(b) Litigation. Each of the Company and the Director hereby agrees that the courts of the State of Delaware shall have jurisdiction to hear and determine any claims or disputes pertaining to this Agreement or to any matter arising therefrom. Each of the Company and the Director expressly submits and consents in advance to such jurisdiction in any action commenced in such courts, hereby waiving personal service of the summons and complaint or other process or papers issued therein, and agreeing that service of such

summons and complaint, or other process or papers, may be made in any manner permitted by the laws of the State of Delaware including if permissible the same manner as notices hereunder may be given pursuant to Section 12. The choice of forum set forth in this paragraph (b) shall not be exclusive nor shall it preclude the enforcement of any judgment obtained in such forum or the taking of any action under this Agreement to enforce such judgment in any appropriate jurisdiction.

14. Expenses. All costs and expenses (including attorneys' fees) incurred in connection with the negotiation and preparation of, or any claim, dispute or litigation pertaining to, this Agreement shall be paid by the party incurring such expenses.

15. Entire Agreement. This Agreement contains the entire agreement of the parties and their affiliates relating to the subject matter hereof and thereof and supersedes all prior agreements, representations, warranties and understandings, written or oral, with respect thereto.

16. Severability.

(a) Generally. If any term or provision of this Agreement or the application thereof to any person, property or circumstance shall to any extent be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons, property or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

(b) Duration and Scope of Certain Covenants. Without limiting paragraph (a) above, if any court determines that any of the covenants contained in Section 6, or any part of such covenants, is unenforceable because of the duration or scope of such covenant or provision, such court shall have the power to and is hereby requested to reduce the duration or scope of such covenant or provision, as the case may be, to the extent necessary to make such covenant or provision enforceable, and in its reduced form, such covenant or provision shall then be enforceable.

17. Remedies.

(a) Injunctive Relief. The Director acknowledges and agrees that the covenants and obligations of the Director contained in Section 6 relate to special, unique and extraordinary matters and are reasonable and necessary to protect the legitimate interests of the Company and that a breach of any of the terms of such covenants and obligations will cause the Company irreparable injury for which adequate remedies at law are not available. Therefore, the Director agrees that the Company shall be entitled to an injunction, restraining order, or other equitable relief from any court of competent jurisdiction restraining the Director from any such breach.

(b) Remedies Cumulative. The Company's rights and remedies under this Section 17 are cumulative and are in addition to any other rights and remedies the Company may have at law or in equity. In connection with paragraph (a) of this Section 17, the Director

represents that his economic means and circumstances are such that such provisions will not prevent him from providing for himself and his family on a basis satisfactory to him.

18. Waiver of Statute of Limitations. The Director hereby waives for the longest period permitted by applicable law the limitation of any statute for the presentation of any claim arising under any provision of Section 6 hereof.

19. Withholding Taxes. The Company shall deduct any foreign, federal, state or local withholding or other taxes from any payments to be made by the Company hereunder in such amounts which the Company reasonably determines are required to be deducted under applicable law.

20. Amendments, Miscellaneous, etc. Neither this Agreement, nor any term hereof, may be changed, waived, discharged or terminated except by an instrument in writing signed by the party against which such change, waiver, discharge or termination is sought to be enforced. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as of the date first written above.

OPGEN, INC.

By: _____
Name: Oliver Schacht Ph.D.
Title: Chief Executive Officer

DIRECTOR

EXHIBIT A

- The Company is retaining the services of the Director in order to assist the Company in its reorganization.

EXHIBIT D

WARRANT HOLDER AMENDMENT AGREEMENT

EXHIBIT E

EIB GUARANTEE TERMINATION AGREEMENT

Schedule II.4(a)

David Lazar
David Natan
Avraham Ben-Tzvi
Matthew McMurdo

Schedule II.4(a)

Oliver Schacht
Mario Crovetto
R. Donald Elsey
Prabhavathi Fernandes, Ph.D.
William Rhodes
Yvonne Schlaeppli

Schedule 4.7

Use of Proceeds- See Cash Flow Forecast 3.18.24 v.2

C L I F F O R D
C H A N C E

CLIFFORD CHANCE
PARTNERSCHAFT MIT
BESCHRÄNKTER BERUFSHAFTUNG

Unterschriftsfassung

EUROPEAN INVESTMENT BANK

AND

OPGEN, INC.

SETTLEMENT AGREEMENT

IN RELATION TO A GUARANTEE AND INDEMNITY
AGREEMENT DATED 9 JULY 2020

CLIFFORD CHANCE PARTNERSCHAFT MIT BESCHRÄNKTER BERUFSHAFTUNG VON RECHTSANWÄLTEN, STEUERBERA-TERN UND
SOLICITORS · SITZ: FRANKFURT AM MAIN · AG FRANKFURT AM MAIN PR 2669

This settlement agreement (hereinafter referred to as “**Settlement Agreement**”) is entered into on 25 March 2024

BETWEEN:

(1) **OPGEN, INC.**, 9717 Key West Avenue, Suite 100, Rockville, Maryland 20850 USA (“**OpGen**”)

– hereinafter the
“**OpGen**” –,

and

(2) **EUROPEAN INVESTMENT BANK**, 100 boulevard Konrad Adenauer, L-2950 Luxembourg, Luxembourg

– hereinafter “**EIB**” –

EIB and OpGen hereinafter referred to as the “**Parties**” and individually as a “**Party**”.

PREAMBLE

(A) OpGen is the sole shareholder of Curetis GmbH, a German limited liability company with its registered seat at Max-Eyth-Straße 42, 71088 Holzgerlingen and registered at the commercial register with the Local Court Stuttgart under HRB 756134 (“**Curetis**”)

(B) EIB is the lender to Curetis under the EUR 25,000,000 Finance Contract dated 12 December 2016, as amended and restated from time to time, most recently on 20 May 2019 (“**Finance Contract**”). Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to them in the Finance Contract.

(C) Curetis has filed for the opening of insolvency proceedings over its assets at the local court of Stuttgart with the dock file number 14 IN 1471/23. By

Diese Vergleichsvereinbarung (nachstehend als “**Vergleichsvereinbarung**” bezeichnet) wird am 25. März 2024 geschlossen

ZWISCHEN:

(1) **OPGEN, INC.**, 9717 Key West Avenue, Suite 100, Rockville, Maryland 20850 USA (“**OpGen**”)

– nachstehend der
“**OpGen**” –,

und

(2) **EUROPEAN INVESTMENT BANK**, 100 boulevard Konrad Adenauer, L-2950 Luxemburg, Luxemburg

– nachstehend “**EIB**” –

EIB und OpGen werden im Folgenden als die “**Parteien**” und einzeln als “**Partei**” bezeichnet.

PRÄAMBEL

(A) OpGen ist die alleinige Gesellschafterin der Curetis GmbH mit Sitz in der Max-Eyth-Straße 42, 71088 Holzgerlingen und registriert beim Handelsregister am Amtsgericht Stuttgart unter HRB 756134 (“**Curetis**”)

(B) Die EIB ist Kreditgeberin der Curetis unter dem EUR 25.000.000 Kreditvertrag vom 12. Dezember 2016 in der jeweils geänderten und neu gefassten Fassung, zuletzt neu gefasst am 20. Mai 2019 (“**Kreditvertrag**”). Die hier verwendeten und nicht anderweitig definierten Begriffe haben die ihnen im Kreditvertrag zugewiesene Bedeutung.

(C) Curetis beantragte die Eröffnung des Insolvenzverfahrens über ihr Vermögen beim Amtsgericht Stuttgart unter dem Aktenzeichen 14 IN 1471/23.

way of court order dated 1 February 2024, insolvency proceedings over the assets of Curetis were opened (“**Curetis Insolvency Proceedings**”) and Mr Volker v. Danckelmann was appointed as the insolvency administrator over the assets of Curetis (“**Insolvency Administrator**”).

- (D) EIB and OpGen entered into a Guarantee and Indemnity Agreement dated 9 July 2020 (“**Guarantee Agreement**”) securing, among others, all obligations and liabilities of Curetis under the Finance Contract.
- (E) OpGen acknowledges and agrees that (i) certain Events of Default have occurred and are continuing under Article 10.01(A) of the Finance Contract; and (ii) as a result of such Events of Default, EIB was entitled to exercise remedies against the Obligors including, without limitation, accelerating the Loan.
- (F) EIB has accelerated the Loan under the Finance Contract and demanded payment from Curetis of all accrued or outstanding amounts under the Finance Contract with an immediate demand notice with respect to the Finance Contract dated 15 November 2023 (the “**Acceleration**”). OpGen acknowledges and agrees that such Acceleration was proper and in accord with the Finance Contract and the other Finance Documents.
- (G) EIB also demanded payment of all accrued or outstanding amounts under the Finance Contract from OpGen with a demand notice with respect to the Guarantee Agreement dated 15 November 2023 (the “**Demand Notice**”). OpGen acknowledges and agrees that (i) the demand under the

Mit Gerichtsbeschluss vom 1. Februar 2024 wurde das Insolvenzverfahren über das Vermögen von Curetis eröffnet (“**Curetis Insolvenzverfahren**”) und Herr Dr. Volker v. Danckelmann wurde als Insolvenzverwalter über das Vermögen der Curetis (“**Insolvenzverwalter**”) bestellt.

- (D) Die EIB und OpGen schlossen am 9. Juli 2020 eine Garantie- und Freistellungsvereinbarung (“**Garantievereinbarung**”), die unter anderem alle Verpflichtungen der Curetis unter und im Zusammenhang mit dem Kreditvertrag besichert.
- (E) OpGen erkennt an und stimmt zu, dass (i) bestimmte Kündigungsgründe gemäß Article 10.01(A) des Kreditvertrags eingetreten sind und weiter vorliegen und (ii) die EIB aufgrund dieser Kündigungsgründe berechtigt war, Maßnahmen gegen die Schuldner einzuleiten, insbesondere, aber nicht nur, der Kündigung des Darlehens
- (F) Die EIB hat das Darlehen unter dem Kreditvertrag gekündigt und hat mit Zahlungsaufforderung unter dem Kreditvertrag vom 15. November 2023 die Zahlung aller aufgelaufenen oder ausstehenden Beträge unter dem Kreditvertrag mit sofortiger Wirkung gefordert (die “**Kündigung**”). OpGen erkennt an und stimmt zu, dass diese Kündigung ordnungsgemäß und im Einklang mit dem Kreditvertrag und der anderen Finanzierungsdokumenten war.
- (G) Die EIB hat OpGen mit einem Aufforderungsschreiben vom 15. November 2023 zur Zahlung aller aufgelaufenen oder ausstehenden Beträge unter dem Kreditvertrag aufgefordert (die “**Zahlungsaufforderung**”). OpGen erkennt an und

Demand Notice was proper and in accord with the Guarantee Agreement and the other Finance Documents; and (ii) the Liabilities (*as defined in the Guarantee Agreement*) are valid and enforceable Liabilities.

- (H) Furthermore, Curetis is entitled to (i) a purchase price payment in accordance with the Debt Purchase Agreement between Curetis and OpGen dated 28 June 2023 and (ii) claw-back claim payment from OpGen (“**Curetis Claims**”).
- (I) OpGen is offering a payment of USD 2,000,000.- for the settlement of all of (i) OpGen’s liabilities vis-à-vis EIB under the Guarantee Agreement and (ii) OpGen’s liabilities vis-à-vis Curetis under or in connection with Curetis Claims (“**Settlement Payment**”), the latter also to be compensated by potential sales proceeds from the Unyvero business of OpGen.
- (J) The liquidity required for the Settlement Payment will be provided to OpGen on or about the date of which an additional capital injection in the amount of approx. USD 1 million is provided to OpGen (“**Capital Injection**”).
- (K) In connection with the transactions contemplated under this Settlement Agreement, Curetis (represented by the Insolvency Administrator) and OpGen will enter into an agreement, pursuant to which OpGen will pay the Curetis Settlement Amount (*as defined below*) and the Curetis Claims

stimmt zu, dass (i) die Zahlungsaufforderung gemäß der Aufforderungs-mitteilung ordnungsgemäß und im Einklang mit der Garantievereinbarung und den anderen Finanzierungsdokumenten war und (ii) die Verbindlichkeiten (*wie in der Garantievereinbarung definiert*) gültige und durchsetzbare Verbindlichkeiten sind.

- (H) Ferner hat Curetis gegenüber OpGen (i) einen Anspruch gerichtet auf Zahlung eines Kaufpreises gemäß Forderungskaufvertrag zwischen der Curetis und OpGen vom 28. Juni 2023 und (ii) einen Insolvenzanfechtungsanspruch (“**Forderungen Curetis**”).
- (I) OpGen bietet eine Zahlung von USD 2.000.000,- zur Begleichung und Abgeltung sämtlicher (i) Verbindlichkeiten von OpGen gegenüber EIB aus oder im Zusammenhang mit der Garantievereinbarung und (ii) Verbindlichkeiten von OpGen gegenüber Curetis aus oder im Zusammenhang mit den Forderungen Curetis (“**Vergleichszahlung**”), wobei letztere auch durch potenzielle Verkaufserlöse des Unyvero Geschäfts der OpGen abgegolten werden sollen.
- (J) Die für die Vergleichszahlung benötigte Liquidität wird OpGen etwa zu dem Zeitpunkt zur Verfügung gestellt, an dem OpGen eine weitere, zusätzliche Kapitalzuführung in Höhe von ca. USD 1 Mio. erhält (“**Kapitalzuführung**”).
- (K) Im Zusammenhang mit den unter dieser Vergleichsvereinbarung vorgesehenen Handlungen werden Curetis (vertreten durch den Insolvenzverwalter) und OpGen eine Vereinbarung treffen, nach der OpGen den Curetis Vergleichsbetrag (*wie unten definiert*) zahlen wird und die Forderungen Curetis abgegolten,

will be satisfied, paid in full and of no further force or effect.

- (L) For good and valuable consideration, with this Settlement Agreement, the Parties intend to settle all mutual claims under or in connection with the Guarantee Agreement by way of settlement without prejudice to EIB's claims against (i) Curetis under the Finance Contract and the other Finance Documents and (ii) Ares Genetics GmbH, as Guarantor of Curetis' obligations under the Finance Contract and the other Finance Documents.

THE PARTIES, therefore, agree as follows:

1. SETTLEMENT

1.1 The Settlement Payment will be allocated and divided as follows:

- (a) Curetis is receiving a USD 550,000 payment ("**Curetis Settlement Amount**"); and
- (b) EIB is receiving a USD 1,450,000 payment ("**EIB Settlement Amount**"),

in each case in accordance with the terms of this Settlement Agreement.

- 1.2 OpGen undertakes to pay the EIB Settlement Amount directly to EIB without deduction, set-off, counterclaim, or withholding of any kind, (using "OUR" in the SWIFT payment order and clearly indicating the full legal name of the payer) to the following bank account of EIB on the 10 May 2024 at the latest:

vollständig bezahlt und ohne weitere Wirkung sein wird.

- (L) Mit dieser Vergleichsvereinbarung beabsichtigen die Parteien, für eine jeweils gute und wertvolle Gegenleistung alle gegenseitigen Ansprüche aus oder im Zusammenhang mit der Garantievereinbarung im Wege eines Vergleichs zu vergleichen unbeschadet der Ansprüche der EIB gegen (i) Curetis aus dem Kreditvertrag und den anderen Finanzierungsdokumenten und (ii) Ares Genetics GmbH als Garant für die Verpflichtungen von Curetis unter dem Kreditvertrag und den anderen Finanzierungsdokumenten.

DIE PARTEIEN vereinbaren daher, was folgt:

1. VERGLEICH

1.1 Die Vergleichszahlung wird wie folgt aufgeteilt:

- (a) Curetis erhält eine Zahlung in Höhe von USD 550.000 ("**Curetis Vergleichsbetrag**");
- (b) EIB erhält eine Zahlung in Höhe von USD 1.450.000 ("**EIB Vergleichsbetrag**").

in jedem Fall in Übereinstimmung mit den Bestimmungen dieser Vergleichsvereinbarung.

- 1.2 OpGen verpflichtet sich, den EIB Vergleichsbetrag spätestens am 10. Mai 2024 direkt und ohne Abzug, Aufrechnung, Geltendmachung einer Gegenforderung, oder Vorenthaltung jeglicher Art (unter Verwendung von "OUR" im SWIFT-Zahlungsauftrag und unter eindeutiger Angabe des vollständigen juristischen Namens des Zahlungsauftraggebers) an die

folgende Bankverbindung der EIB zu zahlen:

Bank Name:
The Bank of New York Mellon

SWIFT Address:
IRVTUS3NXXX

Account No:
890-0545-755 (FEDWIRE Routing nr. 021000018)

Reference:
LR 81838 85536

Bank Name:
The Bank of New York Mellon

SWIFT Address:
IRVTUS3NXXX

Kontodetails:
890-0545-755 (FEDWIRE Routing nr. 021000018)

Verwendungszweck:
LR 81838 85536

1.3 OpGen undertakes vis-à-vis EIB to pay the Curetis Settlement Amount directly to the Insolvency Administrator without deduction, set-off, counterclaim, or withholding of any kind on the 10 May 2024 at the latest.

1.4 If (parts of) the EIB Settlement Amount is avoided or reduced by virtue of any bankruptcy, insolvency, liquidation, reorganisation or similar laws and proceedings in respect of OpGen, (i) the Settlement Agreement shall not be deemed to have occurred, (ii) the Guarantee Agreement shall continue to be in full force and effect; and (iii) OpGen shall be deemed to continue to be bound by the terms of the Guarantee Agreement as if the Parties would have not been entered into the Settlement Agreement.

1.5 Subject to the irrevocable and non-contestable payment of the Settlement Payment pursuant to sections 1.2 and 1.3 and further subject to section 1.4 above:

1.3 OpGen verpflichtet sich gegenüber EIB, den Curetis Vergleichsbetrag spätestens am 10. Mai 2024 direkt und ohne Abzug, Aufrechnung Geltendmachung einer Gegenforderung, oder Vorenthaltung jeglicher Art an den Insolvenzverwalter zu zahlen.

1.4 Wird der EIB Vergleichsbetrag (teilweise) aufgrund von Konkurs-, Insolvenz-, Liquidations-, Reorganisations- oder ähnlichen Gesetzen und Verfahren in Bezug auf OpGen aufgehoben oder reduziert, (i) gilt die Vergleichsvereinbarung als nicht zustande gekommen, (ii) bleibt die Garantievereinbarung in vollem Umfang in Kraft und wirksam, und (iii) ist OpGen weiterhin an die Bedingungen der Garantievereinbarung gebunden, als ob die Parteien die Vergleichsvereinbarung nicht abgeschlossen hätten.

1.5 Vorbehaltlich der unwiderruflichen und unanfechtbaren Zahlung der Vergleichszahlung gemäß den vorstehenden Ziffern 1.2 bis 1.3 und vorbehaltlich Ziffer 1.4:

- (a) all claims of each of EIB and OpGen, arising from and in connection with the Guarantee Agreement, irrespective of their legal basis and regardless of whether they are asserted or not, known or unknown, are irrevocably and otherwise unconditionally discharged and settled in full;
- (b) the Guarantee Agreement (and all obligations of each Party thereunder) is terminated and ceases to be in force and effect; and
- (c) each of EIB and OpGen is irrevocably and otherwise unconditionally released from any and all its obligations (present and future, actual and contingent) which are (or are expressed to be) assumed by such Party (whether under contract, law or otherwise) towards the other Party under the Guarantee Agreement,

in each case with effect on from the date when the Settlement Payment is duly made pursuant to sections 1.2 and 1.3 above.

2. GENERAL REPRESENTATIONS & WARRANTIES

OpGen represents and warrants to EIB that:

- 2.1 all the information, including KYC information, provided by OpGen to EIB in connection with the

- (a) sind alle Ansprüche der EIB und von OpGen aus und im Zusammenhang mit der Garantievereinbarung, unabhängig von ihrem Rechtsgrund und unabhängig davon, ob sie geltend gemacht werden oder nicht, ob sie bekannt oder unbekannt sind, unwiderruflich und bedingungslos und vollständig abgegolten;

- (b) wird die Garantievereinbarung (und alle sich daraus ergebenden Verpflichtungen der Parteien) beendet und ist nicht mehr in Kraft; und

- (c) werden EIB und OpGen jeweils unwiderruflich und bedingungslos von allen ihren (gegenwärtigen und zukünftigen, tatsächlichen und bedingten) Verpflichtungen entbunden, welche die jeweilige Partei (vertraglich, gesetzlich oder auf andere Weise) gegenüber der jeweils anderen Partei im Rahmen der Garantievereinbarung übernommen hat (oder übernehmen soll); und

und zwar jeweils mit Wirkung von dem Tag an, an dem die Vergleichszahlung gemäß den Ziffern 1.2 and 1.3 geleistet wird.

2. GENERELLE ZUSICHERUNGEN UND GARANTIEN

OpGen sichert der EIB zu und garantiert ihr, dass:

- 2.1 alle Informationen, einschließlich der KYC-Informationen, die OpGen der EIB im Zusammenhang mit der

transaction contemplated under this Settlement Agreement on or before the date of this Settlement Agreement is, to OpGen's best knowledge (after having made all due and careful enquiries), accurate and not misleading in all material respects;

- 2.2 subject to (i) the discharge of the claims of EIB under the Guarantee Agreement in accordance with section 1.5 above; (ii) the discharge of the claims of the claims of Curetis under the Curetis Claims in accordance with section 1.3 above; and (iii) the Capital Injection, as of the date of this Settlement Agreement, (a) OpGen is not insolvent, bankrupt or subject to any insolvency, winding up or bankruptcy-like procedures; and (b) there is no threat of OpGen becoming insolvent, bankrupt or subject to any insolvency, winding up or bankruptcy-like procedures. No requests for bankruptcy or bankruptcy-like procedures have ever been filed against OpGen and no bankruptcy or liquidation or similar procedures are pending against it;
- 2.3 funding of the EIB Settlement Amount does not come from criminal or illegal activities nor is of illicit origin (including products of money laundering or linked to the financing of terrorism). Should OpGen become aware of the illicit, criminal or illegal origin of the funds used to fund EIB Settlement Amount, it will immediately inform EIB;

in dieser Vergleichsvereinbarung vorgesehenen Transaktion am oder vor dem Datum dieser Vergleichsvereinbarung zur Verfügung gestellt hat, nach bestem Wissen und Gewissen (nach Durchführung aller ordnungsgemäßen und sorgfältigen Nachforschungen) in allen wesentlichen Punkten richtig und nicht irreführend sind;

- 2.2 Vorbehaltlich (i) der Befreiung von den Ansprüchen der EIB aus der Garantievereinbarung gemäß Ziffer 1.5 oben, (ii) der Befreiung von den Ansprüchen von Curetis aus den Forderungen Curetis gemäß Ziffer 1.3 und (iii) der Kapitalzuführung ist zum Datum dieser Vergleichsvereinbarung (a) die OpGen nicht insolvent, bankrott oder Gegenstand eines Insolvenz-, Liquidations- oder konkursähnlichen Verfahrens und (b) besteht keine Gefahr, dass OpGen insolvent, bankrott oder Gegenstand eines Insolvenz-, Liquidations- oder konkursähnlichen Verfahrens wird. Gegen die OpGen wurde nie ein Antrag auf ein Konkurs- oder konkursähnliches Verfahren gestellt, und es sind keine Konkurs-, Liquidations- oder ähnliche Verfahren gegen sie anhängig;
- 2.3 die Finanzierung des EIB Vergleichsbetrags stammt nicht aus kriminellen oder illegalen Aktivitäten oder ist illegalen Ursprungs (einschließlich Produkten der Geldwäsche oder im Zusammenhang mit der Finanzierung von Terrorismus). Sollte OpGen Kenntnis von der illegalen, kriminellen oder rechtswidrigen Herkunft der zur Finanzierung des EIB Vergleichsbetrags verwendeten

2.4 no criminal proceedings or criminal investigation is current or, to OpGen's knowledge, is threatened or pending against OpGen or any of the member of its board of directors and/or board of statutory auditors (or equivalent bodies) before any court, arbitral body or agency;

2.5 OpGen is in compliance with all applicable laws, is not a Sanctioned Person nor in breach of any Sanction.

“**Sanctioned Person**” means any individual or entity (for the avoidance of doubt, the term entity includes, but is not limited to, any government, group or terrorist organisation) who is a designated target of, or who is otherwise a subject of, Sanctions (including, without limitation, as a result of being owned or otherwise controlled, directly or indirectly, by any individual or entity, who is a designated target of, or who is otherwise a subject of, Sanctions).

“**Sanctions**” means the economic or financial sanctions laws, regulations, trade embargoes or other restrictive measures (including, in particular, but not limited to, measures in relation to the financing of terrorism) enacted, administered, implemented and/or enforced from time to time by any of the following:

- i. the United Nations, including, *inter alia*, the United Nations Security Council and any agency or

Mittel erhalten, wird sie die EIB unverzüglich informieren;

2.4 Es laufen keine Strafverfahren oder strafrechtlichen Ermittlungen gegen OpGen oder eines der Mitglieder des Vorstands und/oder des Aufsichtsrats (oder gleichwertiger Einrichtungen) vor einem Gericht, einer Schiedsstelle oder einer Behörde oder sind nach Kenntnis von OpGen angedroht oder anhängig;

2.5 OpGen hält sich an alle geltenden Gesetze, ist keine Sanktionierte Person und verstößt nicht gegen eine Sanktion.

“**Sanktionierte Person**” bezeichnet eine natürliche oder juristische Person (zur Vermeidung von Zweifeln schließt der Begriff “juristische Person” unter anderem Regierungen, Gruppen oder terroristische Organisationen ein), die als Ziel von Sanktionen benannt wurde oder anderweitig von Sanktionen betroffen ist (einschließlich, aber nicht beschränkt auf die Tatsache, dass sie im Eigentum oder unter der direkten oder indirekten Kontrolle einer natürlichen oder juristischen Person steht, die als Ziel von Sanktionen benannt wurde oder anderweitig von Sanktionen betroffen ist).

“**Sanktionen**” sind Gesetze, Verordnungen, Handelsembargos oder andere restriktive Maßnahmen (insbesondere, aber nicht ausschließlich, Maßnahmen in Bezug auf die Finanzierung von Terrorismus), die von einem der folgenden Staaten erlassen, verwaltet, umgesetzt und/oder durch-gesetzt werden:

- i. die Vereinten Nationen, einschließlich unter anderem des Sicherheitsrats der Vereinten Nationen

person which is duly appointed, empowered or authorised by the United Nations to enact, administer, implement and/or enforce such measures;

- ii. the European Union, including, inter alia, the Council of the European Union and the European Commission and any agency or person which is duly appointed, empowered or authorised by the European Union to enact, administer, implement and/or enforce such measures;
- iii. the government of the United States of America, and any department, division, agency, or office thereof, including, inter alia, the Office of Foreign Asset Control (OFAC) of the United States Department of the Treasury, the United States Department of State and/or the United States Department of Commerce; and
- iv. the government of the United Kingdom, and any department, division, agency, office or authority including, inter alia, the Office of Financial Sanctions Implementation of His Majesty's Treasury and the Department for International Trade of the United Kingdom.

und aller Stellen oder Personen, die von den Vereinten Nationen ordnungsgemäß ernannt, bevollmächtigt oder ermächtigt wurden, solche Maßnahmen zu erlassen, zu verwalten, durchzuführen und/oder durchzusetzen;

- ii. die Europäische Union, einschließlich unter anderem des Rates der Europäischen Union und der Europäischen Kommission sowie aller Agenturen oder Personen, die von der Europäischen Union ordnungsgemäß bestellt, ermächtigt oder befugt sind, solche Maßnahmen zu erlassen, zu verwalten, durchzuführen und/oder durchzusetzen;
- iii. die Regierung der Vereinigten Staaten von Amerika und deren Ministerien, Abteilungen, Behörden oder Ämter, einschließlich unter anderem des Office of Foreign Asset Control (OFAC) des Finanzministeriums der Vereinigten Staaten, des Außenministeriums der Vereinigten Staaten und/oder des Handelsministeriums der Vereinigten Staaten; und
- iv. die Regierung des Vereinigten Königreichs und alle Ministerien, Abteilungen, Agenturen, Ämter oder Behörden, einschließlich u. a. des Office of Financial Sanctions Implementation of

3. **NOTICES**

3.1 Notices and other communications given under this Settlement Agreement addressed to any Party shall be made to the address or electronic mail address set out below (and the department or officer, if any, for whose attention the communication is to be made), or to such other address or electronic mail as that Party previously notifies to the other Party in writing:

For EIB:

Attention: PMM/TM/EVD

European Investment Bank
98-100 boulevard Konrad Adenauer
L-2950 Luxembourg
Luxembourg

Email: pmm-tm-evdassistants@eib.org
(with a copy to m.denotter@eib.org
and o.vlasenko@eib.org)

For OpGen:

Attention: CEO / cc Legal

OpGen Inc.
9717 Key West Ave – Suite 100
Rockville, MD 20850, USA

Email: oschacht@opgen.com
(with a copy to JaslowP@ballardspahr.com)

3.2 Any notice or other communication given under this Settlement Agreement must be in writing.

3. **MITTEILUNGEN**

3.1 Benachrichtigungen und sonstige Mitteilungen im Rahmen dieser Vergleichsvereinbarung, die an eine Partei gerichtet sind, sind an die nachstehend angegebene Anschrift oder E-Mail-Adresse zu richten (und gegebenenfalls an die Abteilung oder den Verantwortlichen, zu deren Händen die Mitteilung erfolgen soll) oder an eine andere Anschrift oder E-Mail-Adresse, die die betreffende Partei der anderen Partei zuvor schriftlich mitgeteilt hat:

Für EIB:

Attention: PMM/TM/EVD

European Investment Bank
98-100 boulevard Konrad Adenauer
L-2950 Luxembourg
Luxembourg

E-Mail: pmm-tm-evdassistants@eib.org
(with a copy to m.denotter@eib.org
and o.vlasenko@eib.org)

Für OpGen:

Attention: CEO / cc Legal

OpGen Inc.
9717 Key West Ave – Suite 100
Rockville, MD 20850, USA

E-Mail: oschacht@opgen.com
(with a copy to JaslowP@ballardspahr.com)

3.2 Jede Benachrichtigung oder sonstige Mitteilung im Rahmen dieser

3.3 Any notice provided by OpGen to EIB by electronic mail shall: (i) mention the Finance Contract numbers 87226 and 86508 in the subject line; and (ii) be in the form of a non-editable electronic image (pdf, tif or other common non editable file format agreed between the parties) of the notice signed by an authorised signatory with individual representation right or by two or more authorised signatories with joint representation right of OpGen, attached to the electronic mail.

3.4 Other notices and communications may be made by hand delivery, registered letter or electronic mail or, to the extent agreed by the Parties by written agreement, by email or other electronic communication.

3.5 The Parties agree that any above communication (including via electronic mail) is an accepted form of communication and shall constitute admissible evidence in court.

4. **FINAL PROVISIONS**

4.1 OpGen agrees that each of the Recitals under (A) to (L) set forth above forms part of and expressly is incorporated into the Settlement Agreement of the Parties. Among other things, each of the Recitals constitutes a representation, acknowledgment and admission of fact by OpGen, upon which EIB relies in entering into this Settlement

Vergleichsvereinbarung muss schriftlich erfolgen.

3.3 Jede Mitteilung von OpGen an die EIB auf elektronischem Wege muss: (i) in der Betreffzeile die Kreditvertragsnummern 87226 und 86508 angeben und (ii) in Form eines nicht bearbeitbaren elektronischen Bildes (pdf, tif oder ein anderes zwischen den Parteien vereinbartes, nicht bearbeitbares Dateiformat) welche von einem einzelvertretungsberechtigten Unterzeichner oder von zwei oder mehreren gemeinsam vertretungsberechtigten Unterzeichnern der OpGen unterzeichneten Mitteilung an die elektronische Post übermittelt werden.

3.4 Sonstige Mitteilungen und Kommunikation können durch persönliche Übergabe, per Einschreiben oder auf elektronischem Wege erfolgen oder, soweit von den Parteien schriftlich vereinbart, per E-Mail oder auf anderem elektronischen Wege.

3.5 Die Vertragsparteien sind sich darüber einig, dass jede der oben genannten Mitteilungen (einschließlich der elektronischen Post) eine anerkannte Form der Kommunikation darstellt und vor Gericht als Beweismittel zulässig ist.

4. **SCHLUSSBESTIMMUNGEN**

4.1 OpGen stimmt zu, dass jeder der oben unter (A) bis (L) aufgeführten Präambeln Teil der Vergleichsvereinbarung der Parteien ist und ausdrücklich in diese aufgenommen wird. Unter anderem stellt jeder der Präambeln eine Zusicherung, ein Anerkenntnis und ein Eingeständnis von Tatsachen durch OpGen dar, auf die sich die

Agreement. Additionally, OpGen, to the best of its knowledge and belief, represents that there is no evidence to the contrary in its possession, custody, and control.

4.2 Conclusion of the Settlement Agreement: The Parties may enter into this Settlement Agreement by exchanging by telecommunication, e.g. by electronic photocopy, (1) signature pages signed in person either on paper or on a computer screen and/or (2) signature pages on which a copy of the personal signature has been affixed.

4.3 If this Settlement Agreement is to be entered into pursuant to section 4.2 above, each Party shall submit its signed signature page(s) to Joseph Saed (joseph.saed@cliffordchance.com), Clifford Chance Partnerschaft mbB (the "**Recipient**"). This Settlement Agreement shall be deemed concluded as soon as the Recipient has actually received the signature pages of all Parties (by electronic photocopy or other means of telecommunication) at the time of receipt of the last signature page by the Recipient.

For the purposes of this section 4.3 only, the parties to this Settlement Agreement appoint the Recipient as the recipient agent and expressly authorise the Recipient to collect the signed signature pages from all and on behalf of all Parties to this Settlement Agreement. For the avoidance of doubt, the Recipient shall have no further obligations in this capacity. In

EIB beim Abschluss dieses Vergleichsvertrags beruft. Darüber hinaus versichert OpGen nach bestem Wissen und Gewissen, dass sich in ihrem Besitz, Gewahrsam und unter ihrer Kontrolle keine gegenteiligen Kenntnisse befinden.

4.2 Abschluss der Vergleichsvereinbarung: Die Parteien können diese Vergleichsvereinbarung durch Austausch von telekommunikativ, z. B. per elektronischer Fotokopie übermittelten (1) eigenhändig entweder auf Papier oder einem Computerbildschirm unterzeichneten Unterschriftenseiten und/oder (2) Unterschriftenseiten, auf welche eine Kopie der persönlichen Unterschrift aufgebracht wurde, abschließen.

4.3 Soll diese Vergleichsvereinbarung gemäß vorstehender Ziffer 4.2 geschlossen werden, so hat jede Partei ihre unterzeichnete(n) Unterschriftsseite(n) an Joseph Saed (joseph.saed@cliffordchance.com), Clifford Chance Partnerschaft mbB (der "**Empfänger**") zu übermitteln. Diese Vergleichsvereinbarung gilt als geschlossen, sobald dem Empfänger die Unterschriftsseiten aller Parteien tatsächlich zugegangen sind (per elektronischer Fotokopie oder auf anderer telekommunikativer Weise), zum Zeitpunkt des Empfangs der letzten Unterschriftenseite durch den Empfänger.

Nur für die Zwecke dieser Ziffer 4.3 ernennen die Parteien dieser Vergleichsvereinbarung den Empfänger zum Empfangsvertreter und gestatten dem Empfänger ausdrücklich die unterzeichneten Unterschriftenseiten von allen und für alle Parteien dieser

particular, the Recipient may assume that the transmitted signature pages correspond to the respective original, that the signatures are genuine and that the signatories are authorised to represent the Party.

- 4.4 Nothing in this Settlement Agreement constitutes or shall be deemed to constitute a release or waiver of, or otherwise serve to impair the claims of EIB against (i) Curetis under the Finance Contract and other Finance Documents and (ii) Ares Genetics GmbH, as Guarantor of Curetis' obligations under the Finance Contract and other Finance Documents.
- 4.5 This Settlement Agreement shall be governed by and construed in accordance with German Law. The exclusive place of jurisdiction for all disputes in connection with this Settlement Agreement (including disputes regarding its existence or validity) is Frankfurt am Main.
- 4.6 Each Party has the right to present and to rely on this Settlement Agreement after its coming into force in the Curetis Insolvency Proceedings and in any other proceedings concerning the insolvency of Curetis.
- 4.7 Any changes to this Settlement Agreement have to be made in accordance with section 3

Vergleichsvereinbarung zu sammeln. Für Zweifelsfälle wird festgehalten, dass dem Empfänger im Rahmen dieser Funktion keine weiteren Pflichten obliegen. Insbesondere darf der Empfänger annehmen, dass die übermittelten Unterschriftenseiten mit dem jeweiligen Original übereinstimmen, die Unterschriften echt und die Unterzeichner vertretungsberechtigt sind.

- 4.4 Keine Bestimmung dieser Vergleichsvereinbarung stellt eine Freigabe oder einen Verzicht auf die Ansprüche der EIB gegenüber (i) Curetis unter dem Kreditvertrag und anderer Finanzierungsdokumente und (ii) Ares Genetics GmbH als Garant für die Verpflichtungen von Curetis unter dem Kreditvertrag und anderer Finanzierungsdokumente dar oder soll als solche angesehen werden.
- 4.5 Diese Vergleichsvereinbarung unterliegt deutschem Recht und ist nach diesem auszulegen. Ausschließlicher Gerichtsstand für alle Streitigkeiten im Zusammenhang mit dieser Vergleichsvereinbarung (einschließlich Streitigkeiten über sein Bestehen oder seiner Wirksamkeit) ist Frankfurt am Main.
- 4.6 Jede Partei hat das Recht, diese Vergleichsvereinbarung nach seinem Inkrafttreten im Curetis Insolvenzverfahren und in jedem anderen Verfahren über die Insolvenz von Curetis vorzulegen und sich darauf zu berufen.
- 4.7 Alle Änderungen dieser Vergleichsvereinbarung bedürfen der Form gemäß Ziffer 3.

4.8 The English Version of this Settlement Agreement shall prevail.

4.8 Die englische Fassung dieser Vergleichsvereinbarung ist maßgebend.

(Unterschriftenseiten folgen)

SIGNATURE PAGE

OPGEN, INC.

/s/ OLIVER SCHACHT

Name: OLIVER SCHACHT

Title: CEO

/s/ Albert Weber

Name: Albert Weber

Title: CFO

EUROPEAN INVESTMENT BANK

/s/ Maria-Teresa Massaad

Name: Maria-Teresa Massaad

Title: Head of Division

/s/ Oksana Vlasenko

Name: Oksana Vlasenko

Title: Investment Officer

SGP Schneider Geiwitz – Restrukturierung
Königsstraße 18 70173 Stuttgart

Per Mail: oschacht@opgen.com

OpGen Inc.
9717 Key West Avenue Suite 100
Rockville, MD 20850
VEREINIGTE STAATEN

Dr. jur. Volker von
Danckelmann
Rechtsanwalt
T +49 711 22 05 48-60
F +49 711 22 05 48-699
stuttgart@
schneidergeiwitz.de

Insolvenzverfahren über das Vermögen der Curetis GmbH, Max-Eyth-
Straße 42, 71088 Holzgerlingen
Geschäfts-Nr.: 14 IN 1471/23

21.03.2024/vd
Vorgangsnummer:
6650610/k
Bitte angeben

Hier: **Überlassung Angebot Abschluss Teilverzicht**
Unsere Vorgangsnummer 6650610/k bitte angeben

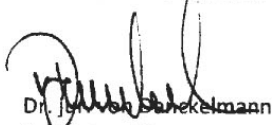
Sehr geehrter Herr Schacht,

anbei erhalten Sie das Angebot zum Abschluss einer Teilverzichtsvereinbarung. Ich halte mich an das Angebot bis zum Montag, 25.04.2024, 16:00 Uhr (Zeit Berlin) gebunden. Ferner verliert das Angebot vor Ablauf der vorgenannten Frist seine Gültigkeit, wenn Sie nicht mehr vertretungsberechtigtes Organ der OpGen Inc. sind.

Dear Mr. Schacht,

enclosed you will find the offer to conclude a partial waiver agreement. I am bound by the offer until Monday, April 25, 2024, 4:00 p.m. (Berlin time). Furthermore, the offer will cease to be valid before expiry of the aforementioned period if you are no longer an authorized representative of OpGen Inc.

Mit freundlichen Grüßen



Dr. jur. Volker von Danckelmann
Rechtsanwalt
als Insolvenzverwalter

Anlage:

Vereinbarung anteiliger Forderungsverzicht vom 21.03.2024

02/2024



**VEREINBARUNG
ANTEILIGER FORDERUNGSVERZICHT**

OpGen Inc.

**CURETIS GMBH
(Amtsgericht STUTTGART, Az. 14 IN 1471/23)**

A handwritten signature in black ink, consisting of a stylized 'D' followed by a flourish.

Vereinbarung

zwischen

Rechtsanwalt Dr. Volker von Danckelmann
in seiner Eigenschaft als Insolvenzverwalter über das
Vermögen der Curetis GmbH
mit Sitz in Holzgerlingen, Max-Eyth-Straße 42,
eingetragen im Handelsregister des Amtsgerichts
Stuttgart
unter HRB 756134 (künftig firmierend als Curetis-
Abwicklungsgesellschaft GmbH i.l.)
geschäftsansässig: Königstraße 18, 70173 Stuttgart

nachfolgend auch **Insolvenzverwalter**

und

OpGen Inc.
9717 Key West Avenue, Suite 100, Rockville, MD 20850,
USA
vertreten durch Herr Oliver Schacht, Ph.D., President &
CEO OpGen Inc

nachfolgend **OpGen Inc.**

Der Insolvenzverwalter sowie die OpGen Inc.,
nachfolgend gemeinsam die „Parteien“ und einzeln
jeweils die „Partei“.

**A.
Vorbemerkung**

1. Mit Beschluss des Amtsgerichts Stuttgart –
Insolvenzgericht – vom 13.11.2023 wurde über das
Vermögen der Curetis GmbH das
Insolvenzeröffnungsverfahren gemäß §§ 21, 22 InsO
angeordnet und Rechtsanwalt Dr. von Danckelmann
zum vorläufigen Insolvenzverwalter bestellt.
Grundlage der gerichtlichen Entscheidung ist ein
Eigenantrag der Curetis GmbH, vertreten durch
deren Geschäftsführer Oliver Schacht, Albert Weber
und Johannes Bacher.

Agreement

between

Attorney Dr. Volker von Danckelmann
in his capacity as insolvency administrator in the
insolvency proceedings over the assets of Curetis
GmbH with registered office in Holzgerlingen,
Max-Eyth-Straße 42, entered in the commercial
register of Stuttgart Local Court under HRB 756134
(in future trading as Curetis-
Abwicklungsgesellschaft GmbH i.l.) business
address: Königstraße 18, 70173 Stuttgart

hereinafter the
insolvency administrator

and

OpGen Inc.
9717 Key West Avenue, Suite 100, Rockville, MD
20850, USA
represented by Mr. Oliver Schacht, Ph.D.,
President & CEO OpGen Inc

hereinafter **OpGen Inc.**

The Receiver and OpGen Inc. hereinafter referred
to as the "Parties" and individually the "Party".

**A.
Preliminary Remarks**

1. By order of the Local Court of Stuttgart –
Insolvency Court - dated November 13, 2023,
insolvency proceedings were opened over the
assets of Curetis GmbH pursuant to Sections
21, 22 InsO and attorney Dr. von Danckelmann
was appointed as provisional insolvency
administrator. The court's decision is based on
an application filed by Curetis GmbH,
represented by its managing directors Oliver
Schacht, Albert Weber and Johannes Bacher.

Mit Beschluss des Amtsgerichts Stuttgart – Insolvenzgericht – vom 01.02.2024 wurde das Insolvenzverfahren über das Vermögen der Curetis GmbH um 12.00 Uhr eröffnet und Herr Rechtsanwalt Dr. von Danckelmann zum Insolvenzverwalter bestellt (Az.: 14 IN 1471/23).

II. Alleinige Gesellschafterin der Curetis GmbH ist zum Zeitpunkt der Insolvenzantragstellung die in den USA ansässige und am NASDAQ gelistete OpGen Inc. Die Curetis GmbH ist Alleingesellschafterin der in Österreich ansässigen Ares Genetics GmbH mit Sitz in Wien. Über das Vermögen dieser Tochtergesellschaft wurde ebenfalls ein Konkursverfahren eröffnet.

III. Die Curetis GmbH hat ihrer in Österreich ansässigen Tochtergesellschaft Ares Genetics GmbH einen Kredit und ein Darlehen zur Verfügung gestellt, um diese finanziell zu unterstützen. Im Mai 2023 betrug der Saldo des Rahmenkreditvertrages EUR 4.929.032,88 und aufgelaufene Zinsen in Höhe von EUR 1.741.603,04 und der Saldo des Darlehens EUR 2.000.000,00 und aufgelaufene Zinsen in Höhe von EUR 1.278.904,11.

Aufgrund bestehenden Kapitalbedarfs, den die Curetis GmbH nicht aus der eigenen operativen Tätigkeit decken konnte, wurden die benötigten Zahlungsmittel von der US-amerikanischen Muttergesellschaft OpGen Inc. bereitgestellt, die diese liquiden Mittel auf dem dortigen Kapitalmarkt eingeworben hatte.

IV. Die Curetis GmbH hat der OpGen Inc. im Juni 2023 die vorgenannten Forderungen, die der Curetis GmbH gegen ihre Tochtergesellschaft der Ares Genetics GmbH zustehen, verkauft und abgetreten.

Aus diesem Forderungskaufvertrag steht der Curetis GmbH gegen ihre Muttergesellschaft OpGen Inc. noch eine Kaufpreisforderung laut der letzten Bilanz in Höhe von EUR 6.015.331,99 zu. Dieser Restkaufpreis ist im Juni 2024 zur Zahlung fällig.

Ferner stehen dem Insolvenzverwalter Rückgewähransprüche aus Insolvenzanfechtung aufgrund von Verrechnungen der Kaufpreisforderung der Curetis GmbH mit

By order of the Local Court of Stuttgart – Insolvency Court - dated February 1, 2024, insolvency proceedings were opened over the assets of Curetis GmbH at 12:00 noon and attorney Dr. von Danckelmann was appointed as insolvency administrator (Ref.: 14 IN 1471/23).

II. At the time of filing for insolvency, the sole shareholder of Curetis GmbH is OpGen Inc., which is based in the USA and listed on the NASDAQ. Curetis GmbH is the sole shareholder of Ares Genetics GmbH, which is based in Austria and has its registered office in Vienna. Bankruptcy proceedings have also been initiated against the assets of this subsidiary.

III. Curetis GmbH has provided its Austrian-based subsidiary Ares Genetics GmbH with a loan and a credit facility to support it financially. In May 2023, the balance of the framework credit agreement amounted to EUR 4,929,032.88 and accrued interest of EUR 1,741,603.04 and the balance of the loan amounted to EUR 2,000,000.00 and accrued interest of EUR 1,278,904.11.

Due to existing capital requirements which Curetis GmbH was unable to cover from its own operating activities, the required funds were provided by the US parent company OpGen Inc. which had raised these liquid funds on the capital market there.

IV. In June 2023, Curetis GmbH sold and assigned to OpGen Inc. the aforementioned receivables due to Curetis GmbH from its subsidiary Ares Genetics GmbH.

Curetis GmbH is still entitled to a purchase price claim of EUR 6,015,331.99 against its parent company OpGen Inc. from this receivables purchase agreement according to the last balance sheet. This remaining purchase price is due for payment in June 2024.

Furthermore, the insolvency administrator is entitled to restitution claims from insolvency



Gesellschafterdarlehen der OpGen Inc. im Ein-Jahreszeitraum in Höhe von EUR 2.808.199,94 zu. Der Insolvenzverwalter hat diesen insolvenzrechtlichen Rückgewähranspruch bisher bei OpGen Inc. nicht geltend gemacht (nachfolgend auch der „Rückgewähranspruch“).

- V. Die Europäische Investitionsbank hatte der Curetis GmbH ein Darlehen gewährt, aus dem aktuell eine Forderung in Höhe von ca. EUR 10.000.000,00 resultiert. Die OpGen Inc. hat gegenüber der Europäischen Investitionsbank eine Garantie/Bürgschaft zur Absicherung der Forderungen der Europäischen Investitionsbank gegen die Curetis GmbH aus diesem Darlehen übernommen. Ebenso hat die Tochtergesellschaft der Curetis GmbH, die Ares Genetics GmbH, für dieses Darlehen eine Garantie/Bürgschaft übernommen.

Die Europäische Investitionsbank hat in den letzten Wochen Verhandlungen mit der OpGen Inc. über die Ablösung der Forderungen aus der Garantie/Bürgschaft geführt. Die Europäische Investitionsbank wurde anwaltlich durch die Kanzlei Clifford Chance beraten und vertreten. Die OpGen Inc. soll von einem Investor übernommen werden bzw. mit diesem fusionieren, um die Börsenzulassung zu behalten bzw. diese dem Investor zu übertragen. In diesem Zuge soll eine Entschuldung der OpGen Inc. erfolgen, was zwingende Voraussetzung für die Übernahme des Investors ist.

Der Investor ist bereit, sowohl einen Teilbetrag der Forderungen der Curetis GmbH aus dem Forderungskauf und der Europäischen Investitionsbank aus der Garantie/Bürgschaft zu erfüllen. Der Investor ist bereit, einen Betrag in Höhe von USD 2.000.000,00 zur Verfügung zu stellen, der zwischen der Curetis GmbH und der Europäischen Investitionsbank aufzuteilen ist.

Vor diesem Hintergrund vereinbaren die Parteien ohne Anerkennung einer Rechtspflicht und ohne Präjudiz was folgt:

avoidance due to offsetting the purchase price claim of Curetis GmbH with shareholder loans of OpGen Inc. in the amount of EUR 2,808,199.94 in the one-year period. The insolvency administrator has not yet asserted this insolvency law restitution claim against OpGen Inc. (hereinafter also referred to as the "restitution claim").

- V. The European Investment Bank had granted a loan to Curetis GmbH, which currently results in a claim in the amount of approximately EUR 10,000,000.00. OpGen Inc. has assumed a guarantee/surety vis-à-vis the European Investment Bank to secure the claims of the European Investment Bank against Curetis GmbH arising from this loan. The subsidiary of Curetis GmbH, Ares Genetics GmbH, has also assumed a guarantee/surety for this loan.

In recent weeks, the European Investment Bank has conducted negotiations with OpGen Inc. on the redemption of the claims under the guarantee/surety. The European Investment Bank was advised and represented by the law firm Clifford Chance. OpGen Inc. is to be taken over by or merged with an investor in order to retain its stock exchange listing or to transfer it to the investor. In the course of this, OpGen Inc.'s debt is to be reduced, which is a mandatory prerequisite for the investor's takeover.

The investor is prepared to fulfill both a partial amount of the claims of Curetis GmbH from the purchase of receivables and of the European Investment Bank from the guarantee/guarantee. The investor is prepared to provide an amount of USD 2,000,000.00 to be split between Curetis GmbH and the European Investment Bank.

Against this background, the parties agree as follows without acknowledging any legal obligation and without prejudice:



**B.
Vereinbarung**

- I. OpGen Inc. bezahlt an den Insolvenzverwalter zur Insolvenzmasse der Curetis GmbH einen Betrag in Höhe von

USD 550.000,00

(in Worten: Fünfhundertfünfzigtausend US-Dollar)

Dies entspricht zum Stichtag 07.03.2024:

EUR 504.853,25

(in Worten:

Fünfhundertviertausendachthundertdreiundfünfzig Euro und fünfundzwanzig Cent)

- II. Die vorbenannte Zahlung unter Ziffer II. dieser Vereinbarung ist spätestens am

10. Mai 2024

und ohne Abzug, Aufrechnung Geltendmachung einer Gegenforderung, oder Vorenthaltung jeglicher Art zur Zahlung fällig.

Für die Rechtzeitigkeit der Zahlung ist die endgültige Gutschrift auf dem Sonderkonto des Insolvenzverwalters gemäß nachfolgender Ziffer IV. dieser Vereinbarung maßgeblich.

- III. Der Zahlungsbetrag aus Ziffer II. dieser Vereinbarung ist auf folgendes Sonderkonto des Insolvenzverwalters zur Anweisung zu bringen:

Kontoinhaber: Dr. Volker Freiherr von Danckelmann
IBAN: DE94 6307 0024 0053 7217 06
BIC: DEUTDEB630
Bank: Deutsche Bank AG

- IV. Sollte die OpGen Inc. den Zahlungsbetrag aus Ziffer B.II. dieser Vereinbarung pünktlich und vollständig auf das vorbenannte Sonderkonto des Insolvenzverwalters bezahlen, sind sämtliche wechselseitigen Forderungen der Parteien, bekannt oder unbekannt, ungeachtet aus welchem

**B.
Agreement**

- I. OpGen Inc. shall pay to the insolvency administrator to the insolvency estate of Curetis GmbH an amount of

USD 550,000.00

(in words: five hundred and fifty thousand US dollars)

This corresponds to 07.03.2024:

EUR 504,853.25

(in words: five hundred and four thousand eight hundred and fifty-three euros and twenty-five cents)

- II. The aforementioned payment under clause II. of this agreement shall be made no later than

Mai 10th, 2024

is due for payment without deduction, set-off, counterclaim, or withholding of any kind.

The timeliness of the payment shall be determined by the final credit entry in the special account of the insolvency administrator in accordance with the following clause IV. of this agreement.

- III. The payment amount under clause II. of this agreement is to be transferred to the following special account of the insolvency administrator:

Account holder: Dr. Volker Freiherr von Danckelmann
IBAN: DE94 6307 0024 0053 7217 06
BIC: DEUTDEB630
Bank: Deutsche Bank AG

- IV. If OpGen Inc. pays the payment amount under clause B.II. of this agreement punctually and in full to the aforementioned special account of the insolvency administrator, all reciprocal claims of the parties, known or unknown, irrespective of

Rechtsgrund, vollumfänglich und endgültig abgegolten, sofern in dieser Vereinbarung nichts Abweichendes geregelt ist. Ausdrücklich ausgenommen von der Erledigung ist insbesondere die in Ziffer ~~B. X.~~ dieser Vereinbarung geregelten Verpflichtungen der OpGen Inc.

Die OpGen Inc. verzichtet auf die Geltendmachung von Forderungen gegen den Insolvenzverwalter, gegen den Insolvenzverwalter persönlich und gegen die Curetis GmbH and gegen die Masse. Die OpGen Inc. wird im Insolvenzverfahren über das Vermögen der Curetis GmbH keine Forderungen zur Tabelle anmelden und mögliche bereits angemeldete Forderungen zurücknehmen.

Diese Abgeltungsklausel gilt ausdrücklich nicht für den Rückgewähranspruch aus Insolvenzanfechtung. Für diesen Rückgewähranspruch gelten die Regelungen unter Ziffer B. IX. dieser Vereinbarung.

- V. Die OpGen Inc. verpflichtet sich, alle Erklärungen, die für die Umfirmierung der Curetis GmbH notwendig sind, auf erstes Anfordern abzugeben und vollumfänglich bei der Umfirmierung mitzuwirken.

Der Insolvenzverwalter wird **Herr Albert Weber** (CFO der OpGen Inc.) über dessen E-Mail-Adresse **aweber@opgen.com** oder **Herr Oliver Schacht** (President und CEO der OpGen Inc.) über dessen E-Mail-Adresse **oschacht@opgen.com** hierüber informieren und Herr Albert Weber und/oder Herr Oliver Schacht werden unverzüglich nach Mitteilung über die notwendigen Erklärungen und Mitwirkungshandlung diese in die Wege leiten.

- VI. Die OpGen Inc. sichert im Insolvenzverfahren die Erteilung von Auskünften sowie die notwendige Unterstützung und Mitwirkung bei der Abwicklung des Insolvenzverfahrens zu.

- VII. Soweit nichts anderes in dieser Vereinbarung geregelt ist, ist die OpGen Inc. nicht berechtigt, gegen Forderungen des Insolvenzverwalters bzw. der Curetis GmbH die Aufrechnung bzw. Verrechnung zu erklären und/oder im Zusammenhang mit dieser Vereinbarung ein Zurückbehaltungsrecht geltend zu machen. Dies gilt nicht für solche Forderungen, die der

the legal grounds, shall be settled in full and finally, unless otherwise stipulated in this agreement. In particular, the obligations of OpGen Inc. regulated in Section ~~B. X.~~ of this agreement are expressly excluded from the settlement.

OpGen Inc. waives the assertion of claims against the insolvency administrator, against the insolvency administrator personally and against Curetis GmbH and against the estate. OpGen Inc. will not file any claims in the insolvency proceedings over the assets of Curetis GmbH and will withdraw any claims already filed.

This settlement clause expressly does not apply to the restitution claim arising from avoidance in insolvency. The provisions of Section B. IX of this agreement apply to this restitution claim.

- V. OpGen Inc. undertakes to make all declarations necessary for the change of name of Curetis GmbH upon first request and to cooperate fully in the change of name.

The insolvency administrator will inform **Mr. Albert Weber** (CFO of OpGen Inc.) via his e-mail address **aweber@opgen.com** or **Mr. Oliver Schacht** (President and CEO of OpGen Inc.) via his e-mail address **oschacht@opgen.com** and Mr. Albert Weber and/or Mr. Oliver Schacht will initiate the necessary declarations and acts of cooperation immediately after notification.

- VI. In the event of insolvency proceedings, OpGen Inc. assures the provision of information as well as the necessary support and cooperation in the handling of the insolvency proceedings.

- VII. Unless otherwise stipulated in this agreement, OpGen Inc. is not entitled to declare offsetting or netting against claims of the insolvency administrator or Curetis GmbH and/or to assert a right of retention in connection with this agreement. This does not apply to claims which the insolvency administrator has previously recognized in

Insolvenzverwalter zuvor schriftlich anerkannt hat oder die gerichtlich rechtskräftig festgestellt worden sind.

VIII. Keine der Parteien ist berechtigt, ohne vorherige schriftliche Zustimmung der anderen Vertragspartei ihre Rechte oder Pflichten im Zusammenhang mit diesem Vertrag oder Teile hiervon abzutreten.

IX.

1. OpGen Inc. versucht derzeit, einen kommerziell sinnvollen Teil des U.S. Geschäftes und Inventars des Unyvero Business (nachfolgend „**Unyvero Business**“) zu verkaufen. Dieser Geschäftsbereich umfasst das bewegliche Vermögen sowie die Kundenbeziehungen. Die OpGen Inc. will einen Geldzufluss von mindestens USD 218.000, erzielen.

2. OpGen Inc. wird sich nach besten Kräften bemühen, das *Unyvero Business* zu veräußern und mindestens einen Geldzufluss in Höhe von USD 218.000, zu erzielen.

OpGen Inc. wird angemessene Anstrengungen unternehmen, um dies zu erreichen, jedoch unter der Bedingung, dass OpGen Inc. keine Garantie für das Ergebnis übernimmt und nicht für Verzögerungen oder Nichterfüllung haftbar gemacht werden kann.

3. Sollte ein Geldzufluss bei OpGen Inc. erfolgen und vollzogen werden, erhält die Curetis GmbH bzw. der Insolvenzverwalter zur Masse aus dem tatsächlich erzielten Erlös einen erstrangigen Betrag in Höhe von in Summe maximal USD 218.000,00. Ein etwaiger darüber hinaus gehender Erlös steht der OpGen Inc. zu.

4. Die OpGen Inc. verpflichtet sich, auf erstes Anfordern des Insolvenzverwalters schriftlich über die Verkaufsbemühungen Auskunft zu erteilen.

Der Insolvenzverwalter ist jederzeit berechtigt, OpGen Inc. zu dieser Auskunft aufzufordern. Jedoch nur einmal im Kalendermonat. Erstmals im Juni 2024.

writing, or which have been legally established by a court of law.

VIII. Neither party is entitled to assign its rights or obligations in connection with this agreement or parts thereof without the prior written consent of the other party.

IX.

1. OpGen Inc. is currently trying to sell a commercially meaningful portion of the U.S. business and inventory of the Unyvero Business (defined as "**Unyvero Business** "). This division comprises the movable assets and customer relationships. OpGen Inc. intends to realize cash inflow of at least USD 218.000,00.

2. OpGen Inc. will use its best efforts to sell the *Unyvero Business* and to realize a cash inflow of at least USD 218.000,00.

OpGen Inc. will use reasonable efforts to accomplish this, provided, however, that OpGen Inc. does not guarantee the outcome and cannot be held liable for delays or non-performance.

3. Should a cash inflow take place by OpGen Inc. and be completed, Curetis GmbH or the insolvency administrator will receive a first-ranking amount of a in total maximum of USD 218.000,00 from the proceeds actually realized. OpGen Inc. will be entitled to any proceeds in excess of this amount.

4. OpGen Inc. undertakes to provide information about the sales efforts in writing at the first request of the insolvency administrator.

The insolvency administrator is entitled to request this information from OpGen Inc. at any time. However, only once a calendar month. For the first time in June 2024.

Die Aufforderung erfolgt über Herr Oliver Schacht (President und CEO der OpGen Inc.) über dessen E-Mail-Adresse oschacht@opgen.com, oder an einen neu bestellten CEO.

Wenn die OpGen Inc. innerhalb von 14 Tagen nach dieser Anforderung durch den Insolvenzverwalter keine aussagekräftige Auskunft erteilt, wird für jeden Fall des Zuwiderhandels eine Vertragsstrafe in Höhe von \$ 1.000,00 zur Zahlung fällig.

5. Die OpGen Inc. ist -ohne gesonderte Aufforderung- verpflichtet, dem Insolvenzverwalter unverzüglich mitzuteilen, wenn ein Verkauf des oben genannten Geschäftsbereichs erfolgt ist und sie ist verpflichtet, den Kaufvertrag unverzüglich in Kopie vorzulegen. Ebenso ist die OpGen Inc. verpflichtet, dem Insolvenzverwalter unverzüglich mitzuteilen, wenn der Kaufpreis vom Erwerber vereinnahmt wurde.

Diese Mitteilungen und die Vorlage des Kaufvertrages hat über die E-Mailadresse des Insolvenzverwalters volker.danckelmann@schneidergeiwitz.de zu erfolgen.

6. Sollte die OpGen Inc. den Insolvenzverwalter entsprechend der oben genannten Verpflichtungen nicht über den Verkauf unverzüglich unter Vorlage des Kaufvertrages informieren und/oder den Kaufpreis in Höhe von maximal USD 218.000,00 nicht innerhalb von 30 Bankarbeitstagen nach Vereinnahmung des Kaufpreises „Geschäftsbereich Distributor Curetis“ auf das oben genannte Sonderkonto des Insolvenzverwalters bezahlen oder den sonstigen Verpflichtungen aus dieser Vereinbarung, insbesondere Ziffer B. IX, nicht nachkommen, ist der Insolvenzverwalter berechtigt, den Rückgewähranspruch aus Insolvenzanfechtung geltend zu machen und die OpGen Inc. zur Zahlung aufzufordern.

7. Die oben genannten Regelungen gelten uneingeschränkt bis 31.12.2025, wenn bis dahin der Kaufvertrag über den Geschäftsbereich „Distributor Curetis“ abgeschlossen wurde. Auf den Eintritt von Bedingungen oder den Vollzug oder die Kaufpreiszahlung kommt es nicht an. Sollte der Kaufvertrag erst nach dem 31.12.2025

The request will be made via Mr. Oliver Schacht (President and CEO of OpGen Inc.) via his e-mail address oschacht@opgen.com, or to a newly appointed CEO.

If OpGen Inc. does not provide meaningful information within 14 days of this request by the insolvency administrator, a contractual penalty of \$ 1,000.00 will be payable for each case of non-compliance.

5. OpGen Inc. is obliged - without a separate request - to inform the insolvency administrator immediately if a sale of the above-mentioned business division has taken place and it is obliged to submit a copy of the purchase agreement without delay. OpGen Inc. is also obliged to inform the insolvency administrator immediately if the purchase price has been collected by the purchaser.

These notifications and the submission of the purchase agreement must be made via the insolvency administrator's e-mail address volker.danckelmann@schneidergeiwitz.de.

6. Should OpGen Inc. fail to inform the insolvency administrator of the sale immediately in accordance with the above-mentioned obligations by submitting the purchase agreement and/or fail to pay the purchase price in the maximum amount of USD 218.000,00 to the above-mentioned special account of the insolvency administrator within 30 bank working days after receipt of the purchase price "Distributor Curetis Division" or fail to comply with the other obligations arising from this agreement, in particular Section B. IX, the insolvency administrator is entitled to assert the claim for restitution arising from insolvency avoidance and to demand payment from OpGen Inc.

7. The above provisions shall apply without restriction until December 31, 2025 if the purchase agreement for the "Distributor Curetis" division has been concluded by then. The occurrence of conditions or the completion or payment of the purchase price is irrelevant. If the purchase agreement is not



abgeschlossen werden, sind die Regelungen aus Ziffer B. IX. dieser Vereinbarung hinfällig.

X. Jedwede Ergänzungen oder Änderungen dieser Vereinbarung bedürfen der Schriftform, soweit nicht die notarielle Beurkundung gesetzlich erforderlich ist. Dies gilt entsprechend für die Aufhebung dieses Schriftformerfordernisses.

XI. Entsprechend der Vereinbarungen in den vorgenannten Kredit- und Darlehensverträgen der Curetis GmbH mit ihrer Tochtergesellschaft der Ares Genetics GmbH, in denen vereinbart wurde, dass ausschließlich das Recht der Bundesrepublik Stuttgart, Deutschland ist, was auch im Rahmen des Forderungskaufvertrages der Curetis GmbH mit der OpGen Inc. übernommen wurde, findet auch auf diese Vereinbarung ausschließlich das Recht der Bundesrepublik Deutschland Anwendung unter Ausschluss des internationalen Privatrechts (Kollisionsrecht).

Erfüllungsort und ausschließlicher Gerichtsstand für alle Streitigkeiten aufgrund oder im Zusammenhang mit dieser Vereinbarung ist Stuttgart.

XII. Soweit eine oder mehrere Bestimmungen dieser Urkunde unwirksam oder nicht durchsetzbar sein sollten, bleibt die Wirksamkeit und Durchsetzbarkeit der anderen Bestimmungen dieser Vereinbarung hiervon unberührt. In so einem Fall vereinbaren die Parteien, dass die unwirksame oder undurchsetzbare Bestimmung durch eine wirksame oder durchsetzbare Bestimmung ersetzt wird, die, soweit möglich, der wirtschaftlichen Absicht der Parteien im Hinblick auf die unwirksame und durchsetzbare Bestimmung entspricht. Das Vorhergehende gilt entsprechend, sofern und soweit diese Vereinbarung eine Lücke enthält.

XIII. Änderungen dieser Vereinbarung bedürfen eines von den Parteien rechtswirksam unterschriebenen Dokumentes. In diesem ist explizit darauf hinzuweisen, dass es sich um eine Änderung dieser Vereinbarung handelt. Eine Änderung kann ausschließlich einstimmig erfolgen. Dies gilt auch für eine Aufhebung des Schriftformerfordernisses.

concluded until after December 31, 2025, the provisions of Section B. IX of this agreement shall lapse.

X. Any additions or amendments to this agreement must be made in writing, unless notarization is required by law. This applies accordingly to the waiver of this written form requirement.

XI. In accordance with the agreements in the aforementioned credit and loan agreements of Curetis GmbH with its subsidiary Ares Genetics GmbH, in which it was agreed that the law of the Federal Republic of Germany shall apply exclusively and that the place of jurisdiction shall be Stuttgart, Germany, which was also adopted in the context of the receivables purchase agreement of Curetis GmbH with OpGen Inc, the law of the Federal Republic of Germany shall also apply exclusively to this agreement to the exclusion of private international law (conflict of laws).

The place of performance and exclusive place of jurisdiction for all disputes arising from or in connection with this agreement is Stuttgart.

XII. If one or more provisions of this document should be invalid or unenforceable, this shall not affect the validity and enforceability of the other provisions of this agreement. In such a case, the parties agree that the invalid or unenforceable provision shall be replaced by a valid or enforceable provision which, as far as possible, corresponds to the economic intention of the parties with regard to the invalid and enforceable provision. The foregoing shall apply mutatis mutandis if and to the extent that this Agreement contains a loophole.

XIII. Amendments to this agreement require a legally valid document signed by the parties. This document must explicitly state that it is an amendment to this agreement. An amendment can only be made unanimously. This also applies to a waiver of the written form requirement.



Auf die Einstimmigkeit kann nicht verzichtet werden. Der Schriftform genügt ein Briefwechsel oder das nachfolgend unter Ziffer B. XI. beschriebene Verfahren. Rein elektronische Erklärungen (z. B. E-Mail) ersetzen die Schriftform nicht. Sofern die Vereinbarung vorsieht, dass Erklärungen schriftlich gegenüber der anderen Partei abzugeben sind, gilt diese Regelung entsprechend.

XIV. Die Parteien sind sich darüber einig, dass diese Vereinbarung auch dadurch abgeschlossen werden kann, dass die Parteien ihre unterzeichneten Unterschriftsseiten elektronisch (z. B. als gescannte pdf-Datei per E-Mail) sich gegenseitig oder an einen dafür bestimmten Empfänger übermitteln. Die Vereinbarung kommt in diesem Fall mit Zugang der letzten Unterschriftenseite bei der letzten Partei bzw. beim von diesem bestimmten Empfänger zustande. Im Anschluss an das Zustandekommen dieser Vereinbarung werden die Parteien Originalunterschriften für ihre Unterlagen austauschen.

XV. Jede Partei trägt die ihr im Zusammenhang mit der Vorbereitung und Verhandlung sowie dem Abschluss dieser Vereinbarung entstandenen Kosten und Auslagen, einschließlich der Kosten ihrer Berater, selbst.

XVI. Die deutsche Fassung dieser Vereinbarung ist maßgebend.

Unanimity cannot be waived. An exchange of letters or the procedure described in section B. XI. below shall be sufficient to satisfy the written form requirement. Purely electronic declarations (e.g. e-mail) do not replace the written form requirement. If the agreement stipulates that declarations are to be made in writing to the other party, this provision shall apply accordingly.

XIV. The parties agree that this agreement can also be concluded by the parties transmitting their signed signature pages electronically (e.g. as a scanned pdf file by e-mail) to each other or to a designated recipient. In this case, the agreement is concluded upon receipt of the last signature page by the last party or by the recipient designated by the latter. Following the conclusion of this agreement, the parties shall exchange original signatures for their documents.

XV. Each party shall bear its own costs and expenses incurred in connection with the preparation, negotiation and conclusion of this agreement, including the costs of its advisors.

XVI. The German Version of this agreement shall prevail.

Stuttgart, 21. März 24


Dr. v. Danckelmann
Rechtsanwalt
als Insolvenzverwalter



OpGen Inc
Oliver Schacht
CEO



OpGen Inc
Albert Weber
CFO



DIRECTOR AGREEMENT

DIRECTOR AGREEMENT, dated as of March 25, 2024, by and between OpGen Inc., a Delaware corporation (the “**Company**”), and David Lazar (the “**Director**”).

W I T N E S S E T H:

WHEREAS, the Company wishes to engage the Director and the Director is willing to accept such engagement upon the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. Services. Upon the terms and subject to the conditions of this Agreement and with effect from the Effective Date (as defined below), the Company hereby engages the Director to act as a director and provide services on the terms and conditions provided in this Agreement. The Director agrees to devote appropriate time and attention to the execution of the services to be provided by the Director hereunder, which shall include the services listed on Exhibit A; or such other services as the Company and the Director may reasonably agree (hereinafter the services to be provided by the Director hereunder are referred to as the “**Services**”).

2. Term of Engagement. The term of the Director’s engagement by the Company under this Agreement shall commence on the 25th day of March, 2024 (the “**Effective Date**”) and shall terminate on the earlier of (the “**Termination Date**”): (i) such day which is one year (the “**Contract Period**”) from the date thereof; (ii) the Director ceasing to be a member of the Board of Directors of the Company; and (iii) the occurrence of any of the events set forth in Section 5 below.

3. Independent Contractor. The Director would be an independent contractor, for his role as a Director, not an employee or agent of the Company.

4. Compensation.

(a) Fee. The Director shall be paid a fee of \$12,500 per quarter, payable quarterly, starting on March 25, 2024 and pro-rated for a partial quarter during which the Director serves. Such fee shall be deferred and accrue until such time as the Company has raised sufficient funds to pay the accrued and unpaid fees (the “**Funding**”), or the Director exercises the option to convert all or part of such accrued and unpaid fees into shares of common stock of the Company, par value \$0.01 per share (the “**Conversion Option**”). The Conversion Option shall be at a rate of \$4.00 per share for each \$1.00 of accrued and unpaid fees so converted, and shall be at the sole option of the Director.

(b) Bonus. The Director shall be (i) issued 100,000 shares of restricted common stock upon execution hereof, and (ii) paid a one-time signing bonus of \$50,000, in cash, payable upon completion of the Funding, or the Director exercises the Conversion Option with respect to all of part of the cash portion of the Bonus.

(c) Purpose. It is understood by the parties hereto that the primary purpose of this Agreement is to assist the Company in its business operations, and not solicit to buy or sell securities.

(d) Benefits. During the Contract Period, the Director shall not receive or be eligible to participate in the Company's benefit programs in effect for the employees of the Company as in effect from time to time, on and after the Effective Date.

(e) Expenses. The Company shall reimburse the Director for all reasonable business travel expenses previously authorized in writing by the Company and reasonably and necessarily incurred by the Director in the performance of his duties, responsibilities, and authorities hereunder.

5. Termination Provisions. The Contract Period shall terminate, and the Director's engagement hereunder shall cease, effective upon the date of any of the occurrences set forth below (the "**Termination Date**"):

(a) Termination By Reason of Permanent Disability. If at any time during the Contract Period the Company reasonably determines that the Director has been or will be unable, as a result of physical or mental illness or incapacity, to perform his duties hereunder for one year, the Contract Period may be terminated by the Company upon written notice to the Director.

(b) Termination with Notice. Either party hereto may terminate the Contract Period for any reason upon thirty (30) days written notice to the other party. All Compensation earned upon such Termination Date shall be due and payable.

(c) Termination By Reason of Death. The Contract Period shall automatically terminate on the date of the Director's death (such date being the Termination Date).

Termination shall not occur if the parties hereto mutually agree to extend the term hereof, or if the terms hereof are renegotiated in good faith by the parties hereto.

6. Covenants of the Director.

(a) Non-solicitation of Employees of the Company, Directors of the Company or Customers or Suppliers of the Company. During the Contract Period and for a three (3) year period following the Contract Period (the "**Subject Period**"), the Director shall not, directly or indirectly on behalf of any business, firm, corporation, partnership, person, proprietorship or other entity, incorporated or otherwise, and shall use his best efforts to cause each business, firm, corporation, partnership, person, proprietorship and other entity with which he is or shall become associated in any capacity not to, (i) solicit for employment,

employ or otherwise engage any employee or Director of the Company, without the written consent of the Company, or (ii) except in connection with the performance of his duties hereunder and in accordance herewith, solicit, interfere with, endeavor to entice away from the Company or communicate with regarding the business of the Company any customer or supplier of the Company. The Director acknowledges and agrees in connection with the foregoing that the identities of the Company's employees, Directors, customers, suppliers and clients and other information gained during his period of employment with the Company with respect thereto is Confidential Information (as more fully defined in paragraph (b) below) of the Company.

(b) Confidentiality. During the Subject Period and at all times thereafter, the Director agrees and acknowledges that the Confidential Information (as defined below) of the Company is valuable, special and unique to its business; that such business depends on such Confidential Information; and that the Company wishes to protect such Confidential Information by keeping it confidential for the exclusive use and benefit of the Company. The Director further acknowledges that any use by him of the Confidential Information other than in strict accordance with the terms of this Agreement would be wrongful and would cause the Company irreparable injury. Based upon the foregoing, with respect to such Confidential Information, the Director agrees:

(i) to keep any and all Confidential Information in trust for the sole use and benefit of the Company;

(ii) except as required by applicable law or as required in furtherance of the business of the Company in accordance with the terms hereof, not to use or disclose or reproduce, directly or indirectly, any Confidential Information of the Company;

(iii) to take all steps necessary or reasonably requested by the Company to ensure that all Confidential Information is kept confidential for the sole use and benefit of the Company; and

(iv) in the event the Director's employment with the Company terminates for any reason whatsoever or at any time that the Company may in writing request, to deliver promptly to the Company all materials constituting Confidential Information (including all written, graphic, facsimile, encoded or recorded copies or duplicates thereof or notes regarding the same) of the Company that are in his possession or under his control without making or retaining any written graphic, facsimile, encoded or recorded copy or extract from such materials.

For purposes of this Section 6, "**Confidential Information**" means any and all information developed by or for or possessed by the Company prior to or during the Contract Period that is (A) not generally known in any industry in which the Company does business as of the date hereof or during the Contract Period or (B) not publicly available (including for this purpose information that is publicly available because of a breach by the Director of the provisions hereof). Confidential Information includes, but is not limited to, the information identified in Section 6(a) above (including, without limitation, personnel records and applications, employment and other Director agreements, medical records, Director appraisals, reviews and evaluations, general wage

and salary rates and individual salaries and bonuses and plans and records relating thereto, numbers of Directors in departments and divisions, Director benefit plans and incentive plans), and any and all other information developed by or for or possessed by the Company concerning information technology, marketing and sales methods, concepts, materials, products, processes, procedures, formulae, compounds, formulations, models, innovations, discoveries, improvements, inventions, protocols, computer programs, records, data, know-how, techniques, designs, machinery, devices, research and development projects, data, preparations, business forms, strategies, plans for development of products, services or expansion into new areas or markets, internal operations, product price lists, forecasts, projections, financial information (including the revenues, costs or profits associated with the products of the Company) and any other trade secrets and proprietary information of any type owned by or pertaining to the Company, together with all written, graphic, facsimile, encoded, recorded and other materials relating to all or any part of the same.

(c) Noncompetition, etc. During the Contract Period and any extension thereof, the Director shall not, directly or indirectly, engage in or be associated with, whether as a director, officer, employee, agent, Director, shareholder, partner, owner, independent contractor or otherwise, any business, firm, corporation, partnership, person, proprietorship or other entity, incorporated or otherwise (other than the Company), which is conducting, or plans to conduct, any business which competes with or will compete with, in the United States, (i) the business of the Company as constituted during the Contract Period, or (ii) the products of the Company manufactured, sold or under development by the Company during the Contract Period; provided, however, nothing herein shall prohibit the Director from being a shareholder in any entity that competes with the Company so long as the Director does not control such entity and does not hold more than a five percent (5%) equity interest therein.

(d) Compliance With Laws. In performing his duties hereunder, the Director agrees to comply with all applicable governmental laws, rules and regulations and all applicable policies and procedures of the Company.

(e) Miscellaneous. For purposes of Section 6 hereof, the term "Director" shall include the Director's affiliates and advisors.

7. Representations and Warranties.

(a) The Company. The Company hereby represents and warrants to the Director as follows:

- (i) the Company is duly incorporated, validly existing and in good standing under the laws of the State of Delaware; and
- (ii) this Agreement has been duly authorized, executed and delivered by the Company.

(b) The Director. The Director hereby represents and warrants to the Company as follows:

(i) the Director has full legal capacity to enter into this Agreement;

(ii) the execution, delivery and performance by the Director of this Agreement will not conflict with or result in a breach of any of the terms, conditions or provisions of, or constitute (with due notice or lapse of time or both) a default under, any agreement or instrument to which the Director is a party or by which he is bound;

(iii) this Agreement has been duly executed and delivered by the Director; and

(iv) the Director has made such investigations of the business and properties of the Company as he deems necessary or appropriate before entering into this Agreement and has been given a sufficient amount of time to review this Agreement with counsel and other professionals of his choice and has done so to the extent he desires.

Without limiting clause (ii) above, the Director hereby represents and warrants that he is not bound by the terms of any agreement with any other party to refrain from using or disclosing any trade secret or confidential or proprietary information in the course of his employment with the Company or to refrain from competing, directly or indirectly, with the business of such other party. The Director further represents and warrants that his performance of all the terms of this Agreement and as a Director of the Company does not and will not breach any agreement to keep in confidence proprietary information, knowledge or data acquired by him in confidence or in trust prior to his employment with the Company.

8. Director and Officer Insurance. The Company shall make all commercially reasonable efforts to procure suitable director and officer insurance for a company of substantially similar size and position. Such insurance shall cover and include the Director.

9. Indemnification. The Company shall indemnify the Director and each of his agents against any loss, liability, claim, damage, or expense arising from the actions or inactions of the Company (or any of its officers and directors), including, but not limited to, any and all out of pocket expense and reasonable attorneys' fees whatsoever reasonably incurred in investigating, preparing, or defending against any litigation, commenced or threatened, or any third party claim whatsoever), to which the Director may become subject arising out of or based on any actions or inactions or operations of the Company (or any of its officers and directors), to the fullest extent permitted by the Delaware Revised Statutes. Such indemnification does not include any claims resulting from the gross negligence or wilful misconduct of the Director. The indemnification provided for in this paragraph shall survive the Termination Date.

10. Successors; Assignment.

(a) The Company. This Agreement shall be binding upon and inure to the benefit of the Company and its successors and permitted assigns.

(b) The Director. Neither this Agreement, nor any right, obligation or interest hereunder, may be assigned by the Director, his beneficiaries, or his legal representatives without the prior written consent of the Company; provided, however, that nothing in this paragraph (b) shall preclude (i) the Director from designating a beneficiary to receive any benefit payable hereunder upon his death, or (ii) the executors, administrators, or other legal representatives of the Director or his estate from assigning any such rights hereunder to distributees, legatees, beneficiaries, testamentary trustees or other legal heirs of the Director. Subject to the foregoing, this Agreement shall be binding upon and inure to the benefit of the Director and his executors and administrators.

11. Waiver of Breach. The waiver by the Company or the Director of a breach of any provision of this Agreement by the other party shall not be construed as a waiver of any continuing or subsequent breach of the same provision or of any other provision of this Agreement. It is also understood and agreed that no failure or delay by the Company in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or future exercise thereof or the exercise of any other right, power or privilege hereunder.

12. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been given when delivered by hand or courier service, or mailed by first-class certified mail, postage prepaid and return receipt requested, addressed as follows:

If to the Company:

OpGen, Inc.
9717 Key West Ave, Suite 100
Rockville, MD 20850

If to the Director:

or, in each case, at such other address as may from time to time be specified to the other party in a notice similarly given.

13. Governing Law; Litigation.

(a) Governing Law. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Delaware applicable to agreements made and to be performed entirely within such State.

(b) Litigation. Each of the Company and the Director hereby agrees that the courts of the State of Delaware shall have jurisdiction to hear and determine any claims or disputes pertaining to this Agreement or to any matter arising therefrom. Each of the Company and the Director expressly submits and consents in advance to such jurisdiction in any action commenced in such courts, hereby waiving personal service of the summons and complaint or other process or papers issued therein, and agreeing that service of such

summons and complaint, or other process or papers, may be made in any manner permitted by the laws of the State of Delaware including if permissible the same manner as notices hereunder may be given pursuant to Section 12. The choice of forum set forth in this paragraph (b) shall not be exclusive nor shall it preclude the enforcement of any judgment obtained in such forum or the taking of any action under this Agreement to enforce such judgment in any appropriate jurisdiction.

14. Expenses. All costs and expenses (including attorneys' fees) incurred in connection with the negotiation and preparation of, or any claim, dispute or litigation pertaining to, this Agreement shall be paid by the party incurring such expenses.

15. Entire Agreement. This Agreement contains the entire agreement of the parties and their affiliates relating to the subject matter hereof and thereof and supersedes all prior agreements, representations, warranties and understandings, written or oral, with respect thereto.

16. Severability.

(a) Generally. If any term or provision of this Agreement or the application thereof to any person, property or circumstance shall to any extent be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons, property or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

(b) Duration and Scope of Certain Covenants. Without limiting paragraph (a) above, if any court determines that any of the covenants contained in Section 6, or any part of such covenants, is unenforceable because of the duration or scope of such covenant or provision, such court shall have the power to and is hereby requested to reduce the duration or scope of such covenant or provision, as the case may be, to the extent necessary to make such covenant or provision enforceable, and in its reduced form, such covenant or provision shall then be enforceable.

17. Remedies.

(a) Injunctive Relief. The Director acknowledges and agrees that the covenants and obligations of the Director contained in Section 6 relate to special, unique and extraordinary matters and are reasonable and necessary to protect the legitimate interests of the Company and that a breach of any of the terms of such covenants and obligations will cause the Company irreparable injury for which adequate remedies at law are not available. Therefore, the Director agrees that the Company shall be entitled to an injunction, restraining order, or other equitable relief from any court of competent jurisdiction restraining the Director from any such breach.

(b) Remedies Cumulative. The Company's rights and remedies under this Section 17 are cumulative and are in addition to any other rights and remedies the Company may have at law or in equity. In connection with paragraph (a) of this Section 17, the Director represents that his economic means and circumstances are such that such provisions will not prevent him from providing for himself and his family on a basis satisfactory to him.

18. Waiver of Statute of Limitations. The Director hereby waives for the longest period permitted by applicable law the limitation of any statute for the presentation of any claim arising under any provision of Section 6 hereof.

19. Withholding Taxes. The Company shall deduct any foreign, federal, state or local withholding or other taxes from any payments to be made by the Company hereunder in such amounts which the Company reasonably determines are required to be deducted under applicable law.

20. Amendments, Miscellaneous, etc. Neither this Agreement, nor any term hereof, may be changed, waived, discharged or terminated except by an instrument in writing signed by the party against which such change, waiver, discharge or termination is sought to be enforced. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement.

IN WITNESS WHEREOF, the parties hereto have duly executed and delivered this Agreement as of the date first written above.

OPGEN, INC.

By: /s/ Oliver Schacht

Name: Oliver Schacht Ph.D.

Title: Chief Executive Officer

DIRECTOR

EXHIBIT A

- The Company is retaining the services of the Director in order to assist the Company in its reorganization.

OPGEN, INC.

March 26, 2024

Holder of Common Stock Purchase Warrants

Re: Inducement Offer to Amend Common Stock Purchase Warrants

Dear Holder:

OpGen, Inc. (the “Company”) is pleased to offer to you the opportunity to amend the warrants to purchase shares of the Company’s common stock, par value \$0.01 per share (the “Common Stock”), set forth on Exhibit A hereto (the “Existing Warrants”) and currently held by you (the “Holder”). Capitalized terms not otherwise defined herein shall have the meanings set forth in the Existing Warrants.

The Company and the Holder hereby agree to amend the Existing Warrants as follows:

1. The second paragraph of Section 2(c) of the Existing Warrants is hereby amended and restated as follows:

“(A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, or (ii) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. (“Bloomberg”) as of the time of the Holder’s execution of the applicable Notice of Exercise if such Notice of Exercise is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of “regular trading hours” on a Trading Day) pursuant to Section 2(a) hereof;”

2. Section 3(d) of the Existing Warrants is hereby amended and restated as follows:

“Fundamental Transaction. If, at any time while this Warrant is outstanding, and other than (1) for the purpose of changing the Company’s name and/or the jurisdiction of incorporation of the Company or a holding company for the Company, (2) in connection with a transaction (or a series thereof), whereby David Lazar or any of his Affiliates or any bona fide transferees thereof acquires more than 50% of the outstanding shares of Common Stock or more than 50% of the voting power of the common equity of the Company, or any other securities of the Company which may (and for avoidance of doubt even if subject to third party approvals or other contingencies) be exercisable or convertible to such thresholds of outstanding shares of Common Stock or voting power of the equity of the Company (a “Lazar Investment”), (3) in connection with the first Fundamental Transaction (as defined hereinafter) following such Lazar Investment, and/or (4) in connection with the bankruptcy proceedings of the Company’s Subsidiaries which commenced prior to the date of amendment of this Section 3(d), (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company or any Subsidiary, 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 Company 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 more than 50% of the outstanding Common Stock or more than 50% of the voting power of the common equity of the Company Person, (iv) the Company, 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 Company, 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, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock or more than 50% of the voting power of the common equity of the Company (each a “Fundamental Transaction”), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the

successor or acquiring corporation or of the Company, if it is the surviving corporation, and any 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 this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. Notwithstanding anything to the contrary, in the event of a Fundamental Transaction, the Company or any Successor Entity (as defined below) shall, at the Holder's option, exercisable at any time concurrently with, or within 30 days after, the consummation of the Fundamental Transaction (or, if later, the date of the public announcement of the applicable Fundamental Transaction), purchase this Warrant from the Holder by paying to the Holder an amount of cash equal to the Black Scholes Value (as defined below) of the remaining unexercised portion of this Warrant on the date of the consummation of such Fundamental Transaction; provided, however, that, if the Fundamental Transaction is not within the Company's control, including not approved by the Company's Board of Directors, Holder shall only be entitled to receive from the Company or any Successor Entity the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of this Warrant, that is being offered and paid to the holders of Common Stock of the Company in connection with the Fundamental Transaction, whether that consideration be in the form of cash, stock or any combination thereof, or whether the holders of Common Stock are given the choice to receive from among alternative forms of consideration in connection with the Fundamental Transaction; provided, further, that if holders of Common Stock of the Company are not offered or paid any consideration in such Fundamental Transaction, such holders of Common Stock will be deemed to have received common stock of the Successor Entity (which Entity may be the Company following such Fundamental Transaction) in such Fundamental Transaction. "Black Scholes Value" means the value of this Warrant based on the Black Scholes Option Pricing Model obtained from the "OV" function on Bloomberg determined as of the day of consummation of the applicable Fundamental Transaction for pricing purposes and reflecting (A) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the time between the date of the public announcement of the applicable contemplated Fundamental Transaction and the Termination Date, (B) an expected volatility equal to the greater of (a) the 30 day volatility, (b) the 100 day volatility and (c) the 365 day volatility, each obtained from the HVT function on Bloomberg (determined utilizing a 365-day annualization factor) as of the Trading Day immediately following the public announcement of the applicable contemplated Fundamental Transaction, (C) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in such Fundamental Transaction and (D) a remaining option time equal to the time between the date of the public announcement of the applicable contemplated Fundamental Transaction and the Termination Date and (E) a zero cost of borrow. The payment of the Black Scholes Value will be made by wire transfer of immediately available funds (or such other consideration) within five (5) Trading Days of the Holder's election (or, if later, on the effective date of the Fundamental Transaction). The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(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 the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable 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 exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise 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 exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and

substance to the Holder. 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 Warrant and the other Transaction Documents referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein."

In consideration for amending the Existing Warrants, the Company hereby covenants that it shall enter into a Lazar Investment (as defined above) of no less than \$1,000,000 cash injection into the Company.

Additionally, the Company agrees to the representations, warranties and covenants set forth on Annex A attached hereto.

Holder may accept this offer by signing this letter below, with such acceptance constituting Holder's amendment of the Existing Warrants on or before 8:00 p.m., Eastern Time, on March 16, 2024 (the "Execution Time").

If this offer is accepted and the transaction documents are executed by the Execution Time, then on or before 8:00 a.m., Eastern Time, on the Trading Day following the date hereof, the Company shall file a Current Report on Form 8-K with the Commission disclosing all material terms of the transactions contemplated hereunder. From and after the filing of such Current Report on Form 8-K the Company represents to you that it shall have publicly disclosed all material, non-public information delivered to you by the Company, or any of its respective officers, directors, employees or agents in connection with the transactions contemplated hereunder. In addition, effective upon the filing of such Current Report on Form 8-K, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, agents, employees or Affiliates on the one hand, and you and your Affiliates on the other hand, shall terminate.

No later than the second (2nd) Trading Day following the date hereof, the closing shall occur at such location as the parties shall mutually agree.

Sincerely yours,

OPGEN, INC.

By: /s/

Name: _____

Title:

Accepted and Agreed to:

Name of Holder:

Signature of Authorized Signatory of Holder:

Name of Authorized Signatory:

Title of Authorized Signatory:

Number of Existing Warrants: As set forth on Exhibit A

Annex A

Representations, Warranties and Covenants of the Company. The Company hereby makes the following representations and warranties to the Holder:

- a) SEC Reports. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein “SEC Reports”). As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Exchange Act and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has never been an issuer subject to Rule 144(i) under the Securities Act.
- b) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this letter agreement and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this letter agreement by the Company and the consummation by the Company of the transactions contemplated hereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, its board of directors or its stockholders in connection therewith. This letter agreement has been duly executed by the Company and, when delivered in accordance with the terms hereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.
- c) No Conflicts. The execution, delivery and performance of this letter agreement by the Company and the consummation by the Company of the transactions contemplated hereby do not and will not: (i) conflict with or violate any provision of the Company's certificate or articles of incorporation, bylaws or other organizational or charter documents; or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any liens, claims, security interests, other encumbrances or defects upon any of the properties or assets of the Company in connection with, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any material agreement, credit facility, debt or other material instrument (evidencing Company debt or otherwise) or other material understanding to which such Company is a party or by which any property or asset of the Company is bound or affected; or (iii) conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company is bound or affected, except, in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a material adverse effect upon the business, prospects, properties, operations, condition (financial or otherwise) or results of operations of the Company, taken as a whole, or in its ability to perform its obligations under this letter agreement.
- d) Trading Market. The transactions contemplated under this letter agreement comply with all the rules and regulations of the Nasdaq Capital Market.



OpGen Announces Acquisition of Preferred Stock by David Lazar

- David Lazar invests \$3 million in Preferred Stock
- New OpGen Board of Directors appointed
- David Lazar will take over as CEO of OpGen
- OpGen settles outstanding liabilities with EIB

ROCKVILLE, Md., March 25, 2024 (GLOBE NEWSWIRE) – OpGen, Inc. (Nasdaq: OPGN, “OpGen” or “the Company”), announced today that the Company entered into a securities purchase agreement with David E. Lazar, an experienced private investor, pursuant to which he will 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. The proceeds of the transaction will be used to repay and settle outstanding indebtedness and liabilities of the Company and for other general corporate and operating purposes.

On March 25, 2024, Mr. Lazar paid \$200,000 at the initial closing of the transactions in exchange for 200,000 shares of Series E Preferred Stock. Subject to the satisfaction of certain additional closing conditions, Mr. Lazar will pay an additional \$200,000 on or before April 8, 2024, and the balance of \$2.6 million will be paid no later than May 1, 2024. Each share of Series E Preferred Stock is convertible into 24 shares of the Company’s common stock (“Common Stock”). The conversion of the Series E Preferred Stock into shares of common stock in excess of applicable statutory and regulatory thresholds, including national stock exchange rules, will be subject to receipt of stockholder approval for the issuance of such shares of Common Stock.

In connection with the transactions, Mr. Lazar was also appointed to the Board of Directors of OpGen, and following closing will be appointed CEO. In addition, effective as of the initial closing, each of the prior members of the Company’s board of directors resigned and Oliver Schacht, PhD, resigned as CEO. Mr. Schacht will continue to serve as Executive Vice President of Corporate Development to assist with the transition period following the transactions. In addition to the appointment of Mr. Lazar as a director, each of Messrs. Avraham Ben-Tzvi, Matthew McMurdo, and David Natan were also appointed to the board of the Company, effective as of the initial closing on March 25, 2024.

In connection with the foregoing transaction, OpGen entered into settlement agreements with each of the European Investment Bank (“EIB”) and Curetis GmbH, the Company’s subsidiary (“Curetis”), and Curetis’ trustee in insolvency, pursuant to which the Company settled outstanding liabilities amongst the parties. Pursuant to the settlement agreements and the securities purchase agreement with Mr. Lazar, following closing of securities purchase agreement the Company will pay \$2 million of the proceeds from the financing to settle all outstanding debt of the Company to each of EIB and Curetis. The settlement agreement with EIB also terminated the guarantee agreement, pursuant to which OpGen had guaranteed all of Curetis’ debt to EIB.

Mr. Lazar, the new Chairman of OpGen, issued the following statement: “I am pleased to announce my significant investment in OpGen given the meaningful opportunity I believe the Company represents and am eager to begin working with the Board of Directors and management to actively explore potential strategic options to drive shareholder value.”

Oliver Schacht, PhD, former CEO of OpGen and now Executive VP of Corporate Development commented: “We are pleased with the outcome of our strategic process. With Curetis and Ares Genetics businesses and assets being sold by the respective trustees in Germany and Austria to strategic acquirors, this financing transaction provides an opportunity for OpGen to settle its outstanding liabilities with its major creditors. We believe the transaction also offers future opportunities for OpGen stockholders to participate in possible future strategic transactions under the leadership of David Lazar and the new members of the board.

About David E. Lazar

David E. Lazar is an experienced private investor who brings domestic and international experience in operations, accounting, audit preparation, due diligence, capital restructuring, debt financing, and mergers and acquisitions.

About OpGen, Inc.

OpGen, Inc. (Rockville, Md., U.S.A.) is a precision medicine company harnessing the power of molecular diagnostics and bioinformatics to help combat infectious disease. Along with our subsidiaries, Curetis GmbH and Ares Genetics GmbH, both of which are subject to insolvency proceedings under German and Austrian laws, respectively, since November 6, 2023, we developed and commercialized molecular microbiology solutions helping to guide clinicians with more rapid and actionable information about life threatening infections to improve patient outcomes, and decrease the spread of infections caused by multidrug-resistant microorganisms, or MDROs.

For more information, please visit www.opgen.com

Forward-Looking Statements

This press release includes statements regarding a preferred stock financing transaction and the related transactions. These statements and other statements regarding OpGen’s future plans and goals constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Such statements are subject to risks and uncertainties that are often difficult to predict, are beyond our control, and which may cause results to differ materially from expectations. Factors that could cause our results to differ materially from those described include, but are not limited to, the risks and uncertainties relating to the consummation of final closing contemplated by the financing transaction for the Series E Preferred Shares, insolvency proceedings of Curetis GmbH and Ares Genetics GmbH, our use of proceeds from the sale of our securities, our ability to continue to finance our business and operations, the result of any alternatives to mitigate the Company’s cash position, including restructuring or refinancing of our debt, seeking additional debt or equity capital, reducing or delaying our business activities, selling assets, other strategic transactions or other measures, including obtaining relief under U.S. bankruptcy laws, and the terms, value and timing of any transaction resulting from such alternatives, our ability to satisfy debt obligations under our loan with the European Investment Bank should the final closing contemplated by the financing transaction for the Series E Preferred Shares not be consummated, and our liquidity and working capital requirements. For a discussion of the most significant risks and uncertainties associated with OpGen’s business and condition, please review our filings with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which are based on our expectations as of the date of this press release and speak only as of the date of this press release. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

OpGen:

David E. Lazar

Chairman of the Board of Directors

InvestorRelations@opgen.com
