



Filed pursuant to Rule 433
Issuer Free Writing Prospectus
Registration No. 333-233775

OpGen Investment Opportunity

Prior to pending business combination transaction
with Curetis GmbH

October, 2019



Legal Disclaimers for OpGen Inc.

Forward Looking Statements

This presentation contains forward-looking statements that are subject to many risks and uncertainties. Forward-looking statements appear in a number of places throughout this presentation and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our pending business combination transaction with Curetis GmbH ("Curetis"), a wholly owned subsidiary of Curetis N.V.; ongoing and planned product development by each of OpGen and Curetis; revenues, net loss from operations and cash burn of the combined company, the timing of, and ability to make, regulatory filings and obtain and maintain regulatory approvals for product candidates of OpGen and Curetis; expectations regarding product launch; our results of operations, cash needs, and spending of the proceeds from this offering, including the funds to be lent to Curetis; the financial condition, liquidity, prospects, growth and strategies of the combined company; the industry in which we and Curetis operate; and the trends that may affect the industry or us or the combined company.

We may, in some cases, use terms such as "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "approximately" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this presentation, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this presentation.

Factors that could cause results to differ materially from those described include, but are not limited to, our ability to successfully and timely seek approval of, and obtain approval of our stockholders for the business combination with Curetis, satisfy the closing conditions under the implementation agreement, successfully combine the businesses of OpGen and Curetis, comply with the complexities of a global business, achieve the synergies we expect and successfully implement the combined company's strategic and business goals and objectives. For a discussion of the most significant risks and uncertainties associated with OpGen's business, please review the factors described in the "Risk Factors" section of our Registration Statement on Form S-1 filed with the U.S. Securities and Exchange Commission ("SEC") on October 17, 2019, including the documents incorporated by reference therein. As a result of these factors, we cannot assure you that the forward-looking statements in this presentation will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified timeframe, or at all. Any forward-looking statements that we make in this presentation speak only as of the date of such statement, and we undertake no obligation to update such statements to reflect events or circumstances after the date of this presentation or to reflect the occurrence of unanticipated events except to the extent required by applicable securities laws.

Free Writing Prospectus

OpGen, Inc. has filed with the SEC a registration statement (File No. 333-233775) and a preliminary prospectus (the "Preliminary Prospectus") for the offering to which this communication relates. The registration statement has not yet become effective. Before you invest, you should read the Preliminary Prospectus (including the documents incorporated by reference therein) and other documents we have filed with the SEC for more complete information about us and this offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, when they are available, copies of the Preliminary Prospectus may be obtained from H.C. Wainwright, 430 Park Avenue, New York, NY 10022, by calling (646) 975-6996 or emailing placements@hcwco.com.

This presentation shall not constitute an offer to sell, or the solicitation of an offer to buy, nor will there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of such state or jurisdiction. Neither the SEC nor any other regulatory body has approved or disapproved of our securities or passed upon the accuracy of this presentation.

The offering will only be made by means of a prospectus pursuant to a registration statement that is filed with the SEC after such registration statement becomes effective.



OPGEN CORPORATE OVERVIEW

Precision medicine company focused on combatting the global antibiotic resistance crisis by leveraging molecular diagnostics, informatics, and genomic analysis



Provides rapid and actionable information about life threatening drug resistant infections



Building global network of customers and partners to improve patient outcomes, and decrease the spread of infections caused by multidrug-resistant microorganisms, or MDROs



Key product Acuitas® AMR Gene Panel is designed to detect five pathogens and up to 47 resistance genes, predicting resistance for 9 classes of antibiotics



Collaborations with industry leaders to support the execution of our commercialization strategy as we work to address a \$2 billion potential market for precision medicine MDRO solutions



A commercial stage molecular diagnostics company striving molecular microbiology leadership through proprietary platforms and content



MDx platforms for low- to high-plex sample-to-answer PCR testing for a broad range of sample types relevant for molecular microbiology



Five CE-IVD-marked and 1 US-FDA cleared syndromic testing panels for major infectious disease indications in hospitalized patients



AMR data intelligence and biomarkers based on what Curetis believes to be the most comprehensive whole-genome knowledge base, ARESdb, on the genetics of antibiotic resistance



Direct sales channel in the U.S. complemented by a large network of distributors world-wide. Strategic partnerships for NGS and Bio-IT solutions for fighting AMR with key life science, IVD, and pharma players

COMBINING TO BUILD A STRONGER FUTURE

Strategic Rationale

- Establish a leading antimicrobial resistance (AMR) precision medicine business
- Broad portfolio of high impact rapid diagnostics and AMR bioinformatics
- Leverage combined sales, distribution, bioinformatics and operating infrastructure

➤ **Combined company expected to be positioned for strong growth profile and sustained value creation**

Structure of Transaction

- OpGen acquisition of Curetis GmbH for 2.66 million new shares of OpGen common stock

TRANSACTION TIMELINE AND CONDITIONS TO CLOSING

Both companies' Boards of Directors have approved the implementation agreement

The transaction is expected to close following approval by shareholders and debt holders for both OpGen and Curetis.

Conditions to Closing

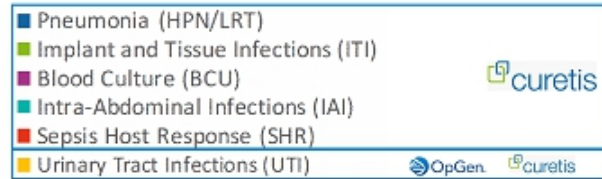
- Successful completion by OpGen of \$10 million equity financing
- Both companies will seek approval from their respective shareholders in meetings to be scheduled as soon as practicable (likely Jan 2020)
- Approval by debt holders of Curetis N.V., Curetis GmbH, and OpGen, Inc.

STRATEGIC BENEFITS

-  Market leader positioned to capitalize on global opportunities in infectious disease and rapid AMR detection 
-  Proprietary molecular diagnostic tests and platforms
-  Premier AI-powered bioinformatics solutions for multi-drug resistance diagnostics
-  Global commercial channel capabilities & partners
-  Financial leverage, operational synergies, and positive growth-driven business outlook

COMBINED COMPANY TO ADDRESS MULTIPLE HIGH IMPACT UNMET CLINICAL NEEDS AND LARGE AVAILABLE MARKET OPPORTUNITIES

U.S. and European market with high unmet medical need addressable through hospital-focused sales channels



The current Curetis portfolio and pipeline of cartridges according to Curetis management estimates target about 10 million patients annually in EU and U.S. with additional upside in Asia / Pacific and ROW markets



1. OpGen estimates based upon information provided by Curetis

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COMBINED COMPANY'S PORTFOLIO OF COMMERCIAL STAGE PRODUCTS & STRATEGIC RELATIONSHIPS

Unyvero Platform & Tests (Curetis)

Unyvero FDA-cleared platform and lower respiratory tract infection (LRT) test



Acuitas Tests & Acuitas Lighthouse (OpGen)

Acuitas tests in development and pending FDA clearance to improve antibiotic decision making



Global Commercial Presence (Curetis)

Direct sales in U.S., European distribution with A. Menarini Diagnostics, China distribution with Beijing Clear Biotech



Strategic Fit

Transformative Strategic Relationship in MDx and BioIT



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SAMPLE-TO-ANSWER AND HIGH-THROUGHPUT TESTING CAPABILITIES

Molecular microbiology leadership through proprietary platforms and content

Striving for Molecular Microbiology Leadership	
MDx Platforms	MDx Content
 <p>unyvero</p> <p>Unyvero A50 High-Plex PCR</p> <p>Unyvero A30 RQ* Low- to Mid-Plex PCR</p>	 <p>Acuitas AMR Gene Panel</p> <p>Acuitas Lighthouse</p> <p>ares genetics a curetis group company</p> <p>ARESdb MDx Content & NGS Applications</p>
Low- to High-Plex PCR Broad Sample Range	Proprietary PCR & NGS Applications based on Leading AI-Powered AMR Knowledgebases

* Unyvero A30 RQ Analyzer in development, latest design concept. Final product may differ.

**Pending 510(k), not for diagnostic use.

CURRENT AND NEAR-TERM U.S. PRODUCT OFFERINGS

Curetis Unyvero Pneumonia (LRT)

Description:

- Sample-to-answer multiplex PCR from native specimen in about 5 hours with ~2min hands-on time
- 19 multiplexed PCR assays covering 36 Pathogen ID, 10 resistance genes

Status:

- FDA-cleared (*De Novo* 510(k)) April '18, launched June '18

Differentiators:

- Most comprehensive panel specifically tailored to bacterial pneumonia delivering unique clinically actionable insights

Coming Next:

- Unyvero LRT plus high sensitivity application for BAL samples (510(k) submitted)

OpGen Acuitas AMR Gene Panel

Description:

- Sample-to-answer multiplex PCR from bacterial isolates in <3 hours
- Up to 47 resistance genes, accurate prediction of resistance for 9 antibiotics
- Available now for Research Use Only (RUO)

Status:

- FDA 510(k) submitted May '19

Differentiators:

- Rapid AMR prediction
- CRE infection control

Coming Next:

- Rapid urine test with sample-to-answer multiplex PCR from native specimen in <3 hours
- 5 pathogen ID/quantitation, up to 47 resistance genes, and accurate prediction of resistance for 9 antibiotics
- Testing to support FDA *De Novo* submission in progress

CURETIS' UNYVERO A30 RQ RAPID SAMPLE-TO-ANSWER TESTING PLATFORM



Platform open for partnering to rapidly create a broad menu of tests

First partnering agreement is anticipated to be negotiated in 2020

Key Design Features

- Fully integrated, closed, sample-to-answer MDx platform
- Universal real-time PCR technology for low- to mid-plex testing
- Flexible cartridge fluidics for numerous chemistries and assay formats
- Fast turn-around time of 45-90 minutes
- Light-weight, stackable benchtop design with small footprint
- Modular and scalable from 1 to 8 cartridge slots
- Designed for ease-of-use and flexible deployment in labs and near-patient settings
- Attractive COGS for instruments and reagents

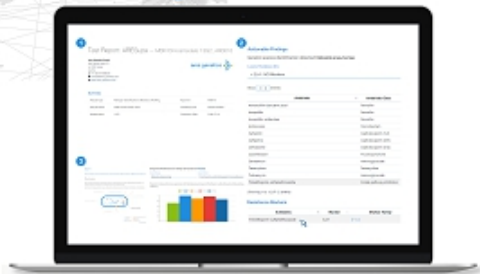
Development Status

- First multiplex PCR successfully demonstrated on fully functional prototypes
- Manufacturing aspects fully specified and in development or implementation phase
- Curetis is aiming to have the the Unyvero A30 RQ platform ready for partnering in 2020

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Curetis' bioinformatics subsidiary with globally leading proprietary AI-powered knowledgebase for AMR informing PCR & NGS-based diagnostics



Global ARESdb Database

- Leading Knowledgebase on quantitative Antibiotic Resistance Markers building on SIEMENS Microbiology Strain Collection

Technology evaluation agreement with leading global IVD corporation

- Includes option to 3 month exclusive negotiation period for a license to ARESdb and ARES Technology Platform for human clinical diagnostic use

Bio-IT AMR agreement with QIAGEN

Pharma R&D agreement with Sandoz

NGS Service Laboratory

ACUITAS LIGHTHOUSE®: DIAGNOSTICS DATA MANAGEMENT PLATFORM FOR ANTIBIOTIC RESISTANT PATHOGENS†

Rapid molecular antibiotic resistance prediction

Development contract for potential State-wide AMR surveillance network



Cloud-based bioinformatics platform powers our ability to rapidly generate meaningful results that have the potential to change the landscape of clinical management and improve outcomes for patients

†In development; For Research Use Only. Not for use in diagnostic procedures.



STRATEGIC BENEFITS



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COMMERCIAL STRATEGY

OpGen and Curetis to realize synergies from a combined commercial effort

- Multiple products to same hospital call points via same sales channel to drive synergies and cost efficiencies



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Expanding global commercial reach through direct sales in U.S. and global distributors

- > Direct sales in the U.S.
- > European distribution through Menarini Diagnostics
- > China distribution through Beijing Clear Biotech
- > 18 distributors covering 43 countries in EU, ME, and Asia

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CURETIS PAN-EUROPEAN DISTRIBUTION BY MENARINI DIAGNOSTICS

Starting with 11 EU countries – option to expand relationship to further EMEA markets and additional product lines

- Menarini Diagnostics
- Other Distributors

Menarini Diagnostics Collaboration (Q1-2019)

- > Covers entire Unyvero A50 product line
- > Initial countries: **BE, CH, DE, ES, FR, IT, LU, NL, PT, SE, UK**
- > Option to expand relationship to further EMEA countries
- > Launch of collaboration at ECCMID 2019



STRATEGIC BENEFITS



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Premier AI-powered bioinformatics solutions for multi-drug resistance diagnostics



Global commercial channel capabilities & partners



Financial leverage, operational synergies, and positive growth-driven business outlook



FINANCIAL CONSIDERATIONS

- We anticipate combined company will be positioned for strong growth profile and sustained value creation
 - FY2018 revenues of \$1.6 million (Curetis) and \$2.9 million (OpGen)
 - Estimated FY2019 combined revenue of \$5-6 million
 - Estimated 2020 combined revenue of \$10-15 million
- Net loss from operations and cash burn anticipated to decrease starting in 2020 due to operating synergies from combined corporate, manufacturing & distribution, R&D, and sales & marketing organizations
- Transaction close contingent on completing interim equity financing as well as debt holder and shareholder approvals from both existing companies
- OpGen has committed to raise interim capital of \$10 million in 2H 2019

EXPECTED COMBINED COMPANY GOVERNANCE TEAM

Combined team has decades of experience in precision medicine, molecular diagnostics and capital markets

Chairman of the Board:
Chief Executive Officer:
Chief Financial Officer:

William Rhodes
Oliver Schacht, Ph.D.
Timothy C. Dec

Board Members:

William Rhodes (Chairman)
Evan Jones (Non-executive role)
Three additional members selected by Curetis
One additional member selected by OpGen
Potential additional candidate recommended
by OpGen

POTENTIAL BUSINESS MILETONES

OpGen / Curetis Business Combination

- Successful shareholder votes and debt holder approvals
- Closing of business combination transaction

Unyvero and Acuitas Rapid DNA tests

- FDA clearances and future FDA submissions
- Unyvero A30 RQ partnering deal(s)
- China NMPA approval and launch for Unyvero HPN test

Ares Genetics

- Completion of Global IVD Corporation technology evaluation and licensing

Thank You!



