

OpGen Data on New Rapid Gene Test and Antibiotic Susceptibility Prediction Algorithms Presented at the 2017 ASM/ESCMID Conference

September 8, 2017

GAITHERSBURG, Md., Sept. 08, 2017 (GLOBE NEWSWIRE) -- OpGen, Inc. (NASDAQ:OPGN) today announced that the Company presented study results on the company's new rapid test in development, the Acuitas® AMR Gene Panel u5.47, and the Acuitas Lighthouse® Knowledgebase for prediction of antibiotic susceptibility at the 2017 ASM/ESCMID Conference on Drug Development to Meet the Challenge of Antimicrobial Resistance. The poster presentation, titled *"Predicting Antibiotic Resistance in Gram-Negative Bacilli by Rapid Detection of Resistance Genes,"* was presented by Terry Walker, Ph.D., OpGen's senior vice president of research and development and the lead author on the study, on September 7, 2017. The conference is being held September 6–8, 2017 at the Boston Park Plaza Hotel.

The poster includes data based on OpGen's analysis of the Merck Study for Monitoring Antimicrobial Resistance Trends (SMART) clinical isolate archive by phenotypic antibiotic susceptibility testing and a high-throughput PCR assay for 126 antibiotic resistance genes. Based on this analysis and additional discovery work, OpGen is developing the Acuitas AMR Gene Panel u5.47, a Research Use Only semi-quantitative PCR test that rapidly detects antibiotic resistance genes. The semi-quantitative PCR test detects 5 bacterial pathogens in clinical isolates and urine specimens and detects 47 antimicrobial resistance genes. The poster highlights *in silico* prediction results using the Acuitas Lighthouse Knowledgebase to interpret test results from the Acuitas AMR Gene Panel. Results of the study showed that the Acuitas Lighthouse Knowledgebase predicted phenotypic antibiotic resistance for 17 antibiotics based on 47 resistance genes, with agreement ranging from 79% to 97% for *E. coli*, 78% to 90% for *K. pneumoniae*; 46% to 84% for *P. aeruginosa*; and 76% to 99% for *P. mirabilis*.

"Antimicrobial drug resistance is an urgent global health concern, and there is a pressing need to provide resistance information to healthcare providers more quickly," said Dr. Walker. "Our data show that the Acuitas AMR Gene Panel accurately detects and quantitates key complicated urinary tract infection pathogens. We are encouraged by the development data for Acuitas Lighthouse Knowledgebase prediction algorithms currently in development. The results from this study suggest the AMR Gene Panel can potentially aid in the rapid detection of resistance genes days ahead of antibiotic susceptibility testing, which is the current standard guide for antibiotic therapy. An early identification of antibiotic resistance genes may improve antimicrobial stewardship and patient outcomes."

About ASM/ESCMID

Antimicrobial drug resistance (AMR) is an urgent global health problem. New antimicrobial drug development is increasingly viewed as a priority by National and International bodies. There are relatively few agents in developmental pipelines and a paucity of identified microbiological targets that can be exploited for drug development. Co-sponsored by the American Society for Microbiology (ASM) and the European Society for Clinical Microbiology and Infectious Diseases (ESCMID), this multidisciplinary meeting will address the challenges, opportunities and current requirements for antimicrobial drug development for AMR.

About OpGen

OpGen, Inc. is harnessing the power of informatics and genomic analysis to provide complete solutions for patient, hospital and network-wide infection prevention and treatment.

OpGen, Acuitas, Acuitas Lighthouse and QuickFISH are registered trademarks of OpGen, Inc.

Forward-Looking Statements

This press release includes statements relating to the company's products and services development efforts. 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, our ability to successfully, timely and cost-effectively develop, seek and obtain regulatory clearance for and commercialize our product and services offerings, the rate of adoption of our products and services by hospitals and other healthcare providers, the success of our commercialization efforts, the effect on our business of existing and new regulatory requirements, and other economic and competitive factors. For a discussion of the most significant risks and uncertainties associated with OpGen's business, please review our filings with the Securities and Exchange Commission (SEC). 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. 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 Contact: Michael Farmer Sr. Director, Marketing 240-813-1284 mfarmer@opgen.com InvestorRelations@opgen.com

Investor Contact: LHA Investor Relations Kim Sutton Golodetz 212-838-3777 kgolodetz@lhai.com or Bruce Voss 310-691-7100 bvoss@lhai.com



OpGen, Inc.