

OpGen's QuickFISH Rapid Pathogen ID Test Demonstrates Clinical Utility and Cost Effectiveness in Community Hospital's Antimicrobial Stewardship Program

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Published study documents annual savings at Winter Haven Hospital of more than \$760,000 from use of the OpGen test, which resulted in a 30% reduction in patient length of stay and a 65% reduction in vancomycin use

GAITHERSBURG, Md., Dec. 17, 2015 (GLOBE NEWSWIRE) -- OpGen. Inc. (NASDAQ:OPGN), a molecular diagnostics and bioinformatics company helping to guide antibiotic therapy and to assist healthcare providers in combatting multi-drug resistant infections, announced today that the American Journal of Clinical Pathology has published a study on the benefits of using the company's rapid Staphylococcus QuickFISH test at Winter Haven Hospital in Winter Haven, Fla.

The study, entitled "<u>The Impact of Implementation of Rapid QuickFISH Testing for Detection of Coagulase-Negative Staphylococci at a Community-Based Hospital</u>", demonstrated that when incorporating QuickFISH testing for Staphylococcus into its Antimicrobial Stewardship (AMS) program, the hospital calculated significant annual savings (\$764,316) through a 30% reduction in length of stay. The hospital achieved this through use of the test as part of its AMS program that helped it to rapidly differentiate between Coagulase-Negative Staph (CoNS), a normal constituent of human skin, and a potentially life-threatening Staphylococcus aureus infection.

The study was published online on December 10, 2015 and will appear in the January, 2016 print edition of the Journal.

"True infections with Staphylococcus aureus present considerable clinical challenges to hospitals, such as increased mortality rates, prolonged hospital stays and additional costs," says Denise L. Koncelik, Laboratory Supervisor and co-author of the study. "Whereas blood culture contamination with Coagulase-Negative Staph can lead to unnecessary coverage with broad-spectrum antibiotic therapy, extended length of stay and unnecessary hospital costs, QuickFISH reports the pathogen ID with the Gram stain result and helped us achieve substantial cost savings and reductions in vancomycin use."

According to the study, the Winter Haven team reported:

- A 90% reduction in time to report pathogen identity (mean of 17.16 hours reduced to a mean of 1.35 hours).
- A 30% reduction in length of stay (mean of 4.89 days reduced to mean of 3.44 days).
- A 65% decrease in days on vancomycin (mean of 2.52 days to mean of 0.89 days).
- Savings from the use of *QuickFISH* with an antimicrobial stewardship program calculated to be \$764,316 using the mean costs per day at a not-for-profit hospital in the state of Florida .
- QuickFISH was shown to be fast and easy to perform in a busy microbiology laboratory, requiring only 5 minutes of hands-on time.

"We believe *Quick*FISH is a significant breakthrough for community hospitals looking to launch effective antimicrobial stewardship programs," says Kevin Krenitsky, M.D., President of OpGen. "*Quick*FISH is the only rapid diagnostic on the market that is fast enough to report pathogen identification along with the Gram stain result, which in turn provides impactful, measurable outcomes such as those documented in this study. *Quick*FISH is a simple and affordable test that can have a meaningful impact on a hospital's AMS program and overall performance. We are looking forward to sharing these powerful study results as we market our rapid pathogen identification products and systems to hospitals throughout the U.S."

About QuickFISH

QuickFISH provides rapid and accurate identification of critical bloodstream infections 1-3 days earlier than conventional identification methods. Conventional methods employ sub-culturing, overnight incubation and phenotypic identification that can take days and could result in use of empiric therapy coverage with broad-spectrum antibiotics until results become available. With QuickFISH, results are available within 30 minutes from the positive blood culture, enabling clinicians to optimize antibiotic therapy sooner. QuickFISH enables de-escalation of broad spectrum antimicrobials (e.g. vancomycin) for patients with contaminated blood cultures (Forrest et al. J Antimicrob Chemo 2006; 58(1):154-158.)

About OpGen

OpGen, Inc. (NASDAQ:OPGN) is developing and deploying precision medicine tools for antibiotic stewardship management in global healthcare settings, adding real benefits to antimicrobial stewardship programs and assisting clinicians with more rapid information about life threatening infections. Using molecular testing and bioinformatics, OpGen offers a full portfolio of *Quick*FISH™ and Acuitas® products including the MDRO Gene Test, the Resistome Test, microbial Whole Genome Sequence Analysis, and Acuitas Lighthouse™ MDRO Management System products. Its *Quick*FISH products are a suite of FDA -cleared and CE-marked diagnostics for rapid molecular testing of positive blood cultures designed to assure appropriate antibiotic therapy. Learn more at www.opgen.com

OpGen Forward-Looking Statements

This press release includes statements relating to the company's products and services. These statements and other statements regarding our 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 rate of adoption of our products and services by hospitals, 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 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.

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