



OpGen Subsidiary Ares Genetics Launches AREScloud

October 21, 2021

- AREScloud is a new, commercial web application aimed at accelerating the analysis of sequenced clinical isolates
- AREScloud offers an advanced solution for infection prevention and control

ROCKVILLE, Md., Oct. 21, 2021 (GLOBE NEWSWIRE) -- [OpGen, Inc.](#) (Nasdaq: OPGN, "OpGen"), a precision medicine company harnessing the power of molecular diagnostics and informatics to help combat infectious disease, today announced that its subsidiary [Ares Genetics](#), which strives to become a leader in bacterial genomics and the AI-powered prediction of antimicrobial resistance (AMR), has commercially launched its AREScloud web application.

Outbreaks of antimicrobial resistant pathogens are a major threat to human health and are a burden to healthcare systems worldwide. To curb the AMR pandemic, effective AMR surveillance and diagnostics are required for infection prevention and better-informed selection of appropriate first- and second-line treatment options.

Leading global health organizations have acknowledged the importance of whole genome sequencing (WGS) of bacterial isolates for effective surveillance and infection prevention and control (IPC). In its 2020 [report](#), the World Health Organization (WHO) states that WGS technology "provides a vast amount of information and the highest possible resolution for pathogen subtyping. The application of WGS for global surveillance can provide information on the early emergence and spread of AMR and further inform timely policy development on AMR control."¹

"The advantage of WGS over other molecular tests such as PCR resides in the technique's potential to provide in a single assay sensitive and precise information on pathogen identity along with information on AMR and virulence," says Dr. Arne Materna, CEO of Ares Genetics. "The challenge of many microbiology laboratories resides in converting WGS-derived complex genome data into actionable information on pathogen identity and AMR, along with treatment options and transmission potential."

AREScloud is designed to help clinical microbiologists, epidemiologists and IPC experts overcome this challenge. The software fully automates data processing - from raw sequence data to report - and offers insights into epidemiologically and etiologically relevant information including pathogen identity, genotype, virulence, plasmids, and AMR. In addition to generating individual sample reports, the AREScloud version that has now been commercially released for the first time introduces unique features for comparative and outbreak analysis.

Under a simple subscription model users can benefit from access to ARESdb, a leading proprietary knowledgebase which contains comprehensive information on genetic and mutational AMR markers as well as advanced machine-learning models for the prediction of antibiograms directly from genomic data.

The performance of AREScloud bioinformatics pipelines for isolate WGS has been validated in several clinical studies. Studies from [2020](#)² and [2021](#)³ demonstrate the pipelines' accuracy and reproducibility for different sequencing platforms, offering users flexibility to choose between widely available Illumina short read data or Oxford Nanopore Technology long read data, an option increasingly adopted for infectious disease applications due to its potential for rapid turn-around times. A multicenter validation [study](#)⁴ from 2020 demonstrates the analytical performance of predicting antibiograms from genomic data (also referred to as predictive antimicrobial susceptibility testing or pAST).

To demonstrate the clinical utility of the AREScloud web application and help identify further areas for optimization in the future, Ares Genetics is actively engaged in discussions with clinical expert users and is collaborating with two major U.S. hospitals on independent studies to evaluate the platform for clinical routine use and for outbreak analysis.

More information on AREScloud is available on the company's [website](#) or can be requested from services@ares-genetics.com.

About OpGen, Inc.

OpGen, Inc. (Rockville, MD, USA) 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, we are developing and commercializing 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. OpGen's product portfolio includes Unyvero, Acuitas AMR Gene Panel and Acuitas® Lighthouse, and the ARES Technology Platform including ARESdb, using NGS technology and AI-powered bioinformatics solutions for antibiotic response prediction.

For more information, please visit www.opgen.com.

Forward-Looking Statements

This press release includes statements regarding the commercial launch of AREScloud, a web application aimed at accelerating the analysis of sequenced clinical isolates. 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 fact that we may not effectively use proceeds from our financings, the realization of expected benefits of

our business combination transaction with Curetis GmbH, the success of our commercialization efforts, the impact of COVID-19 on the Company's operations, financial results, and commercialization efforts as well as on capital markets and general economic conditions, 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. 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, except as required by laws.

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¹ <https://www.who.int/publications/i/item/9789240011007>

² <https://www.frontiersin.org/articles/10.3389/fmicb.2020.01883/full>

³ <https://arestech-public.s3.eu-central-1.amazonaws.com/resources/ARESSiss+ONT+Validation.pdf>

⁴ <https://journals.asm.org/doi/10.1128/JCM.00273-20>



Source: OpGen, Inc.