

bioMérieux and JMI Laboratories partner to fight antimicrobial resistance (AMR)

According to The Lancet, “there were an estimated 4.95 million deaths associated with bacterial AMR in 2019, including 1.27 million deaths attributable to bacterial AMR.

bioMérieux and JMI Laboratories (JMI) are announcing a six year partnership to undertake collaborative projects evaluating the performance and increasing potential of rapid and innovative microbiology diagnostics as important tools in the battle against AMR. JMI Laboratories is a recent member of the Element Group, a leading global Testing, Inspection and Certification (TIC) company, through acquisition in November 2021.

bioMérieux is recognized globally for its advancements in rapid and actionable diagnostics, such as faster pathogen identification (ID) and antimicrobial susceptibility testing (AST) to support antimicrobial stewardship (AMS) efforts. This includes the VITEK® 2, VITEK® REVEAL™, the VITEK MS® platform and ETEST® gradient strips.

JMI is a highly regarded market leader in antimicrobial resistance monitoring studies, by specializing in the advancement of antimicrobial therapies, state-of-the-art surveillance, and post-market observations and insights in the AST field. In particular, JMI established the SENTRY Antimicrobial Surveillance Program in 1997 to monitor worldwide pathogens and the changes in resistance patterns through centralized testing and utilizing reference susceptibility methods. It is now one of the longest running antimicrobial surveillance programs in the world.

Experience, Presence, and Front-Line Service

VITEK® 2 delivers AST results that detect resistance patterns accurately to drive appropriate antibiotic therapy, while the VITEK® 2 ADVANCED EXPERT SYSTEM™ (AES) provides automated review and validation of these AST results, complementing the expertise of the microbiologist to help minimize human error.

While Antimicrobial Stewardship Programs (ASPs) are critically dependent on rapid, reliable testing, there is an essential need for AST results to be continuously evaluated against new and emerging strains of pathogens from across the globe that may have developed new resistance mechanisms or additional levels of resistance to current treatments. Through this partnership with JMI, bioMérieux will be able to continually assess AST/AES results and validate against evolving global antimicrobial susceptibility data collected through the JMI-led SENTRY program.

VITEK2® AST/AES and SENTRY Surveillance

The JMI Laboratory-led SENTRY antimicrobial surveillance program collects about 40,000 clinical isolates of bacteria and fungi every year through a network of more than 150 medical centers from 35+ countries worldwide to help monitor the prevalence of antimicrobial resistance. The collaboration between JMI and bioMérieux is aligned with the medical vision of bioMérieux centralized around AMR/AMS. “As global organizations committed to world-class antimicrobial stewardship as a way to combat AMR, we’ve partnered to establish and address contemporary issues of antimicrobial resistance and ensure accurate AST results to guide effective treatment and optimize patient care,” said Mark Miller, Chief Medical Officer, bioMérieux.

“Bringing together these two expert organizations to fight the increasing problem of bacterial AMR can help to rescue the world in this potential crisis,” said Dr. Elisabeth Lackner, Chief Scientific Officer of Element. “Combining the 20 years of JMI’s cutting-edge work, through microbiology and molecular testing services and the development of new antimicrobials and clinical trial support, together with bioMérieux’s 60 years in modern in vitro diagnostics development and expertise creates a worldwide powerhouse that will transform microbiology diagnostics and strengthen the development of new antimicrobials and clinical trial support to fight AMR.”

“We are excited to partner with bioMérieux on these projects as we appreciate their commitment to improving patient care by providing accurate microbial identification and antimicrobial susceptibility testing results,” said Mariana Castanheira, Chief Scientific Officer of JMI Labs. “Our industry-leading scientists look forward to managing these studies testing challenging organisms, including those carrying important mechanisms of resistance.”

Understanding the epidemiology of resistance mechanisms through active antimicrobial surveillance is vital for the improved detection of circulating resistance factors across geographies.

“Through our combined efforts, we can proactively alert the scientific community of potential growing threats and effectively steer antimicrobial research and development,” said François Lacoste, Executive Vice President, Research & Development, bioMérieux.

About Element

The Element Materials Technology Group is one of the world’s leading global providers of testing, inspection, and certification services for a diverse range of products, materials, and technologies in advanced industrial supply chains where failure in use is not an option. Headquartered in London, UK, Element’s c.9,000 scientists, engineers, and technologists, work across a global network of over 270+ laboratories, support customers from early R&D, through complex regulatory approvals, and into production ensuring their products are safe and sustainable and achieve market access.

Element has achieved the highest ESG ranking in the testing, inspection and certification industry and a place in the top 150 companies in the world from Sustainalytics, a global leader in ESG research and data. This is built on industry-leading environmental commitments which adopt science-based targets and commit to net zero emissions across its entire global business by 2035.

About JMI Laboratories

Established in 2000 by Ronald N. Jones, MD, JMI Laboratories are microbiology specialists in the development of antimicrobials.

Our services include managing the drug discovery process, monitoring emerging resistance trends, and creating publications to highlight the efficacy of currently approved antimicrobials.

Outsourcing a company’s microbiology functions to JMI Laboratories assures access to the highest level of expertise without the requirement to maintain a cost prohibitive in-house staff.