

> OUR COMPANY

Akonni Biosystems develops, manufactures, and will market integrated molecular diagnostic systems that can test for multiple disease indicators, industrial contaminants, food pathogens, or bioterror agents with significantly greater accuracy and speed than traditional diagnostic tools, yet at lower cost.

Based in Frederick, Maryland, Akonni has exclusive license from Argonne National Laboratory to a portfolio of over a dozen patents and has filed 35 additional patent applications. Our systems represent more than 18 years and \$32 million of funded research by United States Department of Energy (DOE), Department of Defense (DOD), Department of Justice (DOJ), Centers for Disease Control (CDC), and National Institutes of Health (NIH).

OUR TECHNOLOGY

In 2004, we acquired an exclusive license to Argonne National Laboratory's gel-drop array technology for medical applications. Since then, through a series of government grants and contracts, we have significantly advanced the technology by improving the overall system's capabilities from sample preparation to final result. Currently, with more than 100 scientific publications and more than a dozen patents exclusively licensed to Akonni, our TruDiagnosis approach is well positioned to be the industry leader in providing accurate, rapid, easy-to-use, and affordable molecular diagnostic testing.

OUR HEALTH CARE PRODUCTS

Leveraging our strong engineering and molecular biology capabilities, we are focusing on applications in which rapid molecular testing is particularly important, such as the diagnosis of infectious diseases. Products in our near-term pipeline include multiplex assays for detecting Multidrug-resistant Tuberculosis (MDR-TB); upper respiratory infections, including respiratory syncytial virus (RSV) and Influenza A; and hospital acquired infections such as Methicillin-resistant *Staphylococcus aureus* (MRSA).

Our TruDiagnosis solutions are delivered as an integrated system and include:

- Bench-top or high-throughput test readers for cost effectively detecting results
- Gel-drop arrays for identifying the presence of pathogens, including complete sets of both positive and negative controls
- Software for analyzing results and generating reports
- Sample preparation methodology for extracting DNA or RNA from clinical volume samples in less than five minutes and without centrifuging
- Multiplex amplification technology for increasing DNA or RNA concentration to easily detectable levels.

By providing our customers with standardized operating procedures and automating otherwise complicated manual laboratory procedures, procedures, we enable them to accurately test for multiple disease states from a single patient sample and receive results in two hours or less. Additionally, unlike existing multiplex technologies that face significant challenges with regard to verification and validation testing, our gel-drop array based format is highly conducive to adding complete sets of positive and negative controls and reference materials for each assay. This results in more predictive and verifiable results.

OUR VISION

We expect to expand our product line to include a full range of instruments and assays serving the needs of reference and peripheral laboratories and point-of-care settings, such as health clinics and physician offices. We also see our solutions reaching into other market areas, including the cancer and pharmacogenetics testing markets and testing for industrial contaminants, food pathogens, or bioterror agents. The TruArray gel-drop array platform is also fully capable of performing immuno-based assays across these similar application areas. We anticipate gaining FDA approval in the future for our first commercialized assays. > CO | 001.01 | 10.10