



**FOR IMMEDIATE RELEASE:**

## **Akonni Biosystems Announces Launch of TruSentry™ System for Rapid, Low-cost Genetic Screening on a Microarray**

**Automated solution provides ability to analyze over 3,000 samples a day for tens to hundreds of genetic markers, including region-specific variants of drug-resistant pathogen strains**

**FREDERICK, MD. – February 1, 2011** – Akonni Biosystems, a molecular diagnostics company that develops, manufactures and plans to market a fully integrated multiplex system for simultaneously identifying and differentiating hundreds of genetic signatures from a single sample, today announced availability of its TruSentry system for early access customers. This new, fully automated solution is designed for government institutions and large centers seeking to increase their capacity for rapid identification of infectious microorganisms and drug resistant variants at a significantly lower overall cost.

TruSentry is a first-of-its-kind approach that brings together Tecan's Freedom EVO® 200 liquid handling system with Akonni's TruTip™ technology for ultra-rapid sample extraction and TruArray® microarray platform for low-cost, highly-multiplexed screening. The fully automated, sample-to-answer system significantly increases throughput compared to other systems available in the market today that are based on real-time PCR, magnetic bead, or traditional microarray technologies. The highly modular nature of Akonni's technology enables it to more rapidly extract pathogens from a broader range of clinical samples (such as blood, sputum, nasal wash, urine, stool or CSF), and to more quickly develop and launch new and custom assays, providing users with complete flexibility to test for new targets as they become known.

Working with Akonni on this new solution is Tecan U.S. of Durham, North Carolina, who will provide the liquid handling capabilities and the optical detection platform.

Dr. Charles Daitch, CEO of Akonni Biosystems, explains, "With a rapidly growing and mobile human population coupled to the ever present threat caused by expanding genetic variants of drug-resistant pathogen strains, it is becoming increasingly important to have the ability to proactively

protect communities from the rapid spread of disease.” Dr. Daitch continues, “Current microarray, bead-based and PCR-based systems are severely limited in that they are either too costly for high-throughput screening applications, are difficult to scale, or severely restrict the types of clinical sample matrices and number of diseases that can be addressed simultaneously. Further, most of these systems do not afford the flexibility to rapidly design tests that incorporate newly identified variants or region-specific targets. In TruSentry, we are introducing the industry’s first system that combines affordable screening for pathogens on a microarray platform with the ability to simultaneously detect tens to hundreds of disease-causing agents and their variants.”

Capable of processing from as few as 8 to more than 3,000 unique samples per day, initial solutions for TruSentry will include several low-cost, highly-multiplexed applications. These applications include tests for identifying: (i) seasonal influenza viruses, with sub typing for oseltamivir resistance; (ii) other viruses that cause respiratory ailments, such as parainfluenza virus, respiratory syncytial virus, monkeypox virus, human respiratory virus, adenovirus, corona virus and severe acute respiratory syndrome (SARS); (iii) the most common bio-security threat agents, including *Bacillus anthracis*, vaccinia virus, and *Yersinia pestis*; (iv) *Mycobacterium tuberculosis* and its multidrug-resistant strains; and (v) methicillin-resistant *Staphylococcus aureus* (MRSA).

Future applications will include highly-multiplexed solutions for screening for gastroenteritis agents; for blood-borne pathogens, such as hepatitis A, B and C viruses; and for common sexually-transmitted bacteria, including *C. trachomatis*, *N. gonorrhoeae*, *M. genitalium*, *M. hominis*, and *U. urealyticum*. The system is also easily adapted for other purposes, e.g. newborn screening, cancer screening, or companion diagnostic applications.

To view a video of TruSentry in action, please visit <http://www.akonni.com/trusentry-in-action/>. For more information, call 301.698.0101, email Akonni at [info@akonni.com](mailto:info@akonni.com), or visit our website at <http://www.akonni.com>.

*The TruSentry System is For Research Use Only. Not for use in diagnostic procedures. No claim or representation is intended to provide information for the diagnosis, prevention or treatment of a disease.*

### **About Akonni Biosystems**

Akonni Biosystems was founded in 2003 and has over 20 patents issued with 13 others pending. The company’s core technology is based on work developed at Argonne National Laboratory and the Engelhardt Institute of Molecular Biology and utilizes gel-drop array technologies optimized for medical applications. Supported by a series of government grants and contracts from NIH, CDC, DOE, DOD, NIJ, and NSF, the company has significantly advanced the original technology by improving the system’s capabilities from sample preparation to final result. Commercial products and products in its near-term pipeline include rapid sample preparation methodologies for ultra-rapid nucleic acid extraction (TruTip) and multiplex panel assays for detecting multidrug-resistant tuberculosis (MDR-TB), upper respiratory infections, viral encephalitis, and hospital-acquired infections (MRSA).

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