

## **Bruker Announces Acquisition of MERLIN to Add Selected Antibiotic Resistance and Susceptibility Testing to its *MALDI Biotyper*® Microbial Identification Platform**

*MERLIN will become Bruker's Center of Excellence for specialty biochemical and selected, high-value MALDI Biotyper-based antibiotic resistance and susceptibility testing*

BREMEN, Germany – September 26, 2017 - Bruker today announced the closing of its acquisition of MERLIN Diagnostika GmbH, located near Bonn, Germany. MERLIN has in-depth expertise in products, services and consulting in the fields of antibiotic resistance testing (ART) and antibiotic susceptibility testing (AST). MERLIN's technology and product portfolio for human and veterinary antibiotic resistance and specialty susceptibility testing further expands Bruker's microbiology business, which is based on rapid, broad-based microbial identification using Bruker's market-leading *MALDI Biotyper* (MBT) platform for proteomic fingerprinting. Financial details were not disclosed.

The principle of the MERLIN *MICRONAUT*™ system for specialty susceptibility testing is the phenotypic detection of microbial growth inhibition in the presence of antibiotics. Its microdilution procedure is a standardized, globally accepted reference method for the determination of minimal inhibitory concentrations (MICs). Standard and special AST plates are available for in-vitro diagnostic use according to the EU directive EC/98/79 for a wide spectrum of clinically important microorganisms. MERLIN's focus is on the detection of major resistance phenotypes, i.e. MRSA, VRE, MBL, ESBL, KPC, AMP-C, and OXA-48. In addition, MERLIN has the ability to customize antibiograms for more than 200 antibiotics. Due to this flexibility, the *MICRONAUT* system enables laboratories to adjust their testing profiles to the rapid spread of certain new resistances. *MICRONAUT* software for identification and susceptibility testing includes an expert plausibility check, and has for several years already offered an interface to Bruker's *MALDI Biotyper*.

MERLIN is a member of the German Diagnostic Industry Association (VDGH) and the Paul-Ehrlich-Society for Chemotherapy ([www.p-e-g.org](http://www.p-e-g.org)), and MERLIN is involved in various studies related to antibiotic resistance, e.g. the monitoring of drug resistance among clinically relevant pathogens in Germany and central Europe. For such multicenter studies involving human and veterinary medicine, MERLIN offers the design and production of dedicated MIC study plates, as well as scientific consulting and support. MERLIN acts as a reference laboratory for annual inter-laboratory tests by the INSTAND organization ([www.instand-ev.de](http://www.instand-ev.de)) for quality assurance in microbiology.

MERLIN will continue to serve all existing collaboration and distribution partners, as well as all OEM customers and end customers after the acquisition.

Dr. Esther Pfeil, Managing Director of MERLIN Diagnostika GmbH, commented: "We are very pleased to be part of Bruker's microbiology business now, as we have been collaborating with Bruker already for several years. Our product and service offerings in the field of antibiotic susceptibility testing (AST) complement the *MALDI Biotyper* system for fast and efficient microbial identification. With our proven expertise in the field of AST, we aim to accelerate further assay additions to the *MBT-STAR*™ consumables portfolio for selected, rapid antibiotic resistance and susceptibility testing on the *MALDI Biotyper*."

Dr. Johann-Wolfgang Wittke, Managing Director of the Medical Laboratory Bremen (Germany), said: “Our laboratory has been working with Bruker’s *MALDI Biotyper* for microbial identification and the *MICRONAUT* system from MERLIN for many years. The *MICRONAUT* microdilution approach with the determination of true minimal inhibitory concentrations has leading analytical performance and reliability. We use MERLIN’s custom-tailored microtiter plates to answer different microbiological questions, or for the detection of resistance mechanisms. This flexibility is unmatched in the market, and I am looking forward to further integration, synergies and reduction of hands-on time.”

Dr. Wolfgang Pusch, Executive Vice President for Microbiology & Diagnostics at Bruker Daltonics, added: “MERLIN adds expertise and an impressive portfolio of flexible specialty products for antibiotic susceptibility testing to Bruker’s clinical and applied microbiology business. Over time, we expect that MERLIN will further expand our selected, high-value ART and AST assay portfolio for the *MALDI Biotyper*.”

### **About the Bruker *MALDI Biotyper* (MBT) Platform**

The *MALDI Biotyper* family of systems enables molecular identification of microorganisms like bacteria, yeasts and fungi. Classification and identification of microorganisms is achieved reliably and quickly using proteomic fingerprinting by high-throughput MALDI-TOF mass spectrometry. The *MALDI Biotyper* uses a molecular approach based on specific proteomic fingerprints from bacterial strains. Many published studies have highlighted the greater accuracy and lower cost offered, as well as typically much faster time-to-result (TTR).

Applications of various *MALDI Biotyper* solutions include clinical routine microbial identification, environmental and pharmaceutical analysis, taxonomical research, food and consumer product safety and quality control, as well as marine microbiology. In many European and international laboratories the *MALDI Biotyper* has replaced classical biochemical testing for bacterial identification in the past few years due to the accuracy, speed, extensive species coverage, ease of use and cost effectiveness of the system. Traditional biochemical techniques detect different metabolic properties of microorganisms, can take many hours or even days for completion, and they often lack specificity.

The robust *MALDI Biotyper* requires minimal sample preparation and offers low consumables cost. The products of the *MALDI Biotyper* family are available in a research-use-only (RUO) version, as the U.S. FDA-cleared *MALDI Biotyper CA System*, or in an IVD-CE version according to EU directive EC/98/79. The *MALDI Biotyper* also has medical device registrations in numerous other countries. RUO versions of the *MALDI Biotyper* allow selected, high-value antimicrobial resistance tests.

### **About Bruker Corporation (NASDAQ: BRKR)**

For more than 55 years, Bruker has enabled scientists to make breakthrough discoveries and develop new applications that improve the quality of human life. Bruker’s high-performance scientific instruments and high-value analytical and diagnostic solutions enable scientists to explore life and materials at molecular, cellular and microscopic levels. In close cooperation with our customers, Bruker is enabling innovation, productivity and customer success in life science molecular research, in applied and pharma applications,

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Figure 1: *MICRONAUT* AST plates provide phenotypical detection of major resistance phenotypes

