

## Biognosys Presents Technological Innovations and Scientific Progress to Make the Proteome Actionable for Life Science Research at the HUPO 2023 World Congress

- Library-free and machine learning-augmented data analysis with Spectronaut® 18 yields industry-leading protein quantification and throughput for DIA proteomics
- Novel collaborative research using the TrueDiscovery® and TrueTarget® CRO services platforms demonstrates the quantitative precision and wide applicability of mass spectrometry proteomics for biomarker discovery and drug development
- Biognosys' iRT Kit is cornerstone of Bruker's novel real-time performance monitoring within ProteoScape™ analytics for timsTOF instruments

**September 15, 2023. ZUERICH, Switzerland and CAMBRIDGE, Massachusetts--GlobeNewswire--** Biognosys, a leading inventor and developer of mass spectrometry (MS)-based proteomics solutions, announced today their attendance at the [Human Proteome Organization \(HUPO\) World Congress](#) from September 17 to September 21 in Busan, South Korea.

During the Technological Advancements session on Tuesday, September 19, Biognosys' Chief Technology Officer Dr. Lukas Reiter will give a Keynote presentation "Bottom-up Proteomics using DIA" on the evolution, recent developments, and future of data-independent acquisition (DIA) in MS-based proteomics. Biognosys also will present ten posters showcasing technological innovations and novel scientific data with its proprietary proteomics research services, software, and kits. Biognosys' team of scientific experts will be exhibiting and offering software demos at booth #408.

Biognosys' strategic partner Bruker will introduce novel concepts for the timsTOF platform and Bruker ProteoScape™ software suite, forging synergies with Biognosys' Spectronaut® software and iRT Kit to offer customers enhanced capabilities for high-fidelity, high-throughput proteomics.

"I am thrilled to present significant advances with Biognosys' MS proteomics technology and solutions that bring us again closer to making the proteome truly actionable for research, drug development, and clinical decision-making," **commented Dr. Lukas Reiter**. "Our continuously improving software and well-established kits empower users of major MS instruments to perform cutting-edge, hassle-free workflows for deep, high-throughput, reproducible proteomics research in-house. Our CRO services provide biopharma and diagnostics customers with unparalleled precision and insights to expedite biomarker discovery and drug development."

### **Spectronaut® 18: Industry-leading depth, throughput, and efficiency for DIA data analysis**

Spectronaut 18, the latest version of Biognosys' flagship software, offers a significantly further improved identification rate and quantification quality, as well as various new features that make

DIA proteomics more efficient and scalable. At HUPO, Biognosys will present three posters highlighting powerful applications of Spectronaut 18 for comprehensive proteome quantification. Remarkable innovations include the utilization of directDIA+™ for faster, library-free analysis, and deep learning with DeepQuant to enhance the quantification of low-abundant proteins through a neural network for interference correction of precursor quantities.

### **TrueDiscovery®: Proven precision for biomarker discovery in oncology and neuroscience**

Biognosys will present three posters showcasing biomarker discovery and drug development research conducted with esteemed collaborators, including Genmab, Johns Hopkins University School of Medicine, Stanford University, and University of Zuerich. The studies utilized Biognosys' TrueDiscovery platform for unbiased proteomics and collectively demonstrate the quantitative precision, robustness, and wide applicability of MS proteomics for oncology and neuroscience research. A fourth poster evaluates the technological and biological complementarity of TrueDiscovery and the Olink® Explore affinity-based platform of Olink Proteomics AB for plasma proteomics.

### **TrueTarget®: Efficient target deconvolution and binding sites mapping in drug discovery**

Biognosys' TrueTarget platform leverages limited proteolysis mass spectrometry (LiP-MS) to facilitate drug target identification and validation. A first poster, in collaboration with InterAx, demonstrates TrueTarget's unique capabilities in deconvoluting the target of a G-Protein Coupled Receptor (GPCR) antagonist, mapping its binding sites, and providing structural insights on the mechanism of action. A second poster, in collaboration with Samsara Therapeutics, illustrates how target deconvolution with TrueTarget, followed by unbiased proteome profiling with TrueDiscovery, enabled the efficient identification and validation of target proteins and enhanced understanding of biological systems in novel therapeutic development.

### **Biognosys and Bruker: Seamless workflows for dia-PASEF® and QC on timsTOF**

To ensure optimal MS performance, Bruker introduces TwinScape™, a digital twin for the timsTOF platform, interlinked with ProteoScape software to support real-time quality control (QC) with the Biognosys iRT Kit. The peptides in the iRT Kit have been carefully optimized for stability, sensitivity and retention time spacing, and this iRT Kit can now be used for system QC in Bruker's proteomics software ProteoScape. Biognosys' Head of Business Development – Products, Dr. Sira Echevarria, will present how Spectronaut offers improved library-free proteomics analysis for dia-PASEF using directDIA+ during Bruker's HUPO lunch seminar on Tuesday, September 19.

Visit [biognosys.com/hupo-2023](https://biognosys.com/hupo-2023) for a complete overview of Biognosys' presence at HUPO. Posters will be available for download from Friday, September 22.

## About Spectronaut®

Spectronaut is Biognosys' flagship data analysis software for data-independent acquisition (DIA) mass spectrometry (MS) based proteomics.

The software employs advanced Search and Artificial Intelligence (AI) algorithms to translate data into actionable insights for life science research. Spectronaut enables reproducible and precise quantification of thousands of proteins in a single experiment and provides multi-dimensional insights into protein expression, function, and structure across all major biological species and sample types. For more information, visit [spectronaut.com](https://spectronaut.com).

## About TrueDiscovery®

The Biognosys TrueDiscovery platform offers integrated proteomics solutions across the entire drug development pipeline.

TrueDiscovery is powered by Hyper Reaction Monitoring (HRM) mass spectrometry, an advanced Data Independent Acquisition (DIA)-based protein quantification technology co-invented and patented by Biognosys.

TrueDiscovery is the only platform that searches the complete proteome to quantify thousands of the most relevant proteins, including an unlimited number of proteoforms. The platform enables the deepest unbiased profiling of tissue and biofluids proteomes with unbeatable specificity on a large scale. The generated data are highly reproducible and easily transferrable to clinical assays. Studies can be performed in a GLP certified and GCP compliant environment. For more information, visit [truediscovery.bio](https://truediscovery.bio).

## About TrueTarget®

The Biognosys TrueTarget proteomics platform uniquely addresses the most pressing challenges in early drug discovery by identifying on- and off-targets to accelerate and de-risk drug development throughout the pipeline.

TrueTarget is powered by Limited Proteolysis Mass Spectrometry (LiP-MS), a proprietary, patented chemoproteomics technology co-developed by Biognosys. TrueTarget is the only tool to probe structural changes across the complete proteome with peptide-level resolution, providing unique insights into compound binding and target identification.

The platform enables elucidating mechanisms of action and revealing unanticipated toxicities. For more information, visit [truetarget.bio](https://truetarget.bio)

## About Biognosys

At Biognosys, we believe that deep proteome insights hold the key to breakthrough discoveries that transform science for better lives. With our versatile portfolio of next-generation proteomics solutions, including the TrueDiscovery®, TrueTarget®, and TrueSignature® research service platforms, our flagship software Spectronaut®, and the PQ500™ kit, we make the proteome

actionable to empower research, drug development, and clinical decision-making. Our solutions provide a multi-dimensional view of protein expression, function, and structure in all biological species and sample types. Our unique, patented technologies utilize high-resolution mass spectrometry to quantify thousands of proteins with industry-leading precision, depth, and throughput. Through our strategic partnership with Bruker (Nasdaq: BRKR), we make proteomics globally accessible. For more information, visit [biognosys.com](https://www.biognosys.com).

## Media Contact

### **Yves Serroen**

Head of Marketing and Communications

Phone +41 (0) 44 244 50 07

[yves.serroen@biognosys.com](mailto:yves.serroen@biognosys.com)