

Biognosys' Spectronaut[™] software now supports Thermo Scientific[™] Q Exactive[™]

New Spectronaut[™] software release to support data-independent acquisition (DIA) on Thermo Scientific[™] Q Exactive[™]

August 28, 2013 – Zurich-Schlieren (CH) – Biognosys AG, a Swiss Proteomics Company, announced today the second release of its <u>SpectronautTM</u> software for analysis of Hyper Reaction Monitoring (HRM) data. <u>HRM</u> is a targeted proteomics technology that enables reproducible and accurate quantification of 1000s of proteins in a single instrument run. It thereby bridges the gap between the scale of shotgun proteomics with the ability to identify many proteins and the quantitation accuracy of MRM/SRM that allows high quality quantification of smaller number of proteins.

HRM is based on data-independent acquisition (DIA) performed on the new generation of mass spectrometric systems. DIA on the Thermo Scientific[™] Q Exactive[™] hybrid quadrupole-Orbitrap mass spectrometer enables acquiring MS/MS signals from all detected precursor ions present in the sample similar to SWATH[™] Acquisition performed on AB SCIEX TripleTOF® 5600+ System. HRM combines DIA with high resolution MS/MS, large spectral libraries and a targeted approach for data deconvolution and analysis.

Spectronaut[™] software was first launched by Biognosys in January 2013 for analysis of SWATH data. The new software release also supports analysis of DIA data generated on Q Exactive. Together with this release Biognosys provides an acquisition method for Q Exactive that has been optimized for high content quantification experiments.

Other new features of this Spectronaut[™] release include advanced HRM-specific peak scoring and new visualization options like a multiple-run alignment view. Spectronaut[™] uses a proprietary high speed data format that allows processing of 100'000s transitions within minutes. Furthermore, Spectronaut[™] incorporates advanced mProphet algorithms (Nature Methods, 2011) adapted for HRM to enable accurate signal detection and statistically valid peak scoring. The powerful principle behind Spectronaut[™] is the integration of the software algorithms with a reagent kit – <u>HRM Calibration Kit</u> – that provides optimal customized parameter calibration for any end-user system independently on the specific chromatography and mass spectrometer set-up. Spectronaut[™] is a user-friendly desktop application that can be installed and run on a standard notebook.

Biognosys currently offers its <u>HRM</u> technology as a service for discovery applications and highly multiplexed protein quantification. With the second Spectronaut[™] release that is free for academic researchers Biognosys expands its customer base to Q Exactive users facilitating further adoption of HRM technology and supporting open innovation and collaboration between applied and academic research.



About Biognosys

Biognosys is the leading proteomics company offering services and products for highly multiplexed protein quantification. Founded in 2008 as spin-off from the lab of proteomics pioneer Ruedi Aebersold at ETH Zurich, Biognosys is dedicated to transform life science with superior technology and software.

Contact: info@biognosys.ch, www.biognosys.ch