

Streamlined biopharma data workflows for MS applications

The complexity of lifesaving biopharmaceuticals brings significant challenges from research and discovery, through to development and quality control. Some of the toughest tasks for analysts are adequately characterizing these large molecules and subsequently monitoring their quality attributes. Mass spectrometry (MS) is a key analytical technique used for the analysis of biotherapeutics. To allow users to focus on solving challenges while leveraging their MS data more efficiently, integration between data acquisition and processing tools is of high value.

Data acquisition

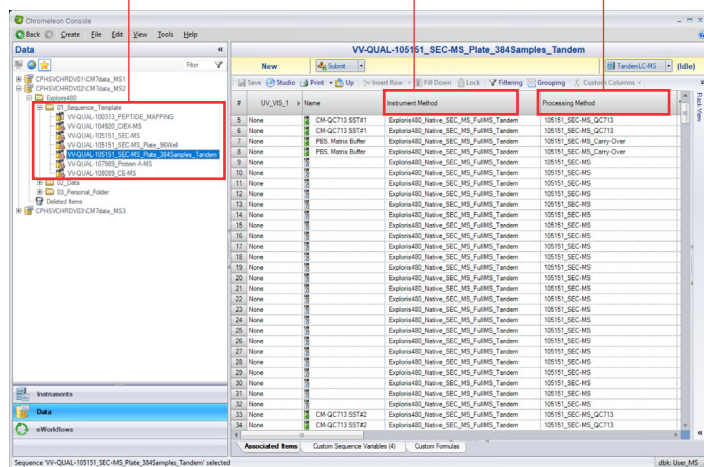


Thermo Scientific™ Chromeleon™ Data System (CDS) plus mass spectrometry

brings streamlined chromatographic and MS workflows with a compliance-ready single software platform.

- Comprehensive compliance tools
- Full enterprise capabilities
- Instrument control and data acquisition
- Automation, compliance-ready data processing with simplified customizable reporting
- Control of HRAM-MS or MS/MS, as well as front-end chromatography systems, including many third-party LC systems

Templates for each MS workflow How to acquire MS data How to process and report MS data

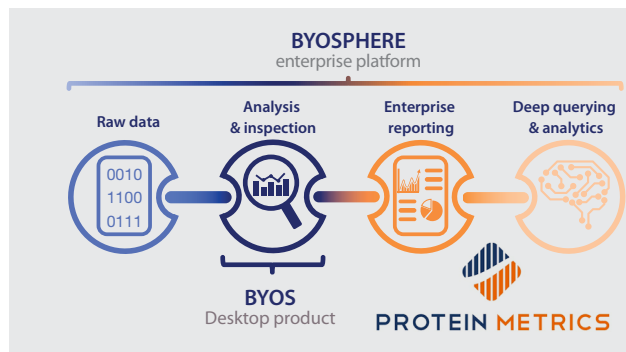


- User-defined analytical workflows
- Chromeleon eWorkflow™ procedures simplify sequence creation and data acquisition

Advanced data processing

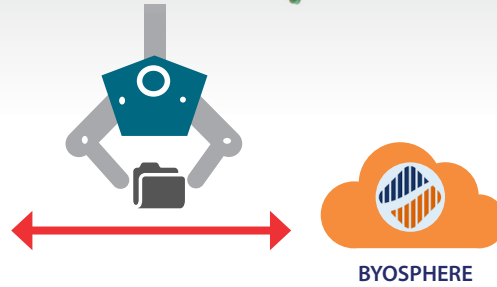
Benefits of Byosphere™

- Byosphere™ enterprise platform combines biotherapeutic MS data, analysis, and reporting in one environment
- Byosphere™ software is available for private cloud or on-premise use, or as a cloud service (SaaS)



Data transfer

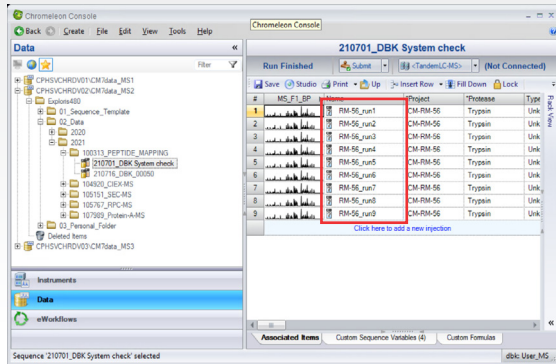
- Data transferred automatically to Byosphere™
- Automated for substantial time savings
- Data structure maintained on both platforms



- Data structure mirrored in Byosphere™
- Easy sample selection for subsequent processing (no .csv sample lists needed)

Chromeleon CDS Enterprise

Instrument control—MS data generation and storage—simple MS data processing

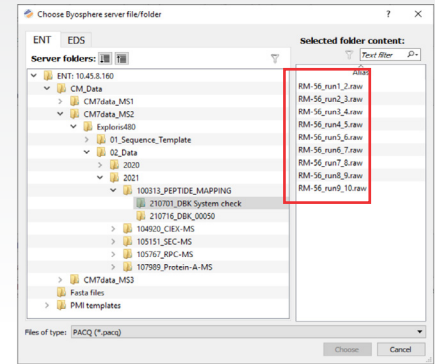


Automatic data synchronization
(raw and metadata)

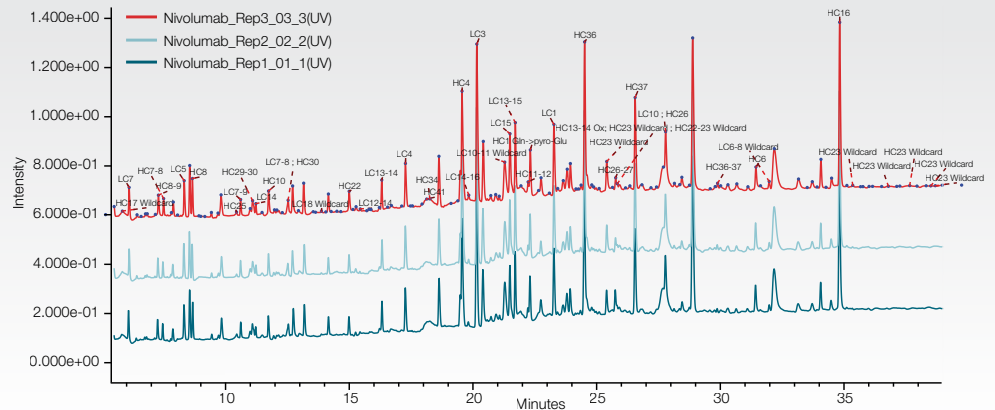


Protein Metrics Byosphere™

Advanced MS data processing



- UV trace can also be imported into Byosphere™ from Chromeleon CDS
- The peaks are labeled as identified peptides for quick visual inspection
- UV trace is effortlessly integrated for quantitative information
- Straightforward comparison of replicates or different samples within the same or different studies



Key benefits

- Exceptional data generation with operational simplicity using Chromeleon CDS
- Fast, simple and automated data export from Chromeleon CDS
- Streamlined data import and processing within the Byosphere™ enterprise platform



Automatic data synchronization

Recent progress in MS-based workflows and case studies form a biopharmaceutical development lab.

Register to watch our on-demand webinars and learn more!

Learn more at thermofisher.com/chromeleon

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