

## Cerno Unveils Breakthroughs in Accurate Small Molecule and Unknown Compound Identification at the 2025 American Society for Mass Spectrometry (ASMS) Meeting

New data reveals how Cerno's universal mass spectrometry software delivers near-HRMS performance on standard instrument, transforming confidence in compound identification across all platforms

Las Vegas, NV, May 27, 2025 – Cerno, a technology company providing advanced software for mass spectrometry data analysis, will present new data describing significant improvements in the accuracy of determining the elemental composition of unknown compounds. The data will be shared during two poster sessions at the American Society of Mass Spectrometry (ASMS) Annual Meeting, in Baltimore MD, on June 1-5, 2025. The Cerno team will also demonstrate their MassWorks and GC/ID software and meet with conference attendees at booth #121.

"Across a wide range of industries, there is a need to accurately separate closely located mass spec signals for more confident qualitative analysis and accurate quantitation," said Yongdong Wang, Ph.D., Chief Executive Officer, Founder and President of Cerno. "However, accessibility to the technology needed for this is challenging, due to its prohibitive cost and complexity. At ASMS, we will present how Cerno's software uniquely addresses this challenge, delivering accurate deconvolution that works with any mass spectrometer. By eliminating the barriers of instrument dependency and high cost, our solution empowers scientists across biopharma, environmental, petroleum, and other industries to achieve greater accuracy and confidence in their mass spec analysis."

## Details of the poster presentations are as follows:

**Title:** Combining Accurate Mass from High Resolution and Spectral Accuracy from Lower Resolution Towards Unique Elemental Composition Determination

Session Date: Thursday, June 5

Time: 10:30 a.m. to 12:00 p.m. and 1:00 p.m. to 2:30 p.m.

Abstract Number: ThP 474

High-resolution mass spectrometry (HiRes MS) is widely used for identifying unknown compounds due to its excellent mass accuracy, often within 1–5 ppm. However, reliably determining the elemental composition of an unknown remains challenging because HiRes MS typically lacks spectral accuracy (SA), which can help eliminate false positives. In contrast, low-resolution (LowRes) MS offers better spectral accuracy but lower mass accuracy. This poster demonstrates the use of Cerno's software to integrate HiRes and LowRes measurements into a single analysis, towards unique elemental composition assignments for unknowns.

**Title:** Accurate Mass Full Spectral Monitoring and Analysis of Both the Analyte and Reference Standard with Ion Chromatography – Mass Spectrometry

Session Date: Thursday, June 5

Time: 10:30 a.m. to 12:00 p.m. and 1:00 p.m. to 2:30 p.m.

## Abstract Number: ThP 091

This poster highlights the challenges of ion chromatography–mass spectrometry (IC/MS) for the detection of ions in complex sample matrices, which often interfere with target analytes. MS of much higher resolution is typically required to resolve these interferences, which are often expensive or difficult to implement. This poster introduces a method that works with existing LowRes MS and provides accurate mass assignment to aid in the qualitative identification of ions involved and the ability to deconvolute and spectrally resolve mutually interfering ions, including isotope-labelled internal standards for more accurate quantitation.

## About Cerno

We are revealing new possibilities in mass spectrometry analysis through transformative software. Our vendor-neutral platform works seamlessly across all mass spec instruments, dramatically enhancing performance without disrupting existing workflows.

Our patented technology extracts deeper insights from complex data, faster, with greater confidence, and unprecedented accuracy. Trusted by scientists worldwide with over 2,000 licenses issued, our solutions are used by leaders across life sciences, academic research, applied sciences, and environmental health and safety. From accelerating drug development to ensuring food safety and advancing cutting-edge research, we empower scientists to make critical decisions faster and economically with clarity and accuracy.