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ASIA EDITION

Thermo Fisher Scientific Unveils Next-generation Innovations at ASMS 2026 to Accelerate Drug Discovery

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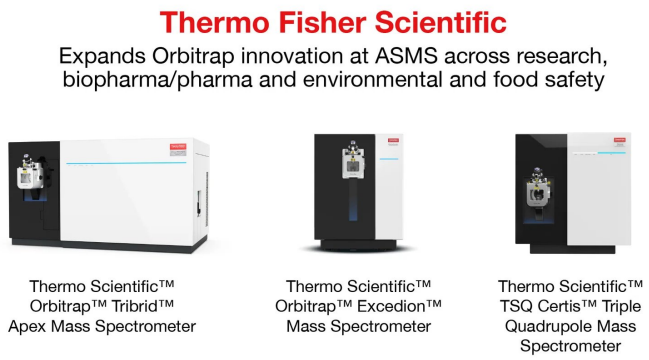
New mass spectrometry platforms, combined with AI-driven analytics and scalable proteomics solutions, help scientists turn complex biology into actionable insights across research and drug development



Thermo Fisher Scientific Inc. (NYSE: TMO), the world leader in serving science, announced the Thermo Scientific Orbitrap Tribrid Apex and Thermo Scientific Orbitrap Excedion mass spectrometers will be showcased at the American Society for Mass Spectrometry (ASMS) Conference. As scientific discovery expands into more complex applications—from advanced proteomics and multiomics to biologics and genetic medicines—researchers and drug developers face increasing pressure to generate high-quality data earlier and make confident decisions faster. Thermo Fisher's latest innovations address these needs by combining high-performance instrumentation with AI-enabled software for scalable multiomics and biopharmaceutical solutions to expedite both discovery and development. Together, these capabilities help scientists identify and validate disease mechanisms more efficiently, advancing targeted treatments.

"Innovation in molecular analysis technologies is helping our customers advance scientific discovery and generate deeper biological insights at an unprecedented pace," said Marc N. Casper, chairman and chief executive officer of Thermo Fisher Scientific. "By combining next-generation Orbitrap platforms with AI-driven analytics, we are now helping scientists transform increasingly complex data into actionable insights to further accelerate the path from discovery to precision therapies."

Advancing Early Discovery with Greater Depth and Versatility

Building on the proven Thermo Scientific Orbitrap Tribrid Technology, the Thermo Scientific Orbitrap Tribrid Apex Mass Spectrometer enables researchers to study complex biology across multiomics, structural biology, biopharma characterization and small-molecule analysis on a single system.

With five times greater sensitivity, up to 100% sequence coverage in a single experiment and results up to four times faster than previous-generation instruments, the Orbitrap Tribrid Apex allows scientists to better understand challenging samples without requiring multiple systems. Researchers can uncover underlying disease mechanisms earlier and identify therapeutic targets sooner across conditions like cancer and neurodegeneration. Supporting more than 300 areas of

research, the Orbitrap Tribrid Apex MS helps translate these discoveries into faster progress across drug discovery and development.

“The Orbitrap Tribrid Apex mass spectrometer is the best proteoform sequencer I’ve seen in my 25 years of translational research,” said Neil Kelleher, Ph.D., director of the Proteomics Center of Excellence at Northwestern University. “It opens an exciting frontier for obtaining deep sequence coverage of proteoforms with unparalleled sensitivity, and these capabilities will enable us to understand complex diseases like never before.”

Enabling More Confident Decisions in Drug Development

As discoveries progress closer to development, the challenge shifts from understanding biology to generating the robust data needed to meet regulatory requirements and advance medicines with confidence. The Thermo Scientific Orbitrap Excedion Mass Spectrometer is designed to help pharmaceutical scientists reduce risk in increasingly complex drug development pipelines. As new modalities such as GLP-1 therapies, oligonucleotides and antibody-drug conjugates introduce greater analytical complexities, identifying and validating key molecular signals early is essential.

With the ability to detect three to five times more compounds in complex samples, the Orbitrap Excedion mass spectrometer provides more complete, regulatory-ready data to support decisions around safety, efficacy and dosing. By enabling earlier detection of low-abundance or previously undetectable molecules, the platform supports earlier identification of critical signals, helping reduce downstream risk, improve regulatory readiness and accelerate time to market.

Connecting Discovery to Population-Scale Insight

Together, these Orbitrap innovations are part of Thermo Fisher’s broader strategy to connect biological discovery with large-scale validation and real-world research. At ASMS, the company is also showcasing its Olink proteomics platform, which enables high-specificity protein analysis at population scale and complements Orbitrap-based discovery workflows. This combined approach is already being applied in initiatives such as PRECISE, one of Asia’s most ambitious and diverse biobank programs to uncover biomarkers linked to aging and metabolic disease. Recent software acquisitions, MSAID and Proteinaceous, strengthen Thermo Fisher’s proteomics ecosystem by adding AI, machine learning and proteoform analysis capabilities that help scientists interpret complex population-scale datasets faster and with greater confidence.

Thermo Fisher Scientific will showcase all innovations at the ASMS 2026 annual conference in San Diego at booth 801 from June1-4, 2026.