

Waters Introduces High Resolution Mass Spectrometry Products and Software to Accelerate Drug Development

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News Summary:

- New Xevo G3 quadrupole time-of-flight mass spectrometer that is up to 10X more sensitive than its predecessor for qualitative and quantitative analyses of challenging molecules.
- New CONFIRM Sequence app on waters_connect software platform designed for nucleic acid sequence confirmation.
- Electrospray ionization (ESI) source couples the Waters' SELECT SERIES MRT mass spectrometer to UPLC for characterizing molecules at fast speeds.

MINNEAPOLIS--(BUSINESS WIRE)-- ASMS 2022 – Waters Corporation (NYSE:WAT) today unveiled new instruments, software and product enhancements to drive drug discovery and development at the American Society for Mass Spectrometry (ASMS) 2022 Annual Conference. The products include the new **Xevo™ G3 quadrupole time-of-flight (QToF) mass spectrometer**, **CONFIRM Sequence** - a new oligonucleotide sequencing confirmation app for the waters_connect™ software platform and an electrospray ionization source for the high-resolution Waters™ **SELECT SERIES™ Multi-Reflecting Time of Flight (MRT)** mass spectrometer.

The new Xevo G3 QToF system is a high-performance, benchtop mass spectrometer for characterizing and quantifying thermally-fragile molecules in applications such as biotherapeutics, forensics, metabolite identification, metabolomics and extractables and leachables. (Photo: Business Wire)

“Innovation in mass spectrometry progresses rapidly. Our product introductions at this year’s ASMS benefit scientists throughout the drug

development cycle,” said Jon Pratt, Senior Vice President, Waters Corporation. “For researchers, this means enhanced capability to answer fundamental scientific questions. For the analytical scientist compiling analytical

data for new drug filings, it means increased certainty and confidence in knowing precisely what's in their samples and in what quantities.”

Waters Xevo G3 QTof – A Laboratory Workhorse

The new Xevo G3 QTof system is a high-performance, benchtop mass spectrometer for characterizing and quantifying molecules in applications such as biotherapeutics, forensics, metabolite identification, metabolomics and extractables and leachables. The Xevo G3 QTof system is up to 10X more sensitive than its class-leading predecessor at transmitting thermally fragile molecules and excels at measuring and characterizing denatured or native proteins, peptides and other biotherapeutics.

“Biopharmaceutical development and commercialization requires a deep understanding of product variation, their degradation pathways and the processes that make them,” said Dr. Andrew Mahan, Associate Director, Mass Spectrometry Group Leader, Cell Engineering and Early Development, Janssen. “The extended mass-to-charge ratio (m/z) range of the Xevo G3 QTof is going to be ideal for the analysis of multi-specifics and for native MS analyses.”

Waters engineered the Xevo G3 QTof system to reliably give scientists both reproducible and accurate qualitative and quantitative information about molecules in their samples whether in very small or very large amounts.

New Software App for Confirming Nucleic Acid Sequence of Biotherapeutics

The [CONFIRM Sequence app](#) on the waters_connect software platform helps scientists using a Waters LC-MS System to confirm the nucleic acid sequence of therapeutics and identify impurities that could compromise product safety and efficacy.

The CONFIRM Sequence app eliminates 50% of the time it takes for post-processing data review, accelerating characterization and development of nucleic acid therapeutics.iii

The new CONFIRM Sequence app is the first sequencing tool to integrate compliance-ready data acquisition, processing, and reporting - making it ideal for deployment in regulated development and Good Manufacturing Practice (GMP) labs.

Coupling UPLC™ to Waters MRT SELECT SERIES Research Mass Spectrometer with ESI Source for Fast Molecular Characterization

The Waters [SELECT SERIES MRT System](#) is now compatible with UPLC-MS with an available electrospray ionization (ESI) source. Coupling the high resolution MRT System with the ESI source enables scientists to accurately resolve and measure low (<200 ppb) concentrations of sample analytes at UPLC acquisition speeds for metabolomics, metabolite identification or peptide mapping applications.

The superior performance of the SELECT SERIES MRT allows scientists to get the highest quality mass spectrometry data and information faster than any commercial mass spectrometer on the market today, giving scientists a much clearer picture of the structure of their molecules at the isotope level iv.

Additional Resources

- View Waters [ASMS 2022 Online Media Kit](#) for downloadable photos and content
- Download the Waters [Xevo G3 QToF brochure](#)
- Download the poster [A New Software Tool for Sequence Confirmation and Impurity Analysis of Synthetic Oligonucleotides](#)
- Follow and connect with Waters via [LinkedIn](#), [Twitter](#), and [Facebook](#)

About Waters Corporation (www.waters.com)

Waters Corporation (NYSE:WAT), a global leader in analytical instruments and software, has pioneered chromatography, mass spectrometry, and thermal analysis innovations serving the life, materials, and food sciences for more than 60 years. With more than 7,800 employees worldwide, Waters operates directly in more than 35 countries, including 14 manufacturing facilities, and with products available in more than 100 countries.

Waters, Xevo, SELECT SERIES, UPLC and waters_connect are trademarks of Waters Corporation.

i Vs. the Waters Xevo G2-XS

ii For thermally-labile compounds

iii Internal estimate based on 30 minutes to review a single oligo sequence data set in CONFIRM Sequence compared to 90 minutes with ThermoFisher's BioPharma Finder.

iv Waters SELECT SERIES MRT mass resolution >200k FWHM @ m/z 785 and independent of scan time; highest resolution achieved irrespective of scan rate

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