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ROUTINE QUANTITATIVE ANALYSIS: ROBUST. RAPID. RELIABLE. REINFORCED BY THE POWER OF XEVO.





# Xevo TQD

## ACCESSIBLE TO EVERYONE, INFORMATION-RICH,

Created to reduce complexity in mass spectrometry, the Waters<sup>™</sup> Xevo<sup>™</sup> TQD embodies our design philosophy of Engineered Simplicity,<sup>™</sup> ensuring maximum productivity with minimum effort. This engineering method is the established foundation of our entire Xevo family product range.

When you need ultimate consistency between analyses; instrument to instrument, lab to lab; both the advanced technology of the ACQUITY UPLC<sup>™</sup> System and the robust universal ion source architecture available with the Xevo TQD ensure dependability, while providing a flexible platform to accommodate ever-changing sample types.

Enabled by innovative features from the accomplished Xevo family of tandem quadrupole mass spectrometers, Xevo TQD is the only integrated system in its class that enables simultaneous acquisition of high quality quantitative and qualitative data from the widest range of experiments.

A cost-effective solution that everyone in the lab can use.

## **ROBUST QUANTITATIVE DATA**

When you need to quantify target compounds in ever more challenging matrices, the gold standard technique of multiple reaction monitoring (MRM) uses the power of MS/MS to deliver dependable results on an accessible, fully integrated system.

The quantitative workflow powered by Xevo TQD simplifies your process from beginning to end. From sample preparation to final decision making, you're ensured maximum productivity and minimum variability.

Now you can benefit from the power of Xevo throughout your routine analysis.



ACQUITY UPLC I-Class System with Xevo TQD

#### **INFORMATON-RICH DATA**

#### **RADAR™**

An information-rich data acquisition approach that allows you to collect highly specific quantitative data for target compounds while enabling the simultaneous visualization of all other components in your sample matrix.

#### PICs™

Product lon Confirmation scanning, a datadirected product ion scanning acquisition capability activated by a single check box.

#### T-Wave<sup>™</sup>

Established collision cell technology enabling rapid, high quality, UPLC-compatible MS/MS data acquisition.

#### EASE-OF-USE

#### **Engineered Simplicity**

Guarantees maximum system performance with minimum effort for setup, sample runs, and data interpretation, backed by superior support to ensure your continued success.

#### VERSATILITY

#### Universal Ion Source Architecture

The most extensive range of interface capabilities available to service the broadest range of applications.

# MASS LYNX

#### PREPARE



## QUANTITATIVE WORKFLOW THAT WORKS FOR YOU

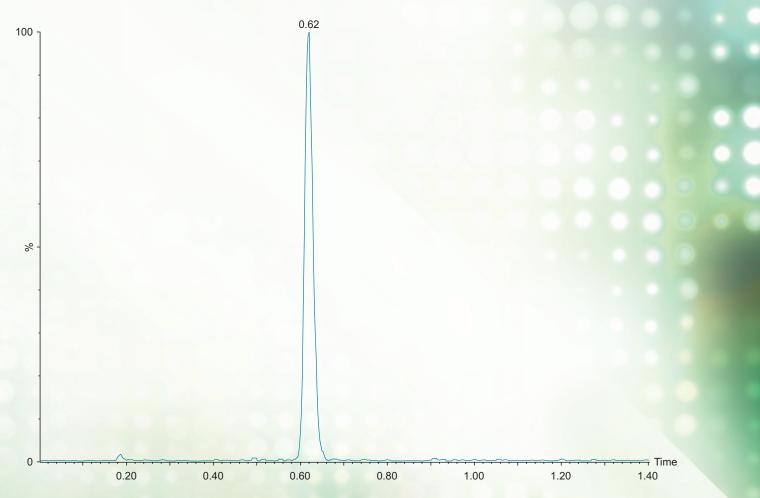
From sample prep to data analysis, Xevo TQD system solutions work for you every step of the way, giving you confidence to act on results.

#### Prepare

With proven sample preparation tools – Oasis,<sup>™</sup> Ostro,<sup>™</sup> and DisQuE<sup>™</sup> Dispersive SPE – rugged, faster, and more efficient assays are assured.

IntelliStart<sup>™</sup> simplifies your system setup with a user-friendly interface that automates routine tasks and reduces the burden of complicated operation, helping everyone to be an MS expert. This technology ensures all levels of scientists can operate the instrument, quickly and confidently generating reproducible UPLC/MS/MS data of the highest quality.

Our extensible and searchable QUANPEDIA<sup>™</sup> database allows for efficient management and optimization of quantitative LC/MS/MS method information, including automatic scheduling of MRMs and automated generation of acquisition and processing methods.



Methanesulfonic acid detected by an IntelliStart generated negative ion MRM method.

## **ANALYZE:** NO MORE WASTED SAMPLES

Rapid, round-the-clock sample analysis requires a robust reliable system. Automated real-time QC checking ensures that valuable samples are not wasted; if your QC tolerances are not met, QCMonitor will automatically send an email to notify you.

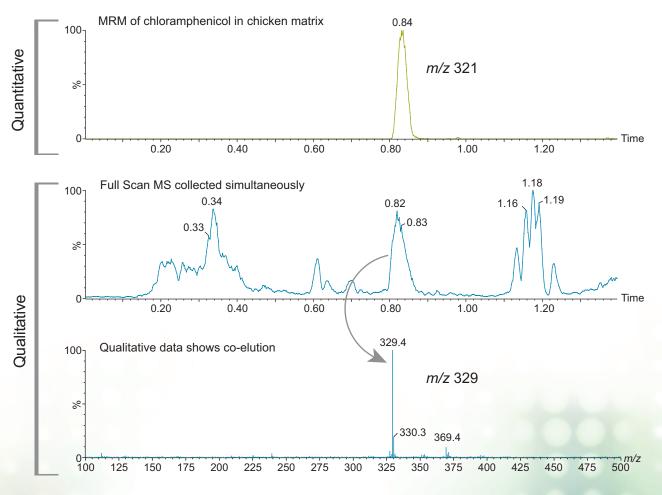
## (RADAR)

#### Know the secrets of your sample

You no longer have to accept the complications and uncertainty associated with matrix effects. When performing targeted quantification, RADAR allows you to see the whole picture, enabling you to develop methods faster and with more confidence. With RADAR you can monitor for matrix interferences, metabolites, impurities, and degradants in your sample while accurately quantifying your target compounds.

This is done by collecting data in both MRM and full scan modes simultaneously. In addition, RADAR acquires all detectable ions in both positive and negative full scan MS, arming you with a depth of knowledge about your sample not previously possible from a traditional quantitative assay.

RADAR is only possible because of the ability to rapidly alternate between MS, MS/MS, positive, and negative ion modes without compromising performance in any mode.

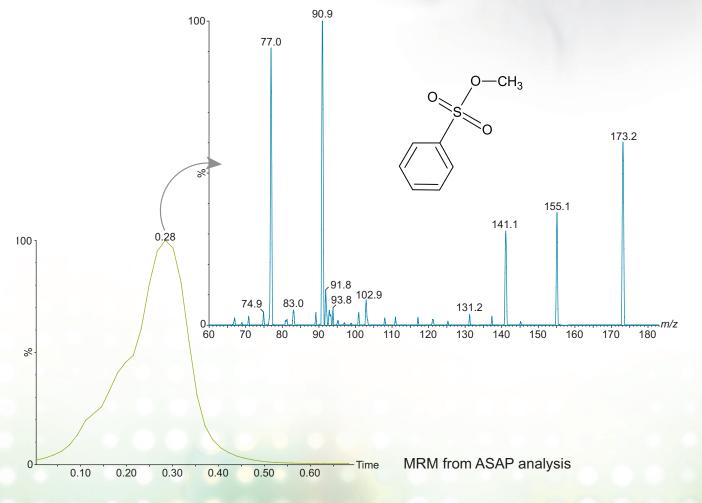


Full scan chromatograms obtained by RADAR analysis enable you to see further into your sample, giving you the information to fully understand your analysis.

#### **INTERPRET:** WITH COMPLETE CONFIDENCE

With Product Ion Confirmation scanning (PICs) you'll gain complete confidence in your results, every time. PICs provides data-directed confirmation with no limit on the number of fragment ions to assist confirmation, and is activated by a single check box. PICs automatically triggers a product ion scan when a peak is detected by MRM, maximizing information when a potential target compound is detected.

Redefine your analytical workflow with an unprecedented ability to process, visualize, compare, and interpret the most complex data, automatically. Then turn it into meaningful information quickly with targeted MassLynx<sup>™</sup> Application Managers. TargetLynx<sup>™</sup> streamlines quantitative data review and reporting, minimizing the possibility of errors by providing a clear overview of QC checks and results.



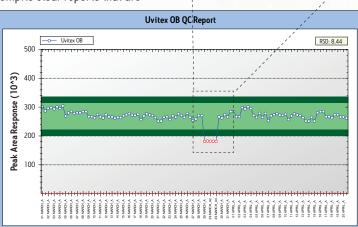
ASAP with PICs provides a quick and easy way to confirm the identity of low level components in many different matrices with minimal sample prep.

## **DECIDE:** ACT ON YOUR RESULTS

Get to the answers faster — flag out-of-tolerance results, trend QCs, and method performance with TrendPlot. Remove all obstacles between you and your results so that you can deliver them to your customers — fast.

It's easier than ever to manage and act on the results of your data with MassLynx and NuGenesis™ SDMS software. With the ability to compile clear reports that are

stored centrally and can be made accessible throughout your organization, you'll be able to make decisions faster and better than ever before.



Trendplot makes it easy to detect out of specification results.

## **UNIFI: NEXT GENERATION SOFTWARE**



UNIFI<sup>™</sup> for Regulated Bioanalysis is available with the Xevo TQD; providing a comprehensive suite of informatics tools and platform solutions tailored to suit your needs.

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| Iministrator, UNIFI [Administrator]                          |   |   |               |                 |                |                              |            |                          |             |                   |        |           | 0       | 0      |

Decision-making is less demanding with the workflows enabled by UNIFI.



From the most powerful tandem quadrupole family of instruments, Waters Xevo TQD is the most versatile technology platform in its class.

#### Testing the limits of your imagination

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The universal ion source architecture of the Xevo family allows you to use the widest range of ionization techniques today, while future proofing for the innovations of tomorrow. You'll have limitless choice in experimental options.

## CHANGE YOUR ION SOURCES NOT YOUR INSTRUMENTS

When you need options and time is critical, ion sources are quickly interchangeable and ready to use within minutes.



APGC – Atmospheric Pressure Gas Chromatography



APPI – Atmospheric Pressure Photo Ionization APCI – Atmospheric Pressure Chemical Ionization



ESI – Electrospray Ionization APCI – Atmospheric Pressure Chemical Ionization ESCi™ – Dual ESI and APCi



ASAP™ – Atmospheric Solids Analysis Probe

# The Power of Xevo

## **EXPAND** YOUR CAPABILITIES



## Xevo TQ-XS Ultimate sensitivity and reliability

Your world is changing and you need to be able to develop robust methods quickly, get the same result every time, and generate data you can trust.

Take your analyses to the next level by employing market-leading instrumentation, combined with the right chemistries and methodologies and unrivalled specialist support, allowing you to focus on what you do with the data, not how you get it.

Leap forward in your scientific challenges and benefit from the innovative and accomplished Xevo mass spectrometers, engineered to deliver reproducible and accurate quantitative data, with system versatility and simplicity of operation.

## Xevo TQ-S micro SENSITIVE, RELIABLE, AND COMPACT

SENSITIVITY





## Xevo G2-XS QTof

## COMPREHENSIVE, QUANTITATIVE, AND QUALITATIVE INFORMATION

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SENSITIVITY



ACCESSIBLE, RELIABLE, AND PROVEN

#### **SALES OFFICES:**

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