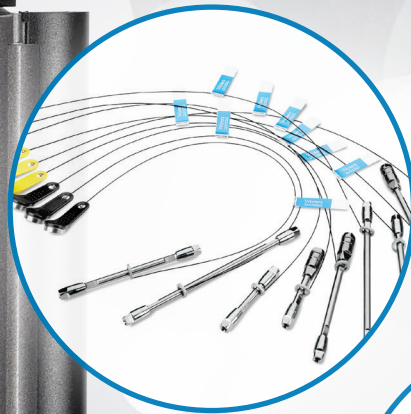


[ ARC PREMIER SOLUTION ]

See clearly and consistently,  
**with confidence.**



Arc™ PREMIER



Waters

THE SCIENCE OF WHAT'S POSSIBLE.™



## The universal platform for liquid chromatography.

The most significant innovation in separation science since we introduced UPLC™ in 2004, Waters™ MaxPeak™ Premier Solutions reduce variability associated with metal-sensitive analytes – all without time-consuming tasks like system and column conditioning. As part of the MaxPeak Premier Product family, the Arc™ Premier System, coupled with MaxPeak Premier Columns and QuanRecovery vials and plates, helps solve some of the most complex challenges associated with undesired analyte interactions, to meet the needs of today and the requirements of tomorrow.

With the Arc Premier Solution, you can:

- Increase confidence in your results
- Minimize risk of undetected analytes
- Achieve higher data quality and reproducibility



## See clearly and consistently, with confidence.

Detect more of your sample components from the very beginning with the Arc Premier Solution, which enables your lab to make informed decisions and reduce risk with stronger analytical capabilities – so you can confidently produce the most accurate, reliable, and reproducible data.

The Arc Premier Solution sharpens chromatographic peaks for metal-sensitive compounds by eliminating secondary interactions from metals, resulting in:

- Improved compliance from higher quality data
- Faster, more reproducible, and accurate data integration
- Shorter time from sample to result without passivation

### SEE SIGNIFICANT IMPROVEMENTS TO SENSITIVITY AND RECOVERY

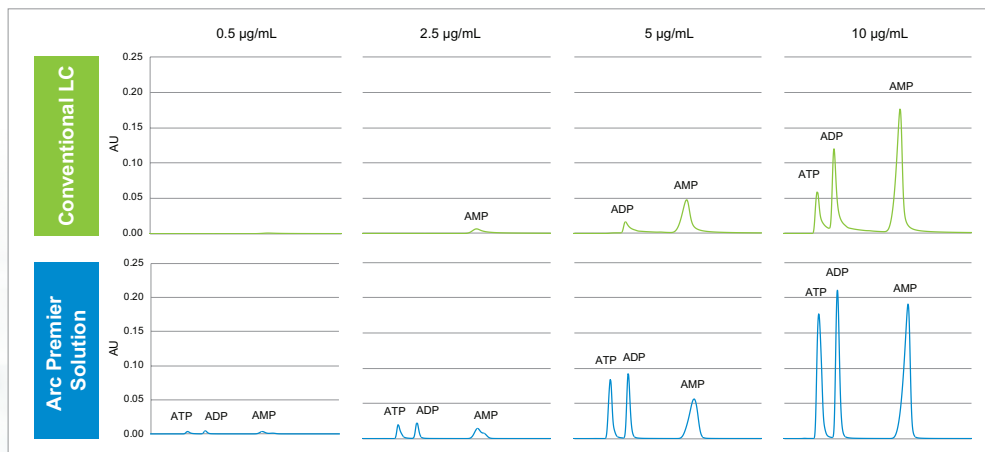


Figure 1. Analysis of adenosine monophosphate, adenosine diphosphate, and adenosine triphosphate. Significant improvements to sensitivity and recovery are observed with the Arc Premier Solution compared to a conventional LC system.

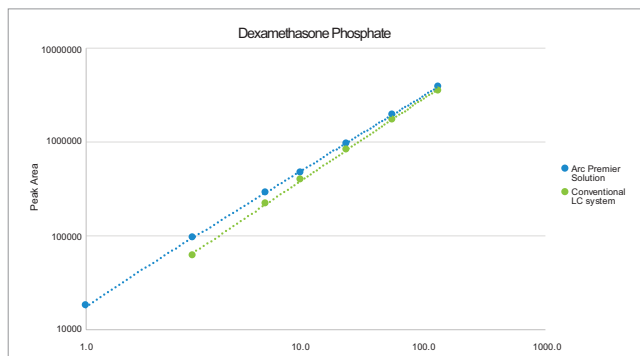
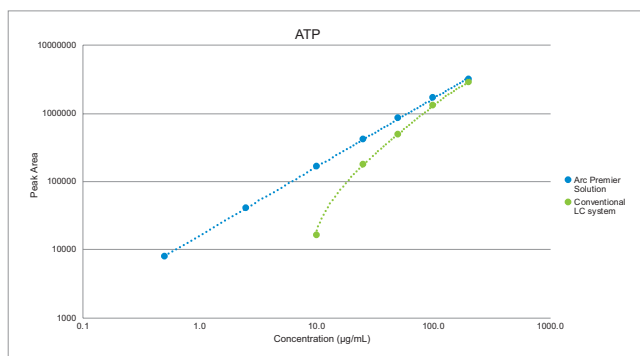


# MaxPeak High Performance Surfaces Technology

The Arc Premier Solution is designed with MaxPeak High Performance Surfaces (HPS) Technology, which offers improvements in separation and detection of metal-sensitive analytes. With the Arc Premier Solution's ability to mitigate non-specific binding, you can expect:

- Dramatic improvements in reversed-phase and HILIC applications
- Increased sensitivity, reducing risk of undetected analytes
- Increased efficiency by eliminating time-consuming system and column conditioning
- Greater reproducibility and increased confidence in results

## EXCELLENT PERFORMANCE WITHOUT SYSTEM CONDITIONING



MAXPEAK<sup>HPS</sup>

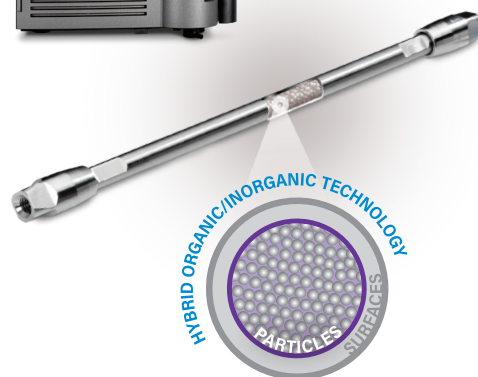


Figure 2. Analysis of adenosine triphosphate. Lower limits of detection and increased calibration curve linearity are demonstrated with the Arc Premier Solution compared to a conventional LC system.



## Holistic solutions for optimal performance.

A true measure of excellence for Waters is in orchestrating consistent instrument and chemistry optimization, so you can fine-tune your system to your specific analytical need, rapidly change between applications, and consistently maintain a high level of confidence in your results.

The outcome is better quality data, faster results, and system-to-system and column-to-column reproducibility, allowing methods to be seamlessly transferred between analysts, instruments, and laboratories.

### BETTER PEAK SHAPES AND REPEATABILITY THAN CONVENTIONAL LC, WITHOUT CONDITIONING

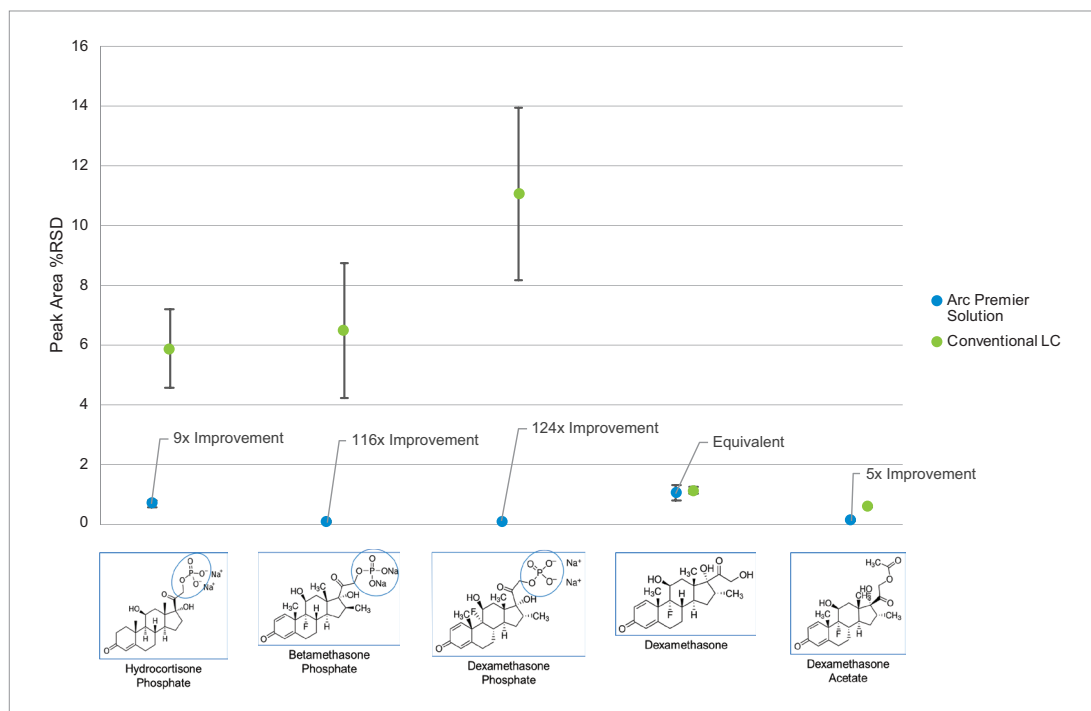


Figure 3. Analysis of data of hydrocortisone phosphate, betamethasone phosphate, dexamethasone, and dexamethasone acetate from an Arc Premier System and a conventional LC system by six users. Peak area reproducibility improved 9-124x when integrating the same data from metal-sensitive compounds across six users.

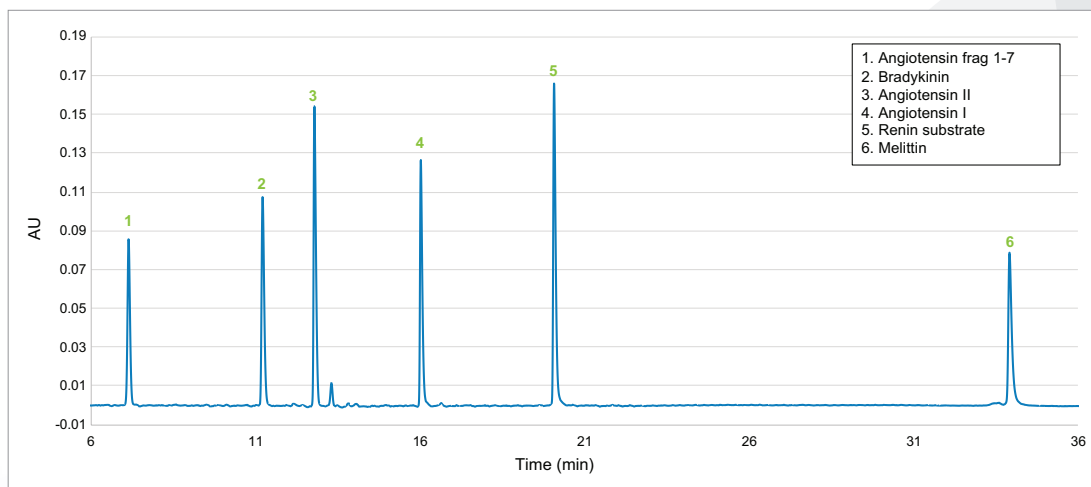


Figure 4. Analysis of a peptide standard containing angiotensin frag 1-7, bradykinin, angiotensin II, angiotensin I, renin substrate, and melittin after separation with a long shallow gradient (1% B change per minute) on an Arc Premier System with binary solvent management.

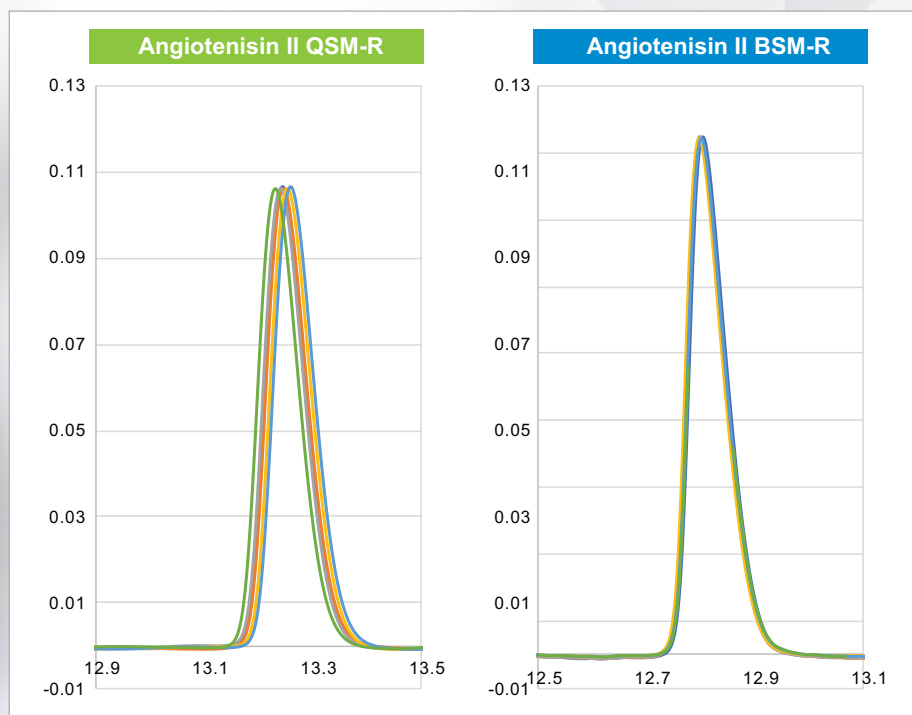


Figure 5. Comparison of angiotensin II peaks demonstrated the improvement in retention time reproducibility (60% improvement) and peak area reproducibility (56% improvement) using binary solvent management compared to quaternary solvent management. Other components in the peptide standard showed 37-96% improvement in peak area and 56-73% improvement in retention time reproducibility.



## Efficient workflow. Clear results.

The Arc Premier Solution delivers the ultimate in chromatographic performance, giving you more confidence in your analytical results. With MaxPeak High Performance Surfaces (HPS) Technology coupled with Waters liquid chromatography (LC) technology and the column chemistries you trust, the Arc Premier Solution is designed specifically to eliminate the unpredictability of analyte losses due to metal interactions. With the Arc Premier Solution, you will.

- Increase sensitivity and sharpen peak shapes
- Minimize variability of results
- Simplify your mobile phases
- Reduce passivation and conditioning times

### ARC PREMIER SOLUTION PROVIDES UNMATCHED CHROMATOGRAPHIC RESULTS

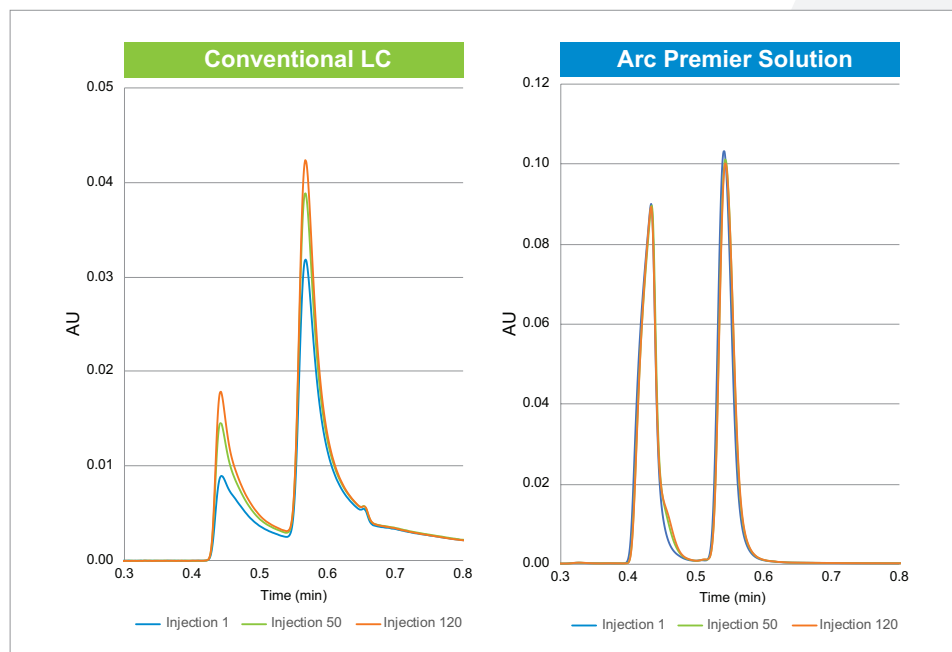


Figure 6. Analysis of hydrocortisone phosphate, betamethasone phosphate, dexamethasone, and dexamethasone acetate. A zoom in on the baseline shows improved peak shapes and resolution for metal-sensitive compounds on the Arc Premier Solution compared to a conventional LC system, improving baseline resolution.

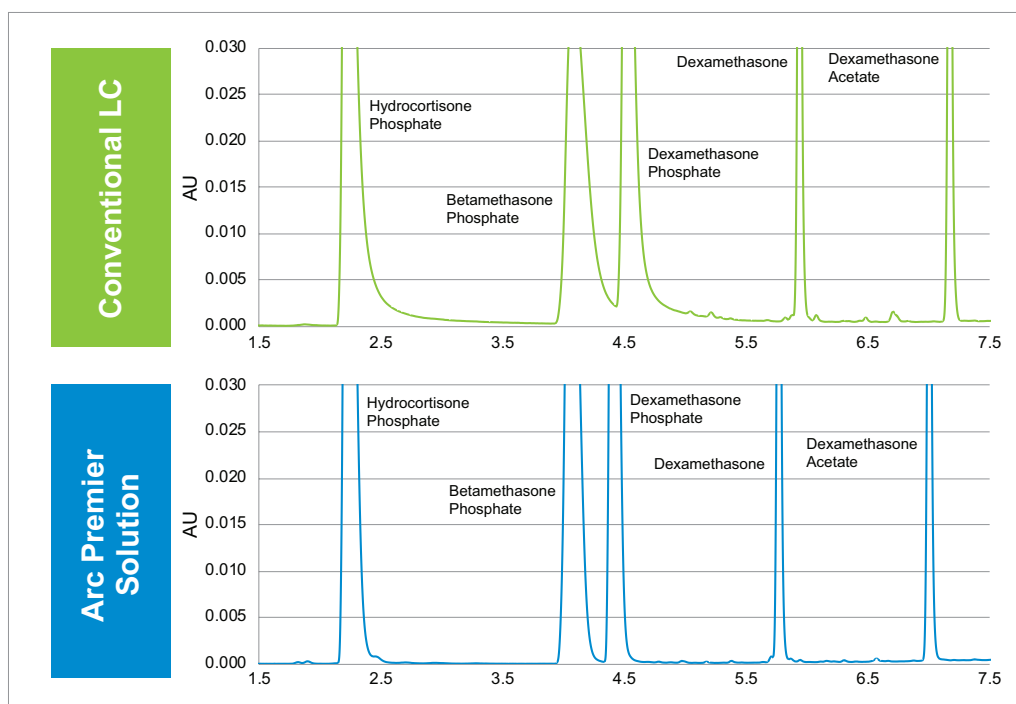


Figure 7. Comparison of adenosine triphosphate and adenosine diphosphate peaks using a conventional LC system and the Arc Premier Solution over 120 injections. The peak areas of metal-sensitive compounds remain constant from the first to the 120th injection using the Arc Premier Solution. Peak areas of metal-sensitive compounds on a conventional LC system continuously increase over time and do not stabilize even after 120 injections.





## Global Services: Committed to your success

As part of the MaxPeak Premier Technology experience, one of our applications specialists will work with you to ensure you are getting everything you need from your system. We have a flexible range of support plans to ensure you get the most out of your system:

### FlexCHOICE™: MySystem COVERAGE\*

Choose the support you need – no more, no less. The Waters service team offers personalized and flexible support, maintenance, and service options to meet your unique lab requirements.

### COMPLIANCE SERVICES

Simplify your process of validating, qualifying, and record-keeping with consulting services to help meet your regulatory guidelines.

### PROFESSIONAL SERVICES

Waters comprehensive suite of consultative services, software applications, and analytical business tools guide you on your path to increased efficiencies and lower costs.

### FlexUP™ TECHNOLOGY RENEWAL PROGRAM

Benefit from ongoing seamless upgrades to our latest LC and mass spec instrumentation and software and eliminate the issues associated with older instrumentation.

*\*Coming soon to all regions.*

## Informatics: Get more from your data for more trusted decisions

Capture, manage, integrate, and analyze your LC and MS data with our informatics platforms, improving discovery and manufacturing, quality and integrity, and reducing time to market. Easily and seamlessly conduct scientific searches, integrate networks, manage compliance, and streamline operations.

### EMPOWER™ CHROMATOGRAPHY DATA SYSTEM

Your entire laboratory operates better with Empower Software, which makes it easier than ever to run samples and produce meaningful results, all while ensuring adherence to strict compliance requirements.

### MassLynx™ SOFTWARE

Increase laboratory productivity with Waters MassLynx Software, which simplifies interaction with and improves your MS system with an intuitive interface, intelligent instrument control, and software features built around the focus of your analysis – the sample.



Learn more about MaxPeak Premier Solutions at [waters.com/MaxPeak](https://waters.com/MaxPeak)



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# Waters

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