TWO MINUTE ANALYSIS OF IMMUNOSUPPRESSANTS IN WHOLE BLOOD

Agilent 6460 Triple Quadrupole LC/MS delivers a rapid, high-throughput method for the analysis of multiple immunosuppressants per sample

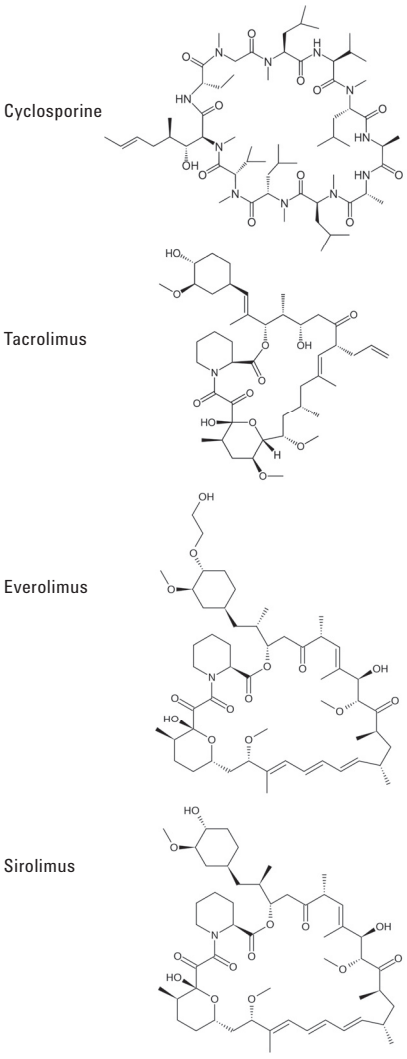

Figure 1: Target Compounds

Background

The analysis of immunosuppresants in a clinical research environment requires a quick and simple analytical method for rapid sample turnaround. LC/MS is ideal solution for the routine quantitative analysis of target compounds such as cyclosporine, tacrolimus, everolimus and sirolimus.

The Approach

Using the ClinMass Complete Kit for Immunosuppressants in Whole Blood from Recipe (Munich, Germany), a two minute LC/MS method was developed providing simple, accurate and rapid analysis of these target compounds from whole blood. Agilent's 1200 Infinity LC and 6460 Triple Quadrupole LC/MS system enabled with Jet Stream technology delivers the utmost sensitivity and specificity required to confidently identify and quantify the target compounds. This performance enhancement is leveraged by Agilent's industry proven reliability and robustness for utmost productivity and cost-effectiveness.

The industry leading MassHunter software enables a simple work flow to rapidly quantitate immunosuppressants. Linearity of calibration curves as well as accuracy of quality control and sample data can be quickly verified using the Batch at a Glance feature. Processed data can be viewed in a variety of user-defined customizable report formats or exported to a laboratory informatics system (LIMS) in .xml or .csv format.

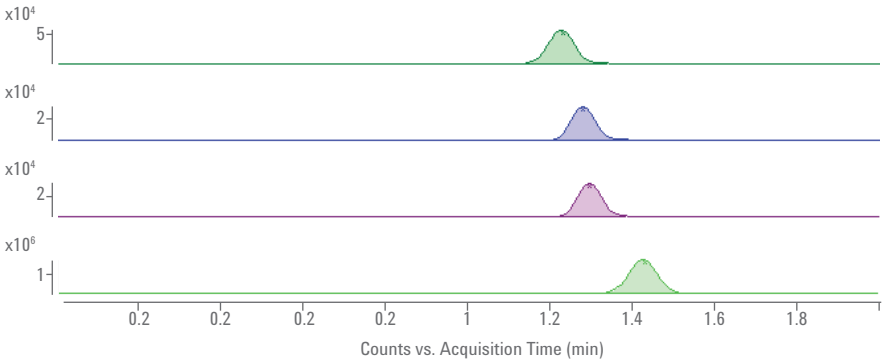

Figure 2: Sensitive and accurate detection of immunosuppressants using a 2-minute method

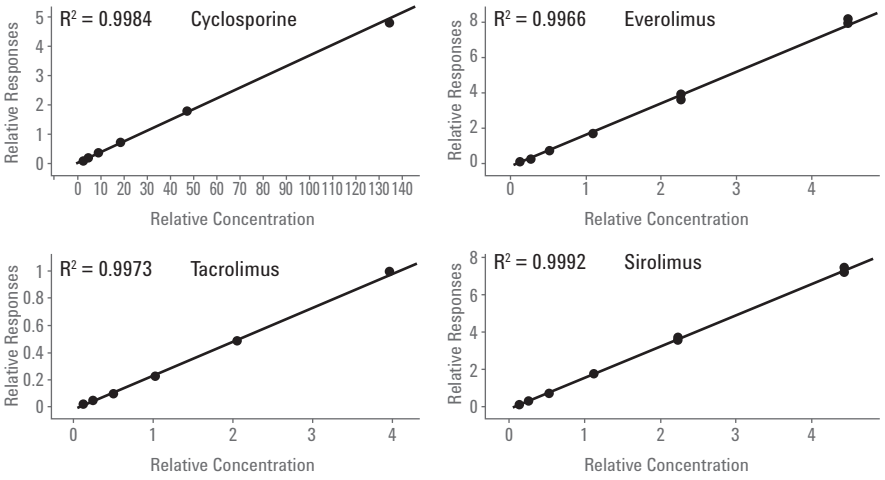

Figure 3: Excellent linearity and sensitivity allows the accurate quantification of cortisol

Key Benefits

- The Agilent 6460 Triple Quadrupole LC/MS system with Jet Stream technology delivers a 2-minute rapid, high-throughput method for multiple compounds
- LC/MS enables sensitive and accurate quantitation with reduced sample preparation
- LC/MS provides a selective, cost effective and less time consuming method.
- MassHunter Quantitative Analysis Software delivers fast results and interpretation through advanced software tools

www.agilent.com/lifesciences/clinresMS

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