



The Power of Precision

Customer case study

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“Invest in instrumentation that enhances your capabilities and empowers you to achieve your scientific goals”



Project goal

To create bio-analytical methods for fixed dose combinations that involve multiple analytes with diverse physico-chemical properties and entail challenging detection limits and large linear dynamic ranges.

Biggest challenges right now

- Sensitive methods to correctly define pharmacokinetic parameters
- Variable calibration curve range required for multiple strengths products
- Achieving high throughput by simultaneous analysis of multiple analytes with diverse physico-chemical properties from fixed dose combination products

Solution

- Sensitivity gains afforded by the SCIEX Triple Quad™ 6500 LC-MS/MS System for achieving challenging detection limits when sample volume is limited
- New IonDrive™ High Energy Detector technology of SCIEX Triple Quad™ 6500 System helps to have wide dynamic range method
- Fast polarity switching in SCIEX Triple Quad™ 6500 system helps to analyze analyte of diverse polarity with lesser run time

Outcomes of research

- Developed several methods for CNS products and Irritable Bowel Syndrome (IBS) of pg/mL level for accurate depiction of pharmacokinetic parameters
- Successfully developed methods for many fix dose combination of anti-diabetic products
- Developed method for anti-malarial fix dose combination product for studies conducted on pediatric patients

“SCIEX team is always focused on addressing customer concerns and increasing satisfaction. SCIEX customer support services are excellent.”

Organization

Sun Pharma is the largest pharmaceutical company in India with around 2,000 research scientists working in multiple R&D centers equipped with cutting-edge technologies for developing generics, APIs, NDDS and NCEs.

Goal

Sun Pharma's business is broadly categorized into four segments: Active Pharmaceutical Ingredients (API), International Branded Generics, Indian Branded Generics and US Generics. Sun Pharma works towards generic product development, manufacturing, clinical and preclinical studies leading to regulatory filing globally.

SCIEX products

- API 3200™ LC-MS/MS System
- API 4000™ LC-MS/MS System
- 4000 QTRAP® LC-MS/MS System
- SCIEX Triple Quad™ 6500 LC-MS/MS System
- Analyst® Software 1.6.3