



SMALL MOLECULE BIOANALYTICAL CHEMISTRY

Lovelace Biomedical has extensive expertise in small molecule bioanalytical chemistry, with specialized laboratories and experienced analysts in liquid and gas chromatograph, mass spectrometry and solid-state analysis. Whether working with a small molecule, protein, peptide, RNA, oligonucleotide, antibody or other agent, Lovelace has experience developing new assays and transferring existing methods to support pharmacokinetic, toxicokinetic and in vivo metabolism studies. Analyses can be conducted to evaluate parent molecules or metabolites in a full range of matrices, including blood, plasma, serum, urine, CSF, pleural fluid and tissue.

KEY CAPABILITIES

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- Analytical Method Transfer
- Formulation Development
- Method Development
- GIP method Validation
- Sample Analysis

INSTRUMENTATION

- Gas chromatography
 - Agilent 7890, MS, FID, TCD and ECD detectors, liquid and head space autosampler
- Liquid chromatography
 - Agilent 1100/1200; DAD, VWD, RID, FLD detectors
 - UPLC Acquity PDA; FLD, ECD detectors
- Mass spectrometer systems
 - API 5000, 5500 and 6500 LCMS
- Molecular devices and biotek plate readers
- Spectrophotometers
- Tecan/Eppendorf liquid handlers
- TomTex Quadra extraction system

GENERAL EXPERTISE

- Analytical/Bioanalytical Chemistry
- Animal model development, including small and large animal surgical models
- Carcinogenicity/GenTox
- Chronic infusion
- Cytokine/chemokine assays
- DMPK
- Drug delivery by IV, IM, IP, SC, PO, IT, IN, ocular, inhalation, local delivery and other specialized routes
- Histopathology and histomorphometry
- IND-enabling toxicology
- IV, intrathecal, ICV catheterization (for delivery and collection)
- Mathematical modeling
- Pharmacology
- Serum and tissue-based biomarkers
- Telemetry (heart rate, blood pressure, respiratory rate, ECG, EEG, temperature, activity, etc.)