



Broader chemical discovery for a new depth of insight

There are tens of thousands of unmapped molecules circulating in human blood – thousands of which could represent robust biomarkers.

Sapient's next-generation rapid liquid chromatography-mass spectrometry (rLC-MS) systems and follow-on technology pipeline enable rapid, comprehensive profiling of both known and unknown small molecule chemistries.

Explore the methods we use to identify and translate novel small molecule biomarkers at speed, scale, and with high specificity.

NONTARGETED DISCOVERY



rLC-MS HESI/APCI

Bruker timsTOF Pro 2

Utilizes a custom mixed-mode column coupled with multiple step gradient elutions to capture broad chemistries in <1 minute analytical cycle time.

15K+ small molecule biomarkers captured per sample, including*:

Schedule a meeting to discuss your study:
discover@sapient.bio

CONFIRMATION VIA TARGETED METHODS



LC-MS

Thermo QE Orbitrap™



GC-MS

Agilent GC-MS



LC-QQQ

Agilent Ultivo™

Key metabolites of interest elucidated through rLC-MS discovery screening can be further assayed using quantitative methods to confirm their robustness.

CLINICAL ASSAY



Our CLIA-certified, CAP-accredited lab can support rapid translation of specific metabolites into clinical assays.



POLAR METABOLITES

- Amino acids
- Central carbon compounds
- Nucleic acids
- Nucleotides
- Organic amines
- Neurotransmitters

POLAR LIPIDS

- Glycerophospholipids
- Short chain fatty acids
- Endocannabinoids
- Acylcarnitines
- Bile acids
- Oxylipins
- Eicosanoids

NONPOLAR LIPIDS

- Hormones (APCI)
- Diglycerols
- Triglycerols
- Ceramides
- Sterol esters
- Cardiolipins
- FAHFAs