

Biomarkers

(LC-MS and Immunoassay)

Biomarkers are increasingly important in the pharmaceutical discovery process due to their ability to monitor the drug's effect on the body and central role in biological processes.

They have a wide range of applications, from acting as safety markers to monitoring drug efficacy.



At our Cambridge (Fordham) facility, our expert biomarker teams support non-clinical and clinical biomarker method development, validation and sample analysis. At Drug Development Solutions, we believe that the key to success is initiating early discussions to clarify the context of use for the data and tailor the subsequent validation on a case-by-case basis.

We have extensive experience with a range of biomarkers, including those linked to:

- Target engagement
- Coagulation cascade
- Diabetes
- GI disorders
- Inflammatory diseases
- Neurological disorders
- Oncology
- Respiratory diseases
- Endocrinology
- Renal disease/damage
- » Stress management

Our capabilities at Drug Development Solutions span from measuring single to multiple analyte profiles, such as those employed to monitor cytokine storms. We have a range of analytical platforms for our biomarker methodologies, using both ligand binding assays, flow cytometry and mass spectrometry, in a multitude of matrix types:

- Blood/Serum/Plasma
- Peripheral blood cells
- BALF
- Sputum
- Bone marrow
- » CSF
- Saliva
- Synovial Fluid
- Urine
- Sweat









Analytical methods and validated <u>instrumentation</u>



Our cutting-edge laboratories are well equipped with the latest technology to meet your bioanalytical needs, allowing us to offer a range of assays supporting non-clinical to late phase drug development.

Detailed below are the analytical platforms available at Drug **Development Solutions for the measurement of Biomarkers:**

Quanterix® HD-X analyser



- Automated
- Bead based
- Ultra-sensitive to fg/mL
- Single/multi analyte
- Kit or bespoke

Sciex **TripleTOF®** 6600 LC-MS



- Validated for use within a regulatory environment
- Enhanced selectivity
- High sensitivity
- Top & middle-down analysis
- Multiplex capability

Gyrolab® хP



- Microfluidic CD-based
- High-throughput
- Sensitive to pg/mL
- Kit or bespoke
- Low sample volumes and high matrix tolerance

LC-MS



- Outstanding selectivity
- Single/multi analyte
- Various triple quadrupole platforms for routine quantitation

MSD®



- Electrochemiluminscent
- Sensitive to pg/mL
- Single/multi analyte
- Kit or bespoke

Luminex **MAGPIX®**



- Bead based
- CCD imaging
- Sensitive to ng/mL
- Single/multi analyte

Envision



- Colorimetric ELISA
- Luminescence
- Kit or bespoke

Beckman Coulter CytoFLEX flow cytometer



- Multiparametiric
- Large data sets
- Single cell or heterogeneous population

Randox **Daytona+**



- Automated
- Colorimetric
- Turbidimetric
- High-throughput

Let's discuss your project:

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