

# BIOANALYTICAL CAPABILITIES

## Expert Navigation & Delivery to Help You Reach Your Preclinical & Clinical Objectives

Helping your drug development program succeed is what we do. Keeping your timeline on track requires scientific expertise, operational experience and up-to-date knowledge of the regulatory environment. Whether you need preclinical or clinical bioanalysis, local support or global capabilities, Covance is the partner that you can trust to help deliver on your bioanalytical timelines every day, every time.

Covance offers unique perspectives that have helped to develop more than 93 percent of all 2018 FDA approved new drugs. We partner to help you determine the best strategy for your drug candidate and to implement a solution that delivers the most value from your program. We will work collaboratively with you to meet your needs, leveraging experience gained from developing more than 1,000 methods annually and supporting more than 260 unique compounds annually.

### Small Molecule & Biologics Bioanalytical Solutions

- ▶ Feasibility, method development, transfer, validation and sample analysis
- ▶ Scientific and regulatory expertise across multiple species and sample matrices
- ▶ High-throughput discovery, nonclinical (GLP) and clinical studies
- ▶ Immunogenicity studies using a tiered approach
  - Screening
  - Confirmatory (immunodepletion)
  - Titer assessment (quantification, semi-quantification)
  - Cell-based neutralizing antibody detection
- ▶ Cell-based bioassay development, validation and sample analysis

### Translational Biomarker Solutions

- ▶ Fit-for-purpose validation
- ▶ CLIA-certified laboratories
- ▶ GLP/GCP-compliant services
- ▶ Discovery and clinical biomarker services
- ▶ Multiplexing capabilities
- ▶ Multiple platforms including MSD and Luminex

#### ELISA-Based

- ▶ Ligand-binding assays
- ▶ Targeted biomarker assay development and validation
- ▶ Biomarker discovery

#### Mass Spectrometry-Based

- ▶ Targeted biomarker assay development and validation
- ▶ Biomarker discovery (proteomics and metabonomics)

### Specialized LC-MS Solutions

- ▶ Oligonucleotides (siRNA, DNA)
- ▶ Peptides and proteins (mAbs)
- ▶ Targeted proteomics
- ▶ Antibody-drug conjugates
- ▶ Tissues
- ▶ Dried Matrix Spot analysis
- ▶ Microfluidics and microsampling analysis
- ▶ High-resolution accurate mass (HRAM)-MS

### 188,500 feet<sup>2</sup> (17,512 meters<sup>2</sup>) of Operational Space (as of October 2019)

- ▶ Indianapolis, IN: 51,000 ft<sup>2</sup>
- ▶ Salt Lake City, UT: 29,000 ft<sup>2</sup>
- ▶ Chantilly, VA: 42,500 ft<sup>2</sup>
- ▶ Madison, WI: 25,000 ft<sup>2</sup>
- ▶ Harrogate, UK: 22,000 ft<sup>2</sup>
- ▶ Huntingdon, UK: 5,700 ft<sup>2</sup>
- ▶ Somerset, NJ: 9,400 ft<sup>2</sup>
- ▶ Shanghai, CN: 19,000 ft<sup>2</sup>

## Small Molecule Instrumentation and Automation

### Instruments

- ▶ AB Sciex API 6500™, 5500™, 5000™, 4500™, 4000™ and 3000™
- ▶ AB Sciex QTRAP® 4000, 5500 and 6500
- ▶ Thermo Scientific™ Q Exactive™ Hybrid Quadrupole-Orbitrap™ MS
- ▶ Thermo Scientific™ FAIMS interface module
- ▶ Thermo Scientific™ TSQ Vantage triple stage Quadrupole MS
- ▶ Thermo Scientific™ TSQ Quantum Ultra™ triple Quadrupole MS
- ▶ Waters® Xevo® TQ-S with ionKey
- ▶ Waters® Micromass® Quattro Premier XE™ Tandem Quadrupole MS
- ▶ Waters® Quattro Premier XE™

### UHPLC

- ▶ Waters® ACQUITY UPLC®
- ▶ Waters® ACQUITY UPLC® (M-Class)
- ▶ Shimadzu Nexera X2 UHPLC system
- ▶ LEAP Technologies 4X UHPLC systems

### HPLC

- ▶ Shimadzu SPD-M10 PDA systems
- ▶ Shimadzu SIL20AC-HT autosampler
- ▶ Shimadzu HTC HPLC
- ▶ Shimadzu Prominence HPLC
- ▶ Agilent Technologies HP1100 HPLC
- ▶ Cohesive Aria TX2 Multiplexed Turbulent Flow HPLC
- ▶ Thermo Scientific™ Aria™ TX1 TurboFlow™, TX2 TurboFlow™ and TX1 Transcend™ TurboFlow™
- ▶ LEAP Technologies CTC HTS PAL equipped with multiplexing valves
- ▶ Rheos 2000 CPS-LC systems

### Automation

- ▶ Hamilton liquid handling systems: Microlab® NIMBUS 96, STAR™ and STARlet
- ▶ Spark Holland Symbiosis™ Pharma
- ▶ Tomtec Liquid Handling Station 96 well (360)
- ▶ Tomtec Quadra4™
- ▶ Anachem Flexus DMPK
- ▶ BSD600-Duet: Automated dried blood spot punch
- ▶ Tissue homogenizing units

For more information or to contact us regarding our bioanalytical solutions, please contact your Covance representative.

Learn more about our drug development solutions at [www.covance.com](http://www.covance.com)

Covance is the drug, medical device and diagnostics business segment of LabCorp, a leading global life sciences company. COVANCE is a registered trademark and the marketing name for Covance Inc. and its subsidiaries around the world.

The Americas +1.888.COVANCE (+1.888.268.2623) +1.609.452.4440

Europe/Africa +00.800.2682.2682 +44.1423.500888

Asia Pacific +800.6568.3000 +65.6.5686588

© Copyright 2019 Covance Inc. SSBIO002-1119

## Biologics Instrumentation and Automation

### Instruments

- ▶ MSD SECTOR Imager 6000 and 2400 readers
- ▶ MSD QuickPlex SQ 120
- ▶ Gyros Gryolab™ xP immunoassay platform
- ▶ Bio-Plex® 200 systems
- ▶ Titertek™ APEX™ 10/600 Gamma Counter
- ▶ PerkinElmer® WIZARD® 2470 Gamma Counter
- ▶ Beckman COULTER COUNTER® Z2™ Particle Cell Counters
- ▶ Beckman COULTER Vi-CELL® Particle Cell Counter

### Readers

- ▶ Molecular Devices (MD) SpectraMax® 340PC reader
- ▶ MD VersaMax™ Tunable Microplate readers
- ▶ MD SpectraMax® L Microplate Luminometers
- ▶ MD SpectraMax® M5 systems
- ▶ MD SpectraMax® 96/384-well plate reader
- ▶ Gemini fluorescence plate reader

### Automation

- ▶ Hamilton Microlab® STAR™ liquid handling system
- ▶ Hamilton Microlab® STARlet workstation
- ▶ Biomek® NXP Span-8

## Information Systems

- ▶ Thermo Scientific™ Watson LIMS™
- ▶ IDBS E-WorkBook
- ▶ Waters® NuGenesis SDMS™
- ▶ Thermo Scientific™ Nautilus LIMS™
- ▶ VelQuest SmartLab™

### Environmental Monitoring Systems

- ▶ Rees Scientific Series II-PC
- ▶ Rees Scientific Centron SQL

## Expanded & Connected Solutions

- ▶ Lead Optimization
- ▶ Drug Metabolism
- ▶ Safety Assessment
- ▶ Bioanalysis
- ▶ Biopharm CMC Analytical Solutions
- ▶ Regulatory PK/TK Reporting
- ▶ Phase I, II, III
- ▶ Central Laboratory Services
- ▶ Biomarker Solution Center

**COVANCE**  
SOLUTIONS MADE REAL®