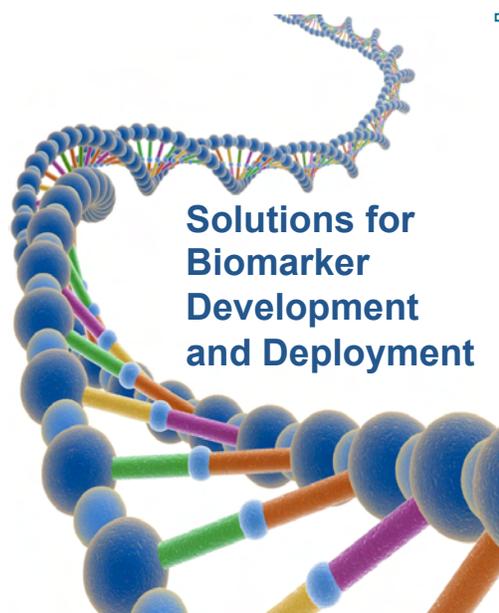


integrated biomarker platforms



**Solutions for
Biomarker
Development
and Deployment**

It is widely recognized that effective biomarker programs offer compelling advantages for drug discovery and clinical trials supporting new therapeutics. The potential to eliminate drug candidates at an early stage – to identify those that perform according to the desired mechanism of action – helps speed drug development. And the ability to identify and stratify patients who will respond to the therapeutic provides the basis for smaller and more economical clinical trials.

However, there is complexity in the effective and efficient deployment of biomarker programs:

- Advanced platform technologies and an array of reliable assay systems must be employed to allow interpretation in a complex network of biological pathways
- Proprietary intellectual property must be considered to avoid confounding biomarker development and future clinical and commercial use
- Sample numbers and the presence of multiple derivative samples requiring tracking and analysis strain logistical and supporting operations teams

OUR SERVICES: Open Platform • Comprehensive & Integrated for Efficiency

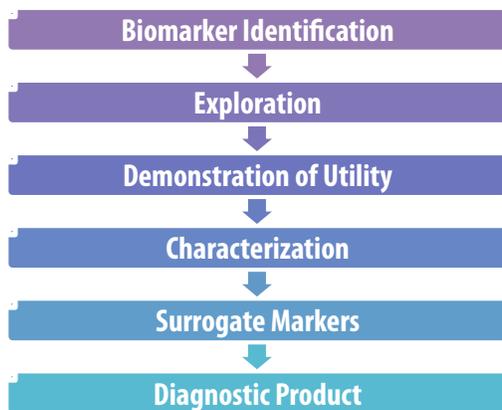
WuXi AppTec offers a fully-integrated, one-stop-shop, clinical-testing solution for bioanalysis, biomarker assays, genomic analysis, and central lab services. Our teams of experts with strong scientific, technical and regulatory backgrounds support a wide variety of therapeutic product types and applications. Through our U.S. and China laboratories WuXi AppTec provides platforms and services for all phases of biomarker development.

Support Biomarker
Discovery & Development

Facilitate Translational
Medicine Research

Expedite Drug
Development Processes

Increase Rates
of Success



Supporting Resources

- **Discovery Biology Teams:** Oncology (including access to Mayo Clinic PDX models for Western Cancers and WuXi AppTec's extensively characterized PDX tumor models from Asian patients), Infectious Disease, Cardiovascular & Metabolic, Immunology & Inflammation, CNS
- **Bioinformatics:** Comprehensive data analysis and custom bioinformatic solutions
- **Validated Biomarkers:** Extensive list of standard biomarkers and over 400 biomarker assays through partnership with Pacific Biomarkers
- **Tissue Banks:** Access to U.S. and China tissue collections.

Talk to us and find out how our biomarker services can work for you.

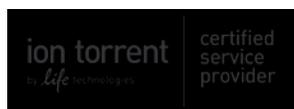
Contact a WuXi AppTec Account Manager at 651-675-2000 or email: info@wuxiapptec.com





BD FACSCanto II and FACSCalibur for measurement of cellular biomarkers, signaling pathway studies, cytokine expression, cellular proliferation and apoptosis

Illumina HiSeq and MiSeq platforms for genome, exome, amplicon, transcriptome sequencing, and more



Life Technologies Ion Proton and Ion Torrent systems for fast next-generation sequencing (virus & bacterial genome)

Industry-Leading Technologies

Advanced sequencing, qPCR, microarray, and cell sorting platforms are utilized by WuXi AppTec to meet your specific project needs. Our expert teams are fully trained on a wide range of technologies including Life Technologies™ and Illumina® sequencing systems.

Comprehensive Toolkit

Soluble & Tissue-Based Biomarkers

- CLIA/CAP/GCP Compliance
- Clinical Chemistry
- Clinical Immunology
- Cell-Based Biomarkers – Flow Cytometry
- Tissue-Based Biomarkers – IHC, FISH, CISH
- Anatomic Pathology / Histopathology
- Access to More Than 40 Expert Pathologists
- Central Lab Services

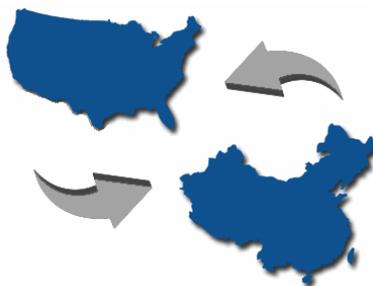
Molecular / Genomic Biomarkers

- Automated DNA/RNA Extraction & qPCR
- Next Generation Sequencing
- Population-scale Genome Sequencing
- Exome Sequencing
- Transcriptome Sequencing
- Microarray
- Bioinformatics

Simplified Logistics

With Convenient Single-Source U.S. Sample Management Center

- Reception of samples at WuXi AppTec - Philadelphia for both U.S. and China services
- Processing of preclinical and clinical samples
- DNA/RNA extraction
- Sample retention in the U.S.
- Short- and long-term storage and distribution
- Experience in permitting / China shipments
- Chain of custody and sample tracking / LIMS systems
- Project management support



Our Facilities

Our facilities are dedicated to providing solutions to advance the development of therapeutics, including personalized medicine from non-clinical to clinical stages.

WuXi AppTec (U.S.) Philadelphia, PA

This FDA-audited facility provides support services for biologics testing, virology, in-house molecular biology, cell biology, and analytical and bioanalytical capabilities for all stages of product development. Houses sample preparation, next generation sequencing, and PCR, and serves as a logistical center for client interaction and project management for biomarker programs.

WuXi AppTec Genome Center Shanghai, China

China's first CLIA-certified genomic center, the WuXi AppTec Genome Center was established in 2011. Offering a full-range of discovery and development services for the biopharma industry, the center provides drug development capabilities – from target discovery to preclinical and clinical development – focusing on next-generation sequencing platforms.

WuXi AppTec (Headquarters) Shanghai, China

With FDA-audited and OECD/CFDA GLP-certified laboratories, the Shanghai facility supports product analytical/bioanalytical testing of clinical and non-clinical samples, including large-molecule analytical methods, FACS, and central lab services.



Learn more about our comprehensive services for biologics – from concept to commercialization – at wuxiapptec.com