

# XenoFinder

## One-Stop Shop for Biotransformation Services

XenoFinder is a global specialty Contract Research Organization (CRO) focused on drug biotransformation studies. We deliver expert services from lead optimization through clinical development to pharmaceutical, biotech companies and academic research institutes, offering comprehensive, customized biotransformation solutions tailored to meet each client's unique needs.

### We Specialize In:

- Metabolite profiling and identification of small molecule drugs
- Radiolabeled ADME studies in animals and humans
- Biotransformation studies of emerging drug modalities



# Biotransformation Services at XenoFinder

## In Vitro Metabolite Identification

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- Metabolic soft spot analysis
- Glutathione (GSH) trapping of reactive metabolites
- Metabolite profiling across species
- Metabolism in 3D hepatocyte spheroid cultures

## In Vivo Metabolism and Disposition

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- ADME studies in mice, rats, dogs, monkeys, and other animal models
- Metabolite profiling and identification in plasma, urine, feces, bile, and tissue samples from pharmacokinetic, pharmacology, toxicology, and clinical studies
- Comparative metabolite profiling in human and toxicology species plasma to support MIST (Metabolites in Safety Testing) evaluation

## Radiolabeled ADME Studies in Animals and Humans

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- Radiolabeled ADME studies of small molecule drugs and new therapeutic modalities, including ADCs, peptides, oligonucleotides, PROTACs, in various animal species (mice, rats, dogs, monkeys, etc.)
- Quantitative whole-body autoradiography (QWBA) tissue distribution studies in rodents
- Human radiolabeled mass balance studies

## Metabolizing Enzyme Phenotyping

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- Identification of the role of AO
- Rapid CYP & UGT phenotyping
- Definitive CYP Phenotyping
- Phenotyping of other metabolizing enzymes

## ADME Studies of ADCs

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- Profiling and identification of payload-related components released from ADCs in vitro
- In vitro metabolite profiling and metabolizing enzyme phenotyping of payloads
- In vivo metabolite profiling and identification of payloads in rats, monkeys, and other species following ADC or payload administration

## Biotransformation of New Drug Modalities

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- In vitro and in vivo metabolite profiling of peptide-based therapeutics, including cyclic peptides, peptide drug conjugates (PDCs) and radionuclide drug conjugates (RDCs)
- In vitro and in vivo metabolite profiling of oligonucleotide-based drugs
- Metabolite profiling of proteolysis-targeting chimeras (PROTACs) and small molecule drug conjugates (SMDCs)

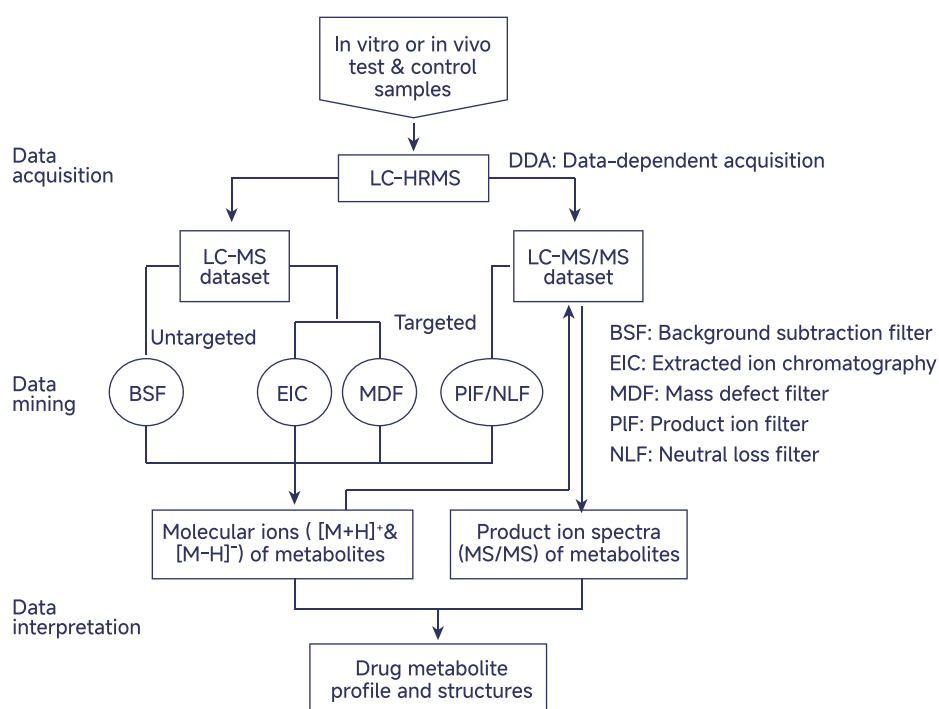
# Core Techniques and Expertise

## Advanced LC-HRMS Data Processing Tool

XenoFinder offers cutting-edge LC-HRMS capabilities powered by its proprietary Background Subtraction Filter (BSF) tool. This technology enables untargeted data processing to detect and identify both common and uncommon drug metabolites, regardless of their molecular weights, mass defects, or fragmentation patterns.

## Metabolite Profiling Workflow for Small Molecule Drugs

XenoFinder has established effective LC-HRMS workflows for the detection and characterization of metabolites from small-molecule drugs and active components—including PROTACs, payloads of ADCs, and botanic drugs. It combines the BSF tool with advanced data-mining techniques such as Mass Defect Filter (MDF) to enhance the sensitivity and selectivity of metabolite profiling (see below).



## Metabolite Profiling Workflows for Peptide- and Oligonucleotide-Based Drugs

XenoFinder has developed a novel LC-HRMS workflow for identifying metabolites of peptide-based drugs, including cyclic peptides, peptide-drug conjugates, and radionuclide-drug conjugates. It leverages the integrated BSF tool for untargeted detection of phase I and II enzyme-mediated metabolites, while BioPharma Finder software is used for identify predictable metabolites formed through peptide hydrolysis. Similarly, a universal LC-HRMS method has been established for profiling metabolites of oligonucleotide-based therapeutics.



# Who We Are

**XenoFinder** is a specialized CRO dedicated to drug biotransformation, with operations in Suzhou, China, and North Wales, PA, USA.

## Experience & Expertise

- Our leadership team consists of seasoned biotransformation scientists
- Scientists at XenoFinder published over 150 DMPK-related papers
- Technical expertise in metabolite profiling and structural elucidation

## Service Coverage

- Provide end-to-end support from early discovery to clinical development
- Focus on consistency across all study phases

## Key Technological Capability

- Proprietary LC-HRMS data processing platform
- Enables untargeted metabolite profiling of a wide range of drug modalities

## Core Services

- Comprehensive metabolite profiling and identification for small molecule drugs and innovative therapeutic modalities
- Design and conduct metabolite profiling experiments as part of radiolabeled ADME studies

## Customized Approach

- Design and execute tailored biotransformation studies based on each client's needs
- Ensure scientific rigor and timely delivery in every study

## Licensed Radiolabeled ADME Laboratory

- Only private company in Suzhou and Shanghai licensed and equipped to conduct  $^{14}\text{C}$ - and  $^3\text{H}$ -labeled metabolite profiling experiments across multiple species, including mice, rats, dogs, monkeys, and humans

## Contact Us

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