

Toxicology Bioanalytical Solutions: Supporting Safer Drug Development Through Scientific Excellence

Introduction

Synexa Life Sciences provides GLP-compliant toxicology bioanalytical services to support discovery, IND-enabling and regulatory safety studies. With over 20 years of bioanalytical experience and purpose-built facilities in the UK and Finland, we deliver high-quality toxicokinetic (TK), pharmacokinetic (PK), biomarker and formulation analysis across a wide range of therapeutic modalities.

Why Synexa

- GLP-accredited laboratories supporting discovery and preclinical clinical studies
- Extensive experience supporting pivotal preclinical and IND-enabling toxicology programmes
- Proven expertise in assay development, validation and sample analysis for novel and complex modalities
- Rapid turnaround supported by dedicated project management, quality assurance and scientific oversight

Core Toxicology Support Toxicokinetics (TK)

- Full TK bioanalysis and reporting
- Preclinical exposure assessment supporting dose-range finding and GLP toxicology studies
- WINNONLIN and Watson LIMS-enabled data analysis and reporting

Bioanalytical Method Development & Validation

- Fit-for-purpose and regulatory-compliant assay development
- Validation according to current ICH M10 guidelines
- Long-term stability, matrix effect, recovery and robustness assessments

Dose Formulation & Exposure Verification

- Quantification of test articles and metabolites
- Support for formulation verification and concentration assessment within toxicology programmes

Modalities Supported

- Small molecules
- Peptides
- Oligonucleotides
- Proteins
- Antibody-drug conjugates
- PROTACs and molecular glues
- Biomarkers and immunomodulators
- Radio-conjugates

Matrices Supported

- Plasma and serum
- Whole blood
- CSF
- Urine
- Tissue homogenates and lysates
- Brain, liver, spleen, kidney, muscle, eye and other specialised tissues
- Cell and tissue culture supernatants
- Including microsampling

Technology Platforms

- LC-MS/MS systems including Waters TQ Absolute, Waters TQ-S and Sciex 6500+ platforms
- HPLC-DAD systems
- Advanced extraction methodologies including protein precipitation, SPE, liquid-liquid extraction, supported liquid extraction, protein digestion and immunoaffinity workflows

Discuss your programme with a scientist

Speak directly with a Synexa scientist about your Toxicology programme requirements today.
Email our team at contactus@synexagroup.com to get started.