

# Advanced Safety Pharmacology Services

## Overview

Safety pharmacology programs evaluating cardiovascular, respiratory, and neurophysiologic function rely on precise data and experienced interpretation to support regulatory and development decisions. These studies are commonly executed through CRO partnerships or internal research teams and often benefit from specialized expertise to strengthen endpoint analysis, telemetry interpretation, and overall program depth.

Endpoint Preclinical connects CROs, pharmaceutical companies, biotechs, medical device, and academic labs with a coordinated network of specialists. Through a single contracting partner, our clients engage program oversight, advanced telemetry services, surgical support, imaging interpretation, pathology correlation, and advanced GLP biostatistics to support safety pharmacology programs.

**We connect the experts who generate, interpret, and defend functional safety data.**

## Why Endpoint

- **Cardiologist-Led Interpretation:** Board-certified cardiology expertise guiding ECG review, arrhythmia interpretation, conduction analysis, and cardiovascular safety assessment.
- **GLP Telemetry, ECG & Respiratory Analytics:** Validated workflows for ECG, blood pressure, and respiratory telemetry data using platforms such as EMKA ecgAUTO and DSI Ponemah.
- **Telemetry Surgical Expertise:** Expert surgeons supporting telemetry implantation, protocol refinement, and signal quality optimization.
- **Integrated Endpoint Interpretation & Biostatistics:** Physiologic signals integrated with imaging, pathology, and quantitative statistical analysis to support defensible safety conclusions and regulatory reporting.
- **Flexible Expert Integration:** Engage a single SME or deploy a coordinated team while maintaining existing internal workflows and research programs.



# Safety Pharmacology Program Support

Area	Representative Expertise
Core Cardiovascular Assessment	ECG interval analysis (PR, QRS, QT/QTc), arrhythmia detection, heart rate and blood pressure telemetry evaluation, conduction disturbance interpretation, manual interval verification, and cardiologist-led reporting aligned with ICH S7A/S7B expectations.
Respiratory Endpoint Analysis	Quantitative analysis of respiratory rate, tidal volume, and minute ventilation integrated with cardiovascular telemetry data for comprehensive cardiorespiratory assessment.
Telemetry Implantation & Surgical Support	Expert surgical implantation of telemetry monitoring systems, protocol refinement, perioperative support, device maintenance, and signal quality optimization developed through decades of preclinical surgical experience.
Qualitative Telemetry Analytics & Biostatistics	GLP-aligned ECG and telemetry analytics, validated workflows, statistical analysis using SAS, Prism, and R, multimodal dataset integration, and regulatory-ready tables, figures, and subreports.
Echocardiography & Functional Imaging	Advanced echocardiographic acquisition and interpretation including tissue Doppler imaging and strain analysis for structural and functional cardiac assessment.
Imaging Correlation	Integration of MRI, CT, PET, SPECT, and ultrasound findings with functional safety endpoints through region-of-interest analysis and quantitative imaging interpretation.
Pathology Correlation	Integration of morphologic and histopathologic findings with functional safety signals to strengthen endpoint interpretation and tissue strategy development.
Study Design & Program Oversight	Core battery design support, endpoint selection, protocol review, CRO collaboration, and regulatory-aligned safety pharmacology strategy development.

*\*Our network supports studies across therapeutic modalities and preclinical species with scalable capacity and efficient reporting timelines.*

## How to Get Started

### 1. Discovery Meeting

Meet with our leadership team to discuss your research goals, challenges, and timelines. We'll identify the right experts within our network to support your program needs.

### 2. Sign an MSA

One master agreement allows your organization to access multiple consultants, capabilities, and service types, without renegotiating terms for each consulting engagement.

### 3. Access Expertise

With your MSA in place, our experts can integrate into your research programs immediately. Our network scales your team—from study design to regulatory support—as your needs evolve.