AVANZA LABORATORIES

ADVANCING CURES THROUGH DRUG DEVELOPMENT SERVICES

SAFETY PHARMACOLOGY AND NEUROBEHAVIORAL ASSESSMENTS

Safety pharmacology and neurobehavioral studies are designed to assess potential adverse pharmacological effects of test articles. Primary evaluations include cardiovascular, respiratory, and central nervous system assessment. Supplemental evaluations of renal/urinary function, gastrointestinal function, and immune function may also be performed. *AVANZA* uses Ponemah™, a state-of-the-art data collection technology, to collect and process vital safety pharmacology data and make it electronically available to the cardiologist. The following types of safety pharmacology studies are performed in both large and small animals:

Core Battery Tests:

Central Nervous System (Rodents)

- Coordination, Sensory/Motor Responses
- Functional Observation Battery
- Modified Irwin Screen
- Locomotor Activity
- Rotor-Rod

Supplemental Battery Tests:

Central Nervous System (Rodents)

- Analgesia Test (Tail Flick)
- Barbiturate – induced sleeping time
- Learning and Memory
- Pro-convulsant Activity
- Startle Response

Gastrointestinal System - Transit Time

- Gastric Motility and Transit

Autonomic Nervous System and Smooth Muscle Evaluation

Cardiovascular System – Telemetry (Canines, Monkeys, Pigs)

- Activity
- Blood Pressure
- Body Temperature
- Electrocardiogram (QT/QTc)
- Heart Rate

Respiratory System (Rats, Canines, Monkeys)

- Capnography (SpO_2, $ETCO_2$)
- Respiratory Rate
- Plethysmography

Renal/Urinary System Urinalysis to include: (Canines, Monkeys)

- Cytology
- Fluid/electrolyte balance
- GFR (creatinine clearance)
- Osmolarity
- pH
- Proteins
- Specific Gravity
- Volume

Contact us for more information about *AVANZA*'s Safety Pharmacology services,

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