



ALTASCIENCES

# DRIVING SIMULATION IN CLINICAL TRIALS

Assessing the effects of psychoactive drugs on driving performance is a key regulatory requirement, providing essential data for labeling. Whether your driving study is planned or requested by regulators, we are equipped to deliver dependable results efficiently and safely.

## SPECIALIZED EXPERTISE AND FACILITIES

Our driving simulation clinical trials solution generates high-quality, decision-enabling data to de-risk and accelerate your drug development program by utilizing:

- 12 driving simulators permanently installed on-site for rapid study start-up, with space to house over 20
- A long-term partnership with the Cognitive Research Corporation (CRC)
- Professional oversight by fully-certified, in-house driving simulation study specialists
- Experience in designing driving studies to meet strict regulatory requirements

**13,000+**

simulated drives  
at our clinical  
pharmacology unit

## SIMULATOR KEY FEATURES

- Proven sensitivity to both therapeutic and adverse drug effects
- Advanced 3D graphics replicate realistic driving environments, including car dashboard, roadway, intersections, and traffic
- Steering sensitivity adjusts dynamically with vehicle speed
- Auditory feedback provides cues for acceleration limits and excessive cornering or braking
- Automated measurement of psychomotor function, and other cognitive behaviors

We combine study design expertise with CRC's validated psychomotor and neurocognitive test battery.



# ENHANCING CLINICAL STUDIES WITH REAL-WORLD INSIGHTS

Driving simulators analyze driving behaviors in various scenarios in a safe and controlled environment, using advanced 3D graphics to simulate realistic driving environments, and capture driving behaviors such as driving speed, acceleration, vehicle position, and lateral deviation—to gather physiological data (e.g., electroencephalogram (EEG), electrocardiogram (ECG), electromyogram (EMG), and facial thermal imaging) to study driving behaviors.

The CRC driving simulator has proven sensitivity to the effects of age, trauma, neurological disease, drowsiness, and CNS depressants and stimulants. Driving simulators are comparable in sensitivity to over-the-road testing, with:



Faster study start-up



Lower cost



No risk of property damage or personal injuries

## RAPID STUDY START-UP

Our dedicated on-site driving suites and highly experienced staff facilitate a rapid recruitment and swift trial start-up process. We leverage a pool of more than 40,000 healthy volunteers, special populations, and patients to meet your diverse study needs.

### Key Advantages:

- Thorough participant assessments to prevent cybersickness or simulator sickness
- Established databases pre-identify candidates and enable targeted outreach across diverse demographics, ethnicities, special populations, and patients
- Proven ability to predict and meet recruitment timelines, keeping studies on track



## TURNKEY SOLUTIONS FOR DRIVING SIMULATION STUDIES

We save you time and simplify your clinical trial with a comprehensive turnkey solution that manages every aspect of your driving simulation study—spanning protocol design, clinical execution, bioanalysis, data reporting, and regulatory submission.

We hold the required narcotic licenses for studies involving controlled substances or positive controls, ensuring your trial runs without interruption or regulatory delays.