

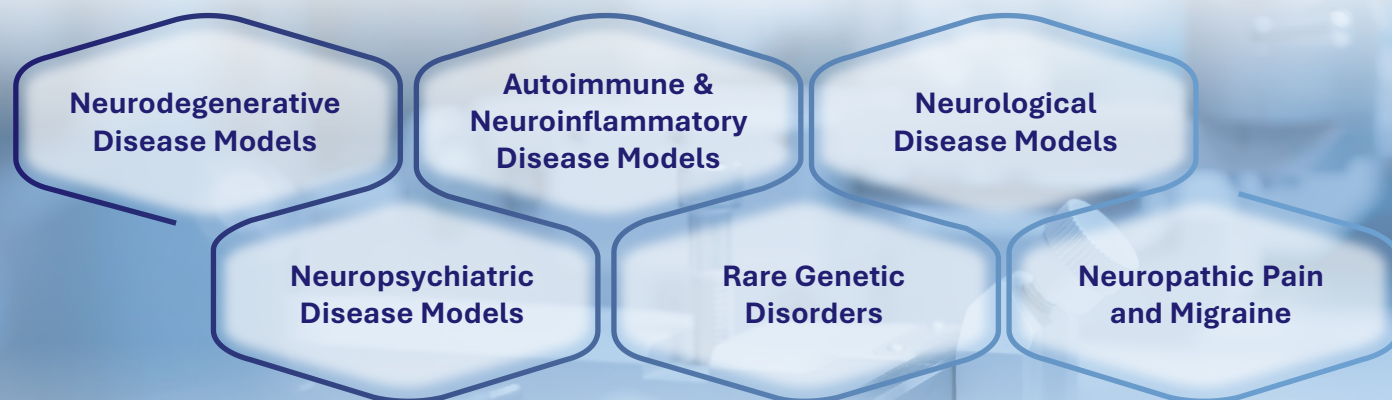
Advancing CNS Drug Discovery with a Comprehensive Portfolio of CNS Models

A comprehensive portfolio of well-validated CNS disease models in rodents.

Expertise across modalities, including small molecules, biologics, conjugates, and CGT.

Minimal lead times and direct communication with Pharmaron scientists.

AAALAC-accredited facilities in China conduct around 300 CNS studies annually.



A Comprehensive Suite of Rodent CNS Disease Models

Neurodegenerative Disease Models	Neurological and Neuroinflammation Models	Neuropsychiatric Disorder Models
• Alzheimer's Disease: APP/PS1, 5XFAD, 3xTG, Tau P301S, Tau P301L, Scopolamine-induced amnesia, Aβ 1-42-induced memory impairment • Parkinson's Disease: Unilateral MFB/intrastratial 6-OHDA lesion, Acute/sub-chronic MPTP, AAV/PFF mediated α-synuclein, L-DOPA-induced dyskinesia • Rare Genetic Disorders: Huntington's disease, Amyotrophic lateral sclerosis, Lysosomal storage disease, Duchenne muscular dystrophy	• Multiple Sclerosis: MOG 35-55-induced EAE, MOG 1-125-induced EAE, Cuprizone-induced demyelination • Epilepsy & Sleep Disorders: PTZ kindling, Maximal electroshock, Kainic acid & Pilocarpine models of TLE • Stroke: Transient & permanent middle cerebral artery occlusion • Neuroinflammation: Systemic & intracerebroventricular LPS injection	• Depression: Forced swimming test, tail suspension test, chronic social defeat stress, chronic restraint stress • Anxiety: Open field test, elevated plus maze, light-dark box • Schizophrenia: DOI-induced head twitch response, MK801-induced hyperlocomotion • Other Models: Resident-Intruder Paradigm

Support for Specialized Dosing Routes

We support dosing by oral gavage, intraperitoneal, subcutaneous, intravenous, intramuscular, Intranasal, intra-rectal, intravitreal, intracerebroventricular injection, brain cannulation, and brain infusion.

Comprehensive Readouts for Efficacy Testing

- **Quantitative EEG/EMG Services:** Telemetry-based seizure detection, sleep/wake cycle monitoring, and nerve conduction studies (CV, SNAPs, cMAPs).
- **Microdialysis Services:** Continuous measurement of free drug concentrations and real-time analysis of pharmacodynamic changes in neurotransmitters, modulators, and proteins in target tissues.
- **Behavioral Testing Services:** Comprehensive testing suites for memory and learning (Morris water maze, Y-maze, passive avoidance test), motor function (rotarod, treadmill, pole, cylinder, catalepsy, CatWalk XT, grip strength, balance beam), anxiety/depression assessments (open field test, tail suspension, forced swimming test, elevated plus maze), pain/inflammation (von Frey, thermal, hot plate, plethysmometer measurement of paw volume, weight bearing), and more.

Biomarker & Bioanalysis Platforms

- Continuous CSF collection without terminating mice
- Dissection of brain regions, nerves, spinal cord, or dorsal root ganglia
- PK/PD studies with in-house bioanalysis
- Histology and immunohistochemistry
- Molecular and cell-based assays
- Genomics & proteomics

Development of New Disease Models

Our team is open to developing new animal models tailored to our client's needs. We are licensed to import animals from overseas and provide the breeding strategy to expand and maintain a colony to support long-term projects.

Standard workflow for developing a new neurodegenerative disease model:



Contact us to discuss how our capabilities can advance your drug discovery program.