

## OCULAR CAPABILITIES

**Biomere** has validated several ocular disease models using state-of-the-art techniques including in-life imaging, terminal imaging and tissue collections. The team focuses on evaluating PK/PD characteristics and early safety profiles of novel therapies to treat ocular diseases. The Biomere site in the US has a variety of ocular models under development and has interest in collaborative model development on new and unique ocular models.

**JOINN Laboratories** has completed over 500 ocular studies and generated data for 30 IND submissions. The facility is AAALAC accredited, inspected by the US FDA, PMDA and MFDS for GLP services and certified by NMPA, OECD and CNAS/ILAC-MRA. The team has deep expertise in ocular disease models and efficacy, tolerance and PK studies for ocular therapies. The JOINN team has supported early discovery through GLP toxicology programs and phase I clinical studies. The team combines comprehensive dosing techniques and specialized surgical procedures with state-of-the-art ocular imaging technology, tissue collection and histopathology analysis.

### DISEASE MODELS

JOINN Laboratories and Biomere offer a wide range of ocular disease models –

#### Biomere models:

- Allergic Conjunctivitis
- Corneal Wound
- Rodent Laser CNV
- Uveitis
- Acute & Chronic Glaucoma
- Wet & Dry AMD

#### JOINN Laboratories models:

- Dry Eye
- Allergic Conjunctivitis
- Corneal Neovascularization
- Corneal Degeneration
- Corneal Wound
- Cataract
- Rodent Laser CNV
- Uveitis
- Acute & Chronic Glaucoma
- Retinal Optic Nerve Damage
- Retinal Neovascularization
- Retinopathy of Prematurity
- Sodium Iodate
- Diabetic Retinopathy

### ROUTES OF ADMINISTRATION

Biomere and JOINN's ocular teams have advanced dosing capabilities in small and large animal models including:

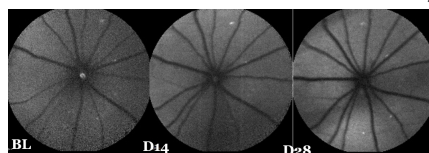
- Topical eye
- Intravitreal injection
- Subretinal injection
- Subconjunctival injection
- Intracameral injection
- Systemic delivery including oral, subcutaneous, intraperitoneal, intratracheal, and intravenous
- Suprachoroidal dosing is limited to rabbit and primate models

### ENDPOINTS

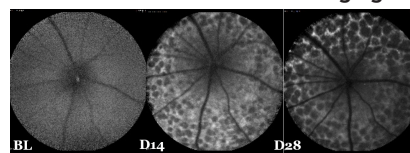
The ocular team performs various endpoint assessments across rodents, rabbits and NHP models using specialized equipment.

- Optical coherence tomography (OCT) and fundus imaging are used to visually examine the eye tissues in response to stimuli and therapeutic intervention
- Electroretinogram (ERG) testing is used to measure the electrical activity of the retina in response to light
- Intraocular pressure (IOP) measurement to evaluate glaucoma models
- Collection of specific eye tissues that are fixed or frozen for histological analysis or expression profiling by the client or third-party partners

#### Rodent Sodium Iodate model of Retinal Degeneration – Fluorescent Fundus Imaging



(Group 1) Vehicle



(Group 2) Sodium Iodate 40 mg/kg

