

OCULAR CAPABILITIES

Our global team of industry-leading scientists employ a variety of state-of-the-art techniques and imaging modalities to investigate the pharmacodynamics (PD), pharmacokinetics (PK) and safety of novel compounds targeted to treat ocular diseases.

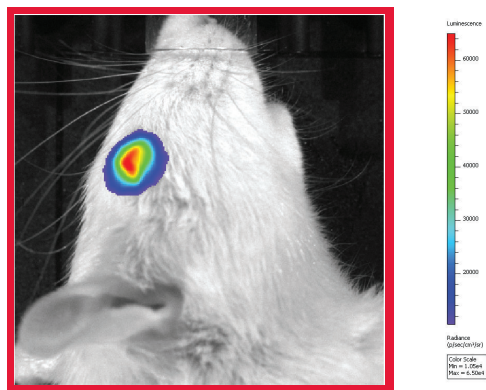
Corneal neovascularization, choroidal neovascularization, cataract, glaucoma, and dry eye models are currently available from JOINN (China). Our combined preclinical and clinical research experience distinctively positions us to support our clients' nonclinical ophthalmic needs.

ASSESSMENT	SPECIES	EQUIPMENT
Slit-lamp/anterior segment	Mouse, rat, rabbit, NHP	Kowa handheld slit-lamp, Topcon slit-lamp, Leica surgical scope
Indirect ophthalmoscope/fundus	Mouse, rat, rabbit, NHP	Keeler indirect, Volk PictorPlus
Optical coherence tomography (OCT)	Mouse, rat, rabbit, NHP	Heidelberg Spectralis OCT +HRA
Electroretinogram (ERG)	Rabbit, NHP	Diagnosys Espion
Intra ocular pressure (IOP)	Rabbit, NHP	Tonovet
Gene expression	Mouse and rat (rabbit and NHP ex vivo)	IVIS Spectrum

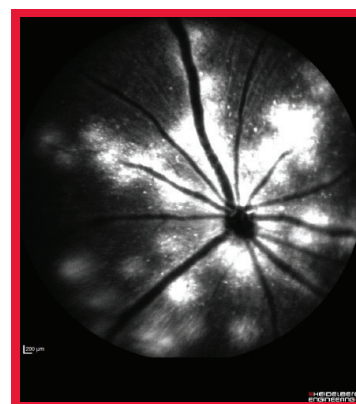
COMPREHENSIVE DOSING TECHNIQUES	SPECIES
Topical eye	Mouse, rat, rabbit, NHP
Intravitreal injection	Mouse, rat, rabbit, NHP
Subretinal injection	Mouse, rat, rabbit, NHP
Subconjunctival injection	Mouse, rat, rabbit, NHP
Intracameral injection	Mouse, rat, rabbit, NHP
Suprachoroidal	Rabbit, NHP
Systemic delivery including oral, subcutaneous, intraperitoneal, intrathecal, intratracheal, and intravenous	Mouse, rat, rabbit, NHP

* *Ocular models (such as corneal neovascularization, choroidal neovascularization, cataract, glaucoma, and dry eye) currently available with our partner, JOINN, in China. * *

EXAMPLE OF IVIS USE IN A RAT EYE



AUTO-FLORESCENCE AFTER GENE THERAPY IN A MOUSE EYE



OCT OF AN NHP WITH INTRARETINAL CYSTS



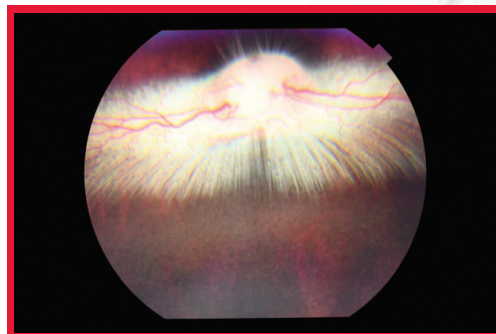
COLOR FUNDUS OF A NORMAL NHP EYE



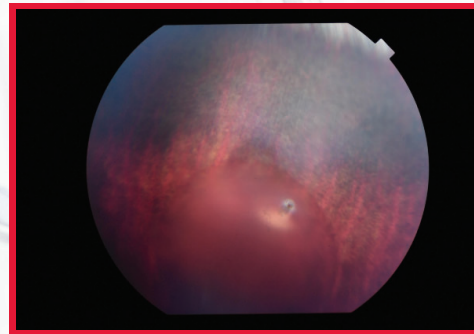
FLUORESCIN ANGIOGRAPHY OF A NORMAL NHP EYE



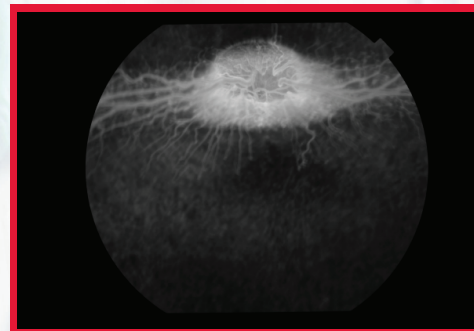
COLOR FUNDUS OF A NORMAL RABBIT EYE



COLOR FUNDUS POST-SUBRETINAL INJECTION IN A RABBIT EYE



FLUORESCIN ANGIOGRAPHY OF A NORMAL RABBIT EYE



GLOBAL PORTFOLIO OF CRO RESOURCES SUPPORTING THE DEVELOPMENT OF OPHTHALMIC DRUGS & DEVICES

- Early Discovery > Phase I Clinical Studies
- GLP (China)
- Efficacy & Proof of Concept Studies
- Tolerance & Safety Studies
- Pharmacokinetics Studies
- Genetic Animal Models
- Comprehensive Dosing Techniques
- State-of-the-Art Ocular Technology
- Specialized Surgical Procedures
- Tissue Collection & Bioanalysis Histology & Pathology (China)

OPHTHALMOLOGY MODELS

- Dry Eye (CH)
- Allergic Conjunctivitis (MA, CH)
- Corneal Neovascularization (CH)
- Corneal Degeneration (CH)
- Cataract (CH)
- Uveitis (MA, CH)
- Acute & Chronic Glaucoma (MA, CH)
- Retinal Optic Nerve Damage (CH)
- Retinal Neovascularization (MA, CH)
- Retinopathy of Prematurity (CH)
- Diabetic Retinopathy (CH)
- Wet & Dry AMD (MA, CA)