

# Enabling R&D of New Drugs in Ophthalmology

The Ophthalmic Platform of TriApex consists of multiple teams supporting nonclinical and clinical efficacy and safety assessment in drug R&D. Our scientific team members, project operation experience, state-of-the-art instruments, large-scale NHP population and quality control system, enable us to help the rapid translation of innovative ophthalmic drug molecules into clinical application.

## Integrated Ophthalmic Platform and Capability



Ophthalmic disease models (mouse, rabbit, dog, monkey, etc.)

Nonclinical safety assessment of ophthalmic drugs

Ophthalmic pharmacokinetic and toxicokinetic analysis (all tissues of eye)

Ophthalmic pathology analysis

Ophthalmic clinical trials (phase I-III)

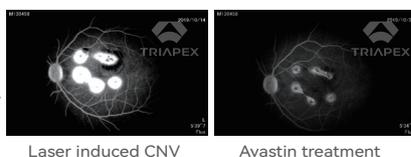
Ophthalmic drug registration

Ophthalmic clinical sample analysis

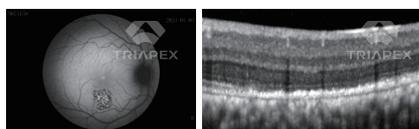
## Ophthalmic Disease Model

- Choroidal neovascularization
- Retinal neovascularization
- Long-term vascular leakage
- Dry age-related macular degeneration
- Blue light induced retinal pigment epithelial atrophy
- Blue light-induced geographic atrophy
- Corneal neovascularization
- Dry eyes
- Diabetic retinopathy
- Myopia / farsightedness / presbyopia
- Ocular hypertension / glaucoma
- Spontaneous cataract
- Pterygium
- Proliferative vitreoretinopathy
- Retinal vein occlusion

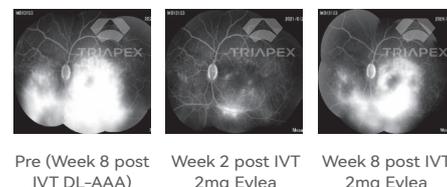
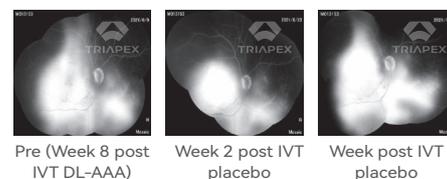
### Laser-induced CNV model



### Blue light-induced geographic atrophy model



### Long-term vascular leakage model

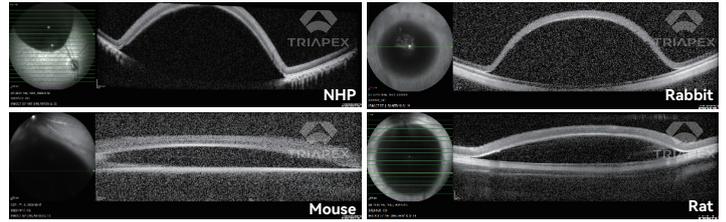
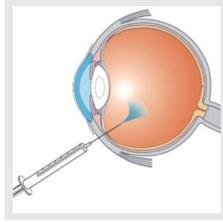


# Ophthalmic Technology, Operation, Expertise and Quality



## Ophthalmic Administration

- Eye drop
- Subconjunctival injection
- Anterior chamber injection
- Intravitreal injection
- Subretinal injection
- Suprachoroidal injection



## Ophthalmic Examination

- Slit lamp
- Ophthalmoscopy
- Ocular pressure (awake or anesthetized animals)
- OCT
- OCTA
- Fundus photography
- Fundus angiography
- Electroretinography (ERG)
- A / B ultrasound
- Optical biometry
- Pupillometer
- Dry eye detector device



ZEISS RESIGHT 700



BQ 900 Slit Lamp



Heidelberg SPECTRALIS OCT



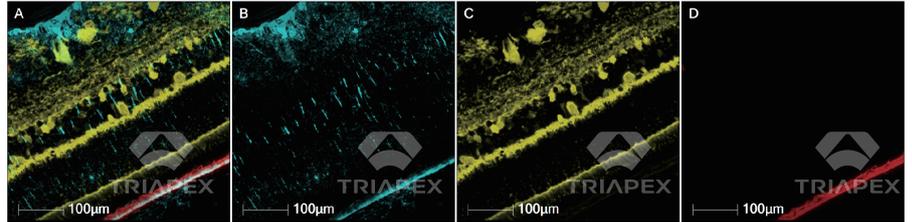
ZEISS CLARUS 500



Diagnosys Espion D315

## Ophthalmic Pathology Analysis

- Eyeball fixation and trimming (e.g. laser spots)
- Histopathologic examination
- Immunohistochemical staining of cells
- Imaging analysis and quantitative analysis



Path images

## Ophthalmic Nonclinical Safety Assessment

- Professional ophthalmic experts with 20+ years of industry experience
- Mastering diverse methods of intraocular administration (IVT, SRI, SCS, etc.)
- Experienced in evaluation of different types of ophthalmic drugs (small molecule, antibody, gene therapy, siRNA, etc.)
- Capable of performing GLP-certified studies in compliance with NMPA/FDA/OECD GLP regulations

## Ophthalmic Clinical Study

- Supporting phase I-III ophthalmic clinical trials and regulatory affairs
- Extensive clinical project experience covering various ophthalmic drugs
- Established deep and stable collaborations and partnerships with high-level hospitals and enterprises
- Working with nonclinical team to accelerate nonclinical to clinical translation



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**TRIAPEX LABORATORIES CO., LTD.**  
An innovative CRO enabling disease-oriented R&D

[www.tri-apex.com](http://www.tri-apex.com)

[BD@tri-apex.com](mailto:BD@tri-apex.com)

+86 25 5819-6588

No. 9 Xinglong Road, Jiangbei New Area, Nanjing, Jiangsu, China, 211800