iris PHARMA

PRECLINICAL & CLINICAL OPHTHALMOLOGY
RESEARCH SERVICES WORLDWIDE

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RESEARCH SERVICES WORLDWIDE

WHEREVER YOU ARE

GET THE BEST
RESEARCH SERVICES
IN OPHTHALMOLOGY

THE SPECIALIST FOR YOUR OCULAR DRUG & MEDICAL DEVICE DEVELOPMENT

Iris Pharma is a worldwide Contract Research Organization (CRO) offering ophthalmologic drug and device development services. From animal proof of concept and *in vivo* regulatory development through to clinical trials and marketing surveys, our teams have excellent knowledge and expertise in each step of the drug development process.

We have worked hand-in-hand with our customers to bring nearly 70 ocular drugs and medical devices to international markets for various diseases such as glaucoma, dry eye, ocular inflammation, infection and allergy.

A PROVEN EXPERIENCE SINCE 1989

- A world-class company with 300 international customers including pharmaceutical and biotechnology companies, drug delivery platform companies, consultants and universities.
- A network of experts and strong partnerships with research facilities, scientists and contract research organizations around the world

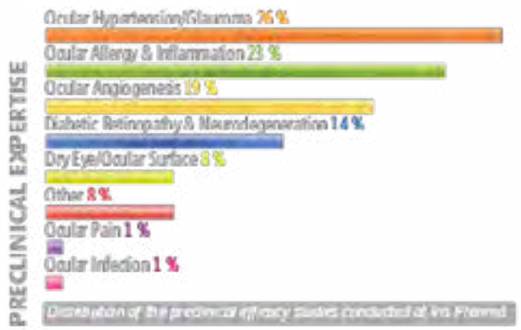
270+ international clients including start-up, biotechnology and pharmaceutical companies

Network of experts and strong partnerships with research facilities, scientists, partners and CROs around the world

MASTERY OF ALL OCULAR PATHOLOGIES IN PRECLINICAL AND CLINICAL DEVELOPMENT

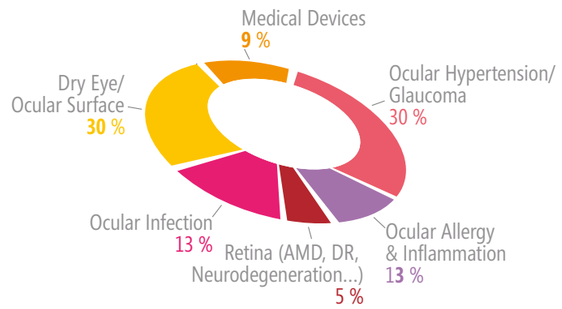
Iris Pharma helps you by providing services to develop your potential drugs and devices involving all areas of the eye, from the ocular surface to the posterior segment of the eye, and the main conditions affecting the organ, such as age-related macular degeneration, diabetic retinopathy, glaucoma and dry eye syndrome.

PRECLINICAL EXPERTISE



Distribution of the preclinical efficacy studies carried out at Iris Pharma

CLINICAL EXPERTISE



Distribution of the clinical trials conducted with Iris Pharma

THERAPEUTIC SPECIALIZATION THE SOLUTION FOR REDUCING TIME TO MARKET

Since its founding in 1989, Iris Pharma has been based on the science of ophthalmology and has expanded its expertise in the field. Our unique, specialized knowledge ensures that you receive high-quality services delivered by well-informed and experienced staff who will guide your drug or device to market in the most efficient manner possible.

« Their stellar study conduct and expert advice have been crucial to advancing our AMD program. »

Team Leader Preclinical Research
German Biotechnology Company

CERTIFICATIONS & ACCREDITATIONS

- Statement of compliance with Good Laboratory Practices (GLP)
- Adherence to all trial-related requirements (ICH-GCP)
- Authorization No.2014-022762 to store for future use, to use, to import and to export radionuclides in sealed and unsealed sources
- Authorization No.D06-065-9 for experiments on live animals
- French research tax credit accreditation (CIR)

QUALITY

At Iris Pharma, quality is a state of mind. Our Quality Assurance program is designed to ensure compliance with GLP and ICH-GCP requirements, guidelines (FDA, OECD, etc.) and local regulatory laws and to maintain Iris Pharma's standard of excellence in our work.

WHY IRIS PHARMA?

A Proven Track Record and Extensive Experience
We have facilitated the translation of nearly 70 ocular drugs and medical devices from the laboratory to marketing approval.

Completely Dedicated to Ophthalmology
Our experts can guide you in making the best decisions to move your ocular products from the laboratory to humans as quickly, safely and effectively as possible.

A Global View of the Drug Development Process
Partnering with you to carry out preclinical and clinical studies: we are thinking of humans from the moment we begin testing on animals.

Comprehensive Ocular Expertise
Our scientists master all ocular pathologies, from the surface to the posterior segment of the eye, including dry eye, glaucoma, AMD and diabetic retinopathy.

A world-Class International Company
We carry out international submissions in compliance with GLP and GCP requirements and international guidelines (FDA, OECD, EMA). Our network of experts and partners extends around the world.

Working with You Now and in the Future
Since 1989, we have been a trustworthy, financially stable company committed to long-term collaborations with each of our customers. As an independent CRO, we ensure impartial development of ocular drugs and devices.

Consistently Aiming for Scientific Excellence
Our staff is highly qualified and specialized in the field of ophthalmology.
We use state-of-the-art medical and scientific equipment for all of your projects.
We validated unique animal models designed for ophthalmology research.

YOUR CHALLENGES

Iris Pharma is an expert in helping you with every challenge from the moment you have a project involving the eye

«I'd like to assess the possible therapeutic value of my lead compound in ocular diseases»

POSITION FOR SUCCESS AND EFFECTIVENESS IN OPHTHALMOLOGY

ENTRUST IRIS PHARMA TO
- Get valuable information from cost effective studies to guide your future work
- Quickly and easily determine the efficacy, PK and safety profiles of your compounds
- View the trends before moving forward

«I need a full preclinical package or clinical trials for my ocular drug or ophthalmic medical device»

PROCEED WITH CONFIDENCE FROM BENCH TO BEDSIDE

WHILE WORKING WITH IRIS PHARMA YOU WILL
- Master the requirements: regulatory requirements, the right data to assemble and key studies
- Master the steps, milestones and deadlines

«My candidate or medical device shows promise in treating ocular diseases. Help me to make it shine»

AT YOUR SIDE TO CREATE VALUE

WITH IRIS PHARMA ON YOUR SIDE YOU WILL
- Demonstrate the value of your product
- Bridge the gap between innovation and pharmaceutical products
- Capture the attention and receive development funding from investors and venture capitalists
- Prepare your product for the licensing process
- Enter into a collaboration with a partner

«I need a step-by-step approach and "À la carte" studies»

GET EXPERT SUPPORT AT ANY POINT IN YOUR DEVELOPMENT PROGRAM

CONTRACT WITH IRIS PHARMA TO
Immediately benefit from the unique know-how and resources of a renowned expert in ophthalmology able to understand your needs and intervine at any stage of your program

« The Iris Pharma staff's cutting-edge knowledge in ophthalmology, along with a forward-thinking state of mind, have helped us lead our products intelligently through the preclinical and clinical stages. »

Director Pharmaceutical R&D
French Ophthalmic Pharmaceutical Company

PRECLINICAL DEVELOPMENT SERVICES

Since 1989, the Iris Pharma team has provided services in the scientific and technical disciplines of preclinical development. We deliver high-quality, regulatory compliance work that helps you move faster from concept to clinical research.

A UNIQUE OCULAR BACKGROUND

- 3,000+ preclinical ocular studies carried out at our labs
- 3,500 intravitreal injections performed on rabbits and rodents in 2016
- 170 posters & papers related to preclinical projects have been authored by our scientists
- Labs and animal husbandry (rabbits, rats, mice, guinea pigs, non human primates*) dedicated 100% to ophthalmology

*via our partner

HIGHLY-QUALIFIED & EXPERIENCED STAFF

- Our collaborators understand and fulfil your needs and objectives
- Our staff includes histopathologists, veterinarians, pharmacologists, study directors, qualified laboratory animal personnel trained in ophthalmology
- We are fully compliant with FDA and EMA regulations

TECHNICAL SKILLS

- Optical Coherence Tomography (OCT)
- Electroretinography (ERG)
- Confocal microscopy
- Slit lamp examinations
- Anterior & posterior segment & fundus photography
- Fluorescein angiography (HRA), retina/choroid flatmount
- Anterior flare (laser flare meter), ocular fluorophotometry
- Esthesiometry, tonometry, pupilometry
- Immunology (e.g. Retinal Ganglion Cells (RGC) labeling, ELISA)
- Vitrectomy, photocoagulation (argon laser), phacoemulsification, microsurgery
- Histology, micro-dissection of ocular samples

CUTTING-EDGE PRECLINICAL STUDIES

Iris Pharma offers:

- Pharmacological studies in animals to investigate the method of action and effects of a substance in the eye
- Good Laboratory Practice (GLP) studies to determine the ocular safety, tolerance, pharmacokinetics and toxicokinetics of test drugs and devices
- Pilot and proof of concept studies to help you determine the most effective direction for future studies

We can also guide you in your preclinical development programs while assisting you in:

- Selection of preclinical animal models according to the clinical features
- Study design and data interpretation
- Preclinical packages including budgets, timelines and regulatory requirements
- Transversal project management
- Strategic and global drug development consultancy

QUALITY & ETHICS

- Commitment to providing the best-in-class quality services (quality systems, quality initiatives, service assessment)
- Compliance with GLP principles since 1995
- Animal Welfare (internal ethics committee and animal well-being structure, recommendations of the ARVO statement for the use of animals in ophthalmic and visual research)

IN VIVO PHARMACOLOGY STUDIES AND ANIMAL EFFICACY MODELS

Benefit of validated animal models for the translation of drug and device findings from bench to bedside

Iris Pharma offers preclinical testing of drug in more than 40 animal efficacy models to mimic the conditions of the human eye.

Iris Pharma can also develop new animal models as needed, according to our customers' specific requirements. Our expertise in preclinical research enables us to assess the compatibility of our animal models with your objectives and to customize the study design according to your needs.

OUR EXPERIENCE

Nearly 1,000 ocular efficacy studies performed in animal models.

THERAPEUTIC EXPERTISE

Age-related macular degeneration (Wet and Dry)
Conjunctivitis (allergic)
Corneal fibrosis syndromes
Corneal graft
Corneal wound healing
Diabetic retinopathy
Dry eye syndrome
Glaucoma
Inherited retinal degeneration
Keratitis (e.g. neurotrophic, infectious)
Orphan diseases
Ocular irritation
Optic neuropathies
Ocular pain or discomfort
Ocular surgery
Ocular inflammation (post surgery or exogenous factors)
Retinopathy of prematury
Stromal ulceration
Uveitis (anterior or posterior)
... and many other pathologies

ANIMAL EFFICACY MODELS AVAILABLE AT IRIS PHARMA

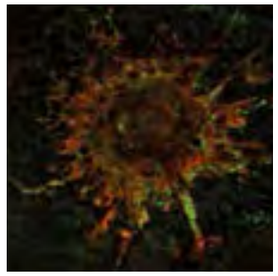
OCULAR DOSE ROUTES

Topical, intravitreal, subretinal, sub-tenon, subconjunctival, suprachoroidal, intracameral, retrobulbar, intraperitoneal, intrascleral, intrastromal, periocular, oral, intravenous, subcutaneous, punctal plug, device implantation, iontophoresis...

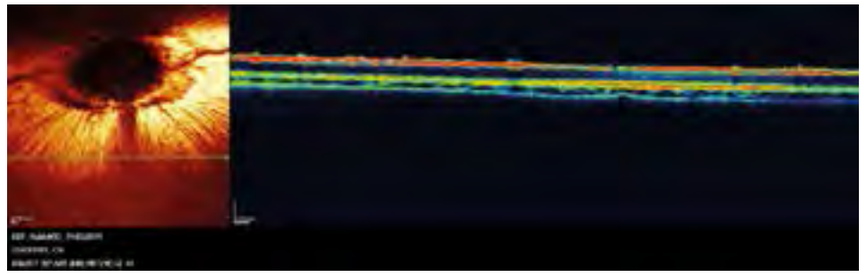
TECHNOLOGIES

We use state-of-the-art ocular technology – including Spectralis® HRA+OCT, confocal microscopy, tomography, electroretinography, and more – to test the efficacy of ophthalmic drugs or devices.

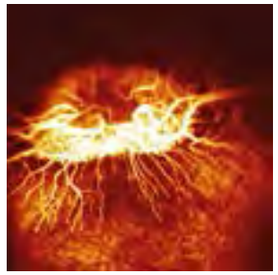
CUTTING EDGE EQUIPMENT FOR IN VIVO PHARMACOLOGY STUDIES



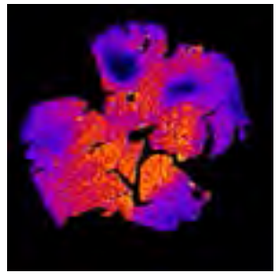
Choroidal neovacularization rat isolectin B4 and FITC dextran staining argon laser model



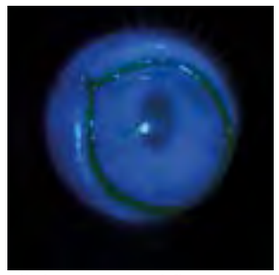
OCT image of normal retina of rabbit



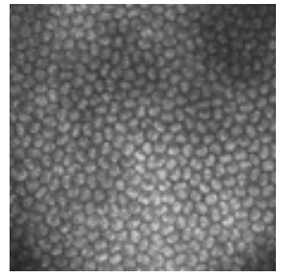
HRA rabbit fundus Fluorescein angiography



Retinal ganglion cells density in a rat HPIO model



Slit lamp corneal fluorescein staining rabbit normal Cornea



HRT-IVCM rabbit normal Corneal endothelium

« The responsiveness, flexibility and preclinical study advice we received from Iris Pharma helped us to reach proof of concept very quickly. »

VP R&D – International Pharmaceutical Company Specialized in Ophthalmology

OCULAR PHARMACOKINETICS

Entrust your ocular PK studies to a specialist

Iris Pharma offers complete ocular pharmacokinetic (PK) evaluation services in a GLP environment to obtain the reliable data required before first-in-human clinical studies of your product. Our skilled and experienced staff handles all administration routes as well as the microdissection and sampling of each eye structure.

OUR EXPERIENCE

More than 500 ocular pharmacokinetic studies carried out

EXPERIMENTAL DESIGN

- Pilot pharmacokinetic
- Pharmacokinetic
- Bioavailability
- Bioequivalence
- Tissue distribution
- Delivery optimization
- Single or repeated dose, ascending dose
- Toxicokinetic / Pharmacodynamic
- Radioactive studies (^{14}C, ^{3}H, ^{125}I, ^{51}Cr)
- Autoradiography: macro & micro
- Regulatory GLP program according to guidelines (OECD, FDA, French competent Authority) or non-GLP evaluation

ADVANTAGES

- Animal experimentation and bioanalytical analysis in the same site
- Ocular sample dissection in rabbits, rats, mice and guinea pigs
- Methods validated for all ocular matrices , including rare matrices
- Development of methods

FORMULATIONS

- Eyedrop, gel, ointment, cream, devices, particles, patch

LOCAL ADMINISTRATIONS

- Topical, intravitreal, sub-retinal, retrobulbar, sub-tenon, periocular, suprachoroidal, subconjunctival, intrascleral, intrastromal, iontophoresis, intracameral...

SPECIES

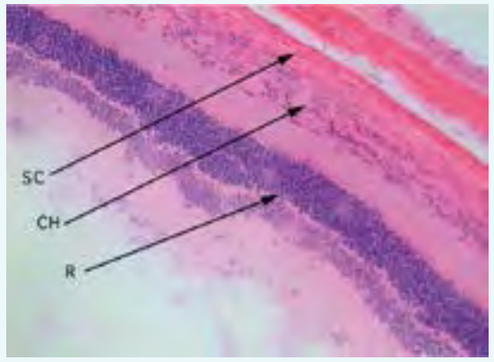
- Rabbits, rats, mice and guinea pigs

SAMPLING

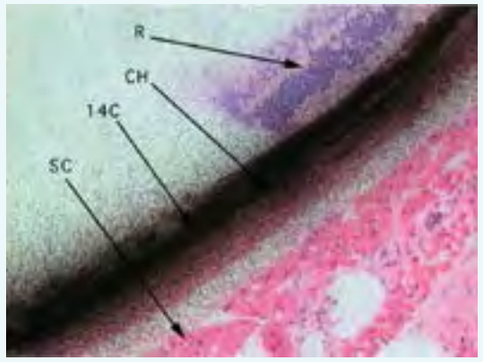
- Ocular microdissection:
  Tears, eyelids, palpebral or bulbar conjunctiva, nictitating membrane, extra ocular muscles, lacrimal gland, Harderian gland, nasolacrimal duct, conjunctiva, cornea, aqueous humor, iris, ciliary body, lens, vitreous, retina, choroid, sclera, optic nerve
- Other sampling:
  Whole blood, plasma, organs, urine, feces

EFFECT OF EYE PIGMENTATION IN A PK STUDY

Posterior segment of the rat eye (sagittal section)



Albino rat (CH: choroid - R: retina - SC: sclera)



Pigmented rat
(CH: choroid - R: retina - SC: sclera - 14C: carbon-14 labelling)

OCULAR TOXICOLOGY STUDIES & SAFETY ASSESSMENTS

Your GLP-certified CRO for consistency, reliability, reproducibility, quality and integrity in preclinical safety tests

Safety assessment or preclinical testing is the first major step toward regulatory approval. Iris Pharma offers the regulatory safety GLP program: acute tolerance, sub-chronic tolerance, corneal anesthesia and where applicable, pupillary diameter and lacrimation testing.

OUR EXPERIENCE

More than 400 ocular tolerance studies carried out

EXPERIMENTAL DESIGN

- Acute tolerance
- Sub-chronic tolerance (<3 months)
- Chronic tolerance (>3 months)
- Corneal anesthesia
- Pupillary diameter
- Lacrimation
- LLNA
- Toxicokinetic analyses
- Single or repeated dose, Maximum Tolerated Dose (MTD), dose selection, escalating
- Regulatory GLP program according to guidelines (OECD, FDA, French competent Authority) or non-GLP evaluation

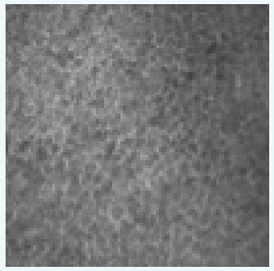
TOXICOLOGY END-POINTS

- Ocular examinations
- Ocular histopathology
- General clinical observations
- Systemic (blood chemistry, hematology, organ histology...)
- Optional end-points (e.g. ERG, HRT-II)
- Draize, McDonald & Shadduck's, Kimura's, Nussenblatt's scoring
- Funduscopy

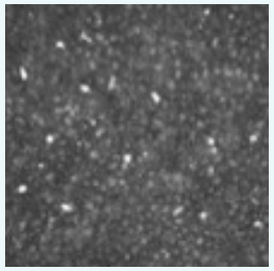
FORMULATIONS

- Eyedrop, gel, ointment, cream, devices, particles, patch

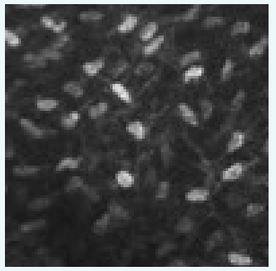
IN VIVO CORNEAL CONFOCAL MICROSCOPY EVALUATION (HRT-II)



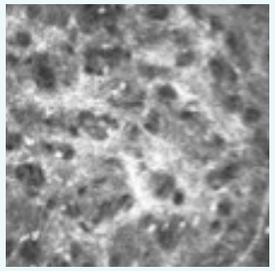
Healthy corneal epithelium



Inflammation in corneal epithelium



Heatly corneal stroma



Opacity in corneal stroma

AVANTAGES

- GLP compliance
- Unique experience and background in ophthalmology
- Reliable results in a timely manner

LOCAL ADMINISTRATIONS

Topical, intravitreal, sub-retinal, retrobulbar, sub-tenon, periocular, suprachoroidal, subconjunctival, intrascleral, intrastromal, iontophoresis, intracameral...

SPECIES

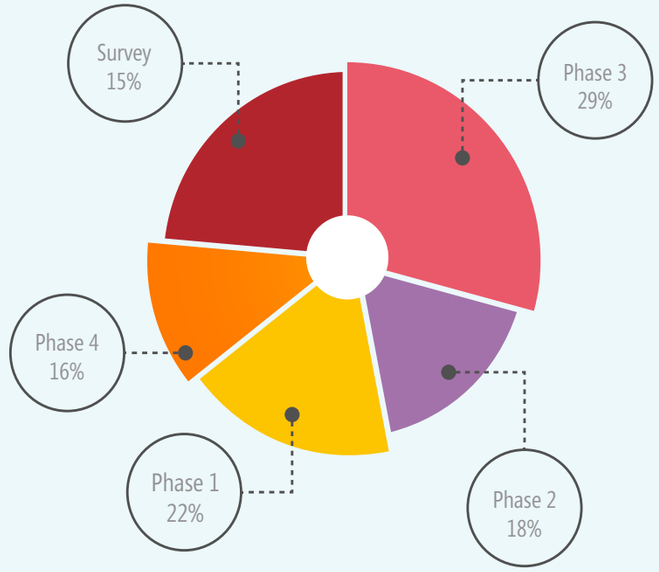
- Rabbits, rats and mice

CLINICAL TRIAL SERVICES

At Iris Pharma, we have decades of experience in performing comprehensive clinical research and development in all areas of ophthalmology.

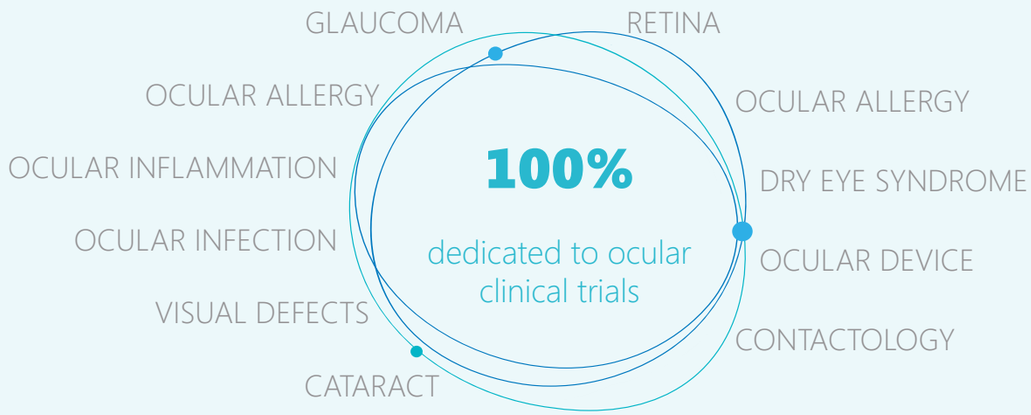
CLINICAL TRIAL PHASES

Our experts in clinical research are skilled in performing all phases of clinical trials: phases 1, 2a, 2b, 3, and post-approval phase 4 studies – and in medico-marketing surveys. We effectively manage clinical trials to obtain marketing approval by the relevant authority, such as the European Medicines Agency (EMA) or the United States Food and Drug Administration (FDA).



PROVEN EXPERTISE IN OPHTHALMOLOGY

We are skilled in performing clinical studies for a comprehensive variety of eye disorders.



Our therapeutic focus on ophthalmology allows you to benefit from our networks of experienced investigative sites and scientists in every eye disease and ensures the conditions supporting efficient patient recruitment.

« Iris Pharma's extraordinary background in ophthalmology facilitates thoughtful consideration of factors that may impact development and/or implementation of clinical study protocols. »

Executive VP – American CRO

OUR EXPERIENCE

110+ clinical studies and marketing surveys conducted in ophthalmology
4,800 sites opened in 33 countries
40,000 patients involved in clinical trials & marketing surveys

OUR SERVICES

We provide our customers with the high-quality services necessary for evaluating new drugs and devices on patients, respecting the regulatory authorities' requirements.

- Regulatory Affairs
- Study Monitoring and Site Management
- Project Management
- Data Management and Biostatistics
- Medical Writing
- Pharmacovigilance*
- Investigational Medicinal Product (IMP) Management*
- Bioanalytical Testing Services
- Central laboratory services

* Via our partners

With Iris Pharma, you can mix-and-match stand-alone services or choose global support to test new ocular drugs and devices in humans during clinical development.

KEY RELATIONSHIPS & INTERNATIONAL NETWORK OF EXPERTS

- Privileged contacts with international opinion leaders and experts in ophthalmology and pharmacology
- A well-established network of internationally renowned ophthalmologists and investigative sites
- Expert partners in medical writing
- Membership in regulatory and quality assurance associations
- An international network of local regulatory consultants

HIGHLY QUALIFIED EXPERIENCED STAFF

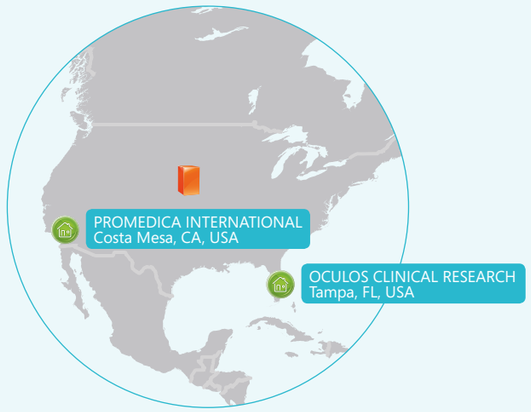
- Our experienced staff understand and fulfil your expectations and objectives
- Our experts include ophthalmologists, pharmacists, pharmacologists...
- Iris Pharma's team is comprehensively and regularly trained and updated on GCP, study monitoring guidelines, local legislations and ophthalmologic pathologies
- More than 40 posters and papers related to clinical projects and development have been authored by our staff

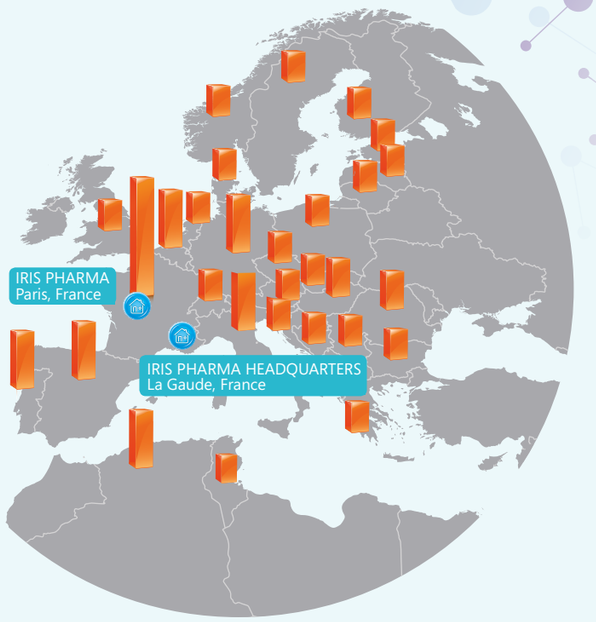
BROAD INTERNATIONAL EXPERIENCE & PRESENCE

We have been performing phase 1 to 4 clinical trials throughout Western and Eastern Europe and North Africa since 1994, and in North America since 2007.

Based on this extensive experience, our multicultural clinical operation teams are familiar with multinational submissions, international and local agency requirements and everything that will make your clinical trial a success.

In the United States, Iris Pharma has two experienced partners with solid expertise in ophthalmology clinical study management and monitoring.





COUNTRIES: Algeria - Armenia - Austria Belgium - Bosnia - Bulgaria - Croatia - Czech Republic - Denmark - Estonia - France Georgia - Germany - Greece - Hungary - Italy Israel - Latvia - Lithuania - Netherlands Norway - Poland - Portugal - Romania Serbia - Slovakia - Spain - Tunisia - Turkey Saudi Arabia - Sweden - Switzerland - United Kingdom - USA

INNOVATIVE TECHNOLOGY PLATFORM & TECHNIQUES

BIOANALYTICAL TESTING SERVICES

Cutting-edge bioanalytical services in ocular matrices

Iris Pharma develops, customizes, and validates assays of drug candidates and metabolites in a variety of ocular matrices to support preclinical, biopharmaceutical, and clinical pharmacology programs.

EXPERIMENTAL DESIGN

- Ocular pharmacokinetic analysis
- Assay method development from scratch, optimization, validation and transfer
- Sample analysis technologies in multiple biological matrices and species (rabbits, rats, mice and guinea pigs)
- Metabolite identification
- Expertise in proven, validated methods to quantitatively measure all types of compounds (small or large molecules) and expertise in immunoassay systems
- Feasibility assessments

CUTTING EDGE TECHNIQUES AND EQUIPMENT

We are experts in processing samples using tools that are both fast and sensitive, such as:

- Mass spectrometry (RRLC-MS/MS)
- High-performance liquid chromatography coupled with different detectors (MS, RID, FLUO, UV)
- Hematology analyzer (MS9-5)
- Radioactive isotopes: ^{14}C, ^{3}H, ^{125}I
- Autoradiography: macro & micro
- Immunoassays (Luminex, ELISA, EIA and RIA)
- Cell-based fluorescence assay (flow cytometry)
- Biochemistry analyzer (Piccolo Xpress)

OUR EXPERIENCE

- More than 150 studies performed
- GLP-compliant bioanalytical laboratory since 1995

EXAMPLES OF COMMERCIAL RRLC-MS/MS METHODS VALIDATED IN HOUSE (in rabbit)

- Diclofenac in vitreous
- Dexamethasone in vitreous, choroid and retina
- Timolol in aqueous humor
- Cyclosporin A in aqueous humor, cornea, conjunctiva, iris ciliary body and lacrymal gland
- Azitromycin in bulbar conjunctiva, aqueous humor and cornea

Primary ocular matrices available at Iris Pharma

- Palpebral conjunctiva
- Bulbar conjunctiva
- Aqueous humor
- Cornea
- Lens
- Iris
- Iris-ciliary body
- Vitreous
- Retina
- Choroid
- Sclera
- Optic nerve
- Tears

NON-GMP PRECLINICAL OCULAR FORMULATION

The benefits of the right preclinical ocular drug formulation to improve drug delivery and to provide maximal effectiveness in animal testing

The eye's natural barriers and elimination systems, the organ's complexity, the difficulty in reaching certain tissues or segments and overall the eye sensitivity are all challenges that Iris Pharma seeks to overcome. Formulation in the ophthalmology field is a particularly difficult subject that requires know-how and great experience in order for your ophthalmic compound to be used effectively in preclinical studies.

Iris Pharma offers adequate non-GMP formulation of your ocular drugs to be tested in preclinical studies, depending on the chemical properties of the compounds and the dosage form desired. Iris Pharma can also evaluate and improve the solubility of your compounds, with or without preservatives.

FORMULATION TARGETING PRECLINICAL RESEARCH

- Non-GMP preclinical formulation and quick formulation testing
- Development and evaluation of preclinical formulations
- Formulation, drug delivery & delivery optimization
- Dosage form development
- Solubility in pH buffers and in eye-compatible solvents
- Drug solubilizer screening
- Excipient compatibility
- Bioavailability enhancement

OUR EXPERIENCE

- We have helped bring to the market leading eye gels such as Siccafluid®, NyoGel®, Geltim, Timosan®, Timogel...
- Development of several formulations, notably ophthalmic gels
- Experience with a wide variety of drug substances:
  - Small organic and inorganic molecules
  - Peptides and proteins including biologics
  - Oligonucleotides, DNA and RNA

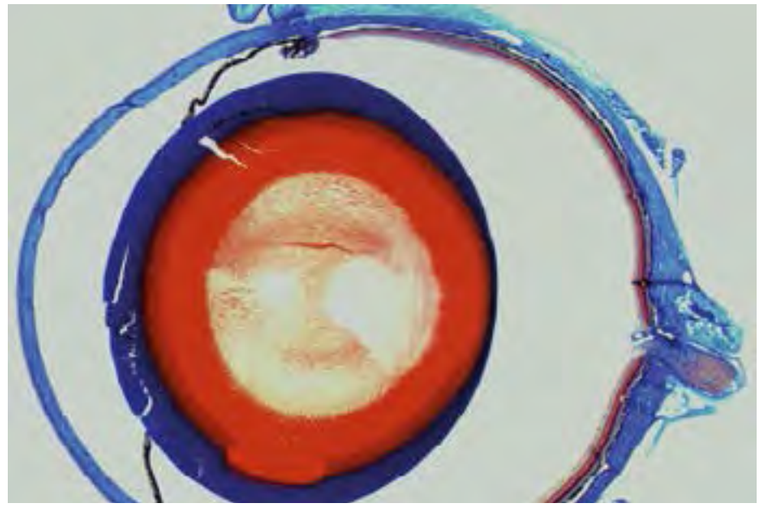
Addressing your formulation challenges

- Insoluble or unstable drugs
- Poor bioavailability
- Short residence time & poor penetration
- Intolerance, discomfort, irritation
- Inadequate PK profile
- Specific delivery either to the anterior segment or posterior segment of the eye
- Suspension

HISTOLOGY

Ocular histology is a true craft, requiring highly trained, specialized staff. The difference in density from one ocular structure to another may go unnoticed by those who have little experience in this field.

Iris Pharma's team has been working for nearly three decades on detailing and analyzing every structure of the eye, even going so far as to observe inflammatory cells in the vitreous body and aqueous humor.



Sagittal section of rat eye

SPECIALIZED EVALUATIONS

Our skilled pathologists are able to use several techniques and perform specialized evaluations, including:

- Biopsies
- Histological sections
- Ophthalmic specimen slide preparation
- Microscopic examination of tissues
- Staining by immunohistochemistry
- Immunofluorescence

LEADING TECHNOLOGY

All histology equipment is available at our facilities (e.g. an ApoTome fluorescence microscope, a microtome, a cryocut and a fully Automated Staining System).

CELLULAR AND MOLECULAR BIOLOGY ASSAYS

Efficient ocular biomarker to be tested in preclinical and clinical research

The expression of ocular biomarkers provides valuable information for predicting and investigating the efficacy of new ocular therapies during preclinical and clinical research.

FOLLOW PREDICTIVE BIOMARKERS IN ANIMAL MODELS

Our multidisciplinary team of scientists works with our customers to identify and quantify predictive ocular biomarkers – such as those involved in neovascularization and the inflammation - in many animal models.

EYEPRIM–VET© - Iris Pharma's medical device for standardized conjunctival cell collection in animals

INCORPORATE BIOMARKERS INTO THE CLINICAL TRIALS DESIGN

Dry eye syndrome is a multifactorial disease on the ocular surface, leading to conjunctival inflammation associated with expression of biomarkers such as HLA-DR (Human Leukocyte Antigen).
HLA-DR quantification is very interesting in clinical trials related to ocular surface diseases and is used in the US and EU as an ancillary parameter to be considered.

HLA-DR quantification by flow cytometry has been developed and mastered by our expert since 1997.

ADVANCED TECHNOLOGY

Iris Pharma has a laboratory equipped with cutting-edge technologies for cellular and molecular biology assays.

- **Flow cytometry (NovoCyte™)**
  This fast, reliable method characterizes cells individually thanks to the specific staining of targeted biomarker proteins.
- **RT-qPCR (LightCycler® 480)**
  This technology simultaneously amplifies, detects and quantifies targeted biomarker mRNA. From RNA extraction to the choice of primers and data analysis, every step is technically and scientifically supervised by Iris Pharma experts.
- **ELISA**
  The Enzyme-Linked Immunosorbent Assay (ELISA) is the standard for quantitative analysis of cytokines and other biomarkers.
- **Multiplex (Luminex® 200 system)**
  The microsphere-based liquid array used by Iris Pharma simultaneously measures a large number of analytes in a single cycle of the assay. With this system, biochemical quantifications and multiple simultaneous analyses can be carried out on low sample volumes. Iris Pharma can, for example, perform analyses of cytokines in animal models of inflammation, notably in an EIU (endotoxin-induced uveitis) model.

iris PHARMA

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