Innovative Non-Viral Gene Therapies for the Treatment of Ocular Diseases
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Company
Clinical stage company developing innovative non-viral gene therapies using proprietary electrotansfection system

Business Strategy
Develop novel products for sight threatening indications with high unmet medical needs
Raising €30 Million Series B

Value Proposition
Innovative ocular delivery approach that sustains expression of therapeutic proteins in the eye for up to 6 months
Minimally invasive procedure: better safety, compliance and clinical outcomes

Intellectual Property
Wide IP portfolio (8 patent families)

Management Team
Strong management team with extensive clinical and drug development expertise in ophthalmology

Current Investors

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The Need for New Treatment Approaches for Retinal Diseases

Intravitreal Injections
- Minimally Invasive
- Limited duration of effect
- Frequent re-administrations needed

Ocular Implants
- Moderately Invasive to Invasive
- Corticosteroid-related ocular side effects
- Foreign bodies introduced into the eye
- Frequent administrations (if biodegradable)

Viral Vector Gene Therapy
- Invasive subretinal surgery, potential damage to retina
- Entire retina not exposed to treatment
- Immunogenicity
- High Cost

Systemic Administrations
- Systemic side effects
- Poor compliance profiles
- Poor ocular bioavailability
- Requires medical/lab monitoring

All Current Treatments Approaches Have Limitations

**Eyevensys Technology Key Competitive Advantages over Existing Approaches**
- Long duration of intraocular therapeutic protein expression, minimizing the need for frequent repeat administrations
- Easy, minimally invasive, safe administrations with reduced risk of retinal injury, systemic and ocular side effects
- Low cost, non-viral vector plasmids can encode a variety of therapeutic proteins with low risk of immunogenicity
Eyevensys Technology: An Innovative Drug Delivery Platform that Turns the Eye into a Biofactory

How It Works

- Direct administration of plasmids into the ciliary muscle, using proprietary electrotransfection system
- Ciliary muscle cells become production site for therapeutic proteins encoded by plasmids
- Once produced, the protein is secreted into the choroid, vitreous and in the aqueous humor and reaches the back of the eye tissues
- Plasmid candidates designed to enable sustained therapeutic protein expression in the eye
## Eyevensys Technology Proof of Concept Validated in Animal Models

Technology validated in multiple animal models demonstrating safety and durability of expression with multiple proteins.

| Safety, Duration, Location of protein expression in rats, rabbits and primates | Reporter Proteins | Green Fluorescent Protein | Lucia
| Efficacy for Uveitis demonstrated in EIU and EAU Models | Anti-TNF Proteins | hTNFR-Ls | β Galactosidase | Gaussia
| Efficacy for Wet AMD demonstrated in Laser CNV Model | Anti-VEGF Proteins | S-Flt1 | Aflibercept | EYS609
| Protection against Retinal Degeneration Demonstrated in LID, MNU, rd10, RCS, P23H Models | Neuroprotective Factors | CNTF | GDNF | EYS611

In animal models plasmid electrotransfection into the ciliary muscle enabled sustained and dose-dependent protein expression reaching the back of the eye for up to 9 months.
Prioritized Indication: Non-Infectious Uveitis (clinical Phase I/II)

EYS606 encodes a potent TNFα inhibitor, a recombinant fusion protein consisting of the extracellular domain of the human TNFα p55 receptor linked to the human IgG1 Fc.

EYS606 reduced the severity of disease and preserved the retina in the rat EAU model.

EYS606 is as effective as Corticosteroids in the rat EIU model.

EYS606 decreases intraocular TNF- levels and improves clinical and histological outcomes in uveitis rat models.
9 patients (3 per cohort) with advanced end-stage uveitis treated in France and UK

**Preliminary Safety Findings**
- Only one SAE reported - not related to the study drug or device
- Majority of AEs were related to administration procedure but not to the study drug
- Most common AEs* were conjunctival hemorrhage, foreign body sensation, conjunctival tears, keratitis, epithelial defects, eye pain, transient visual loss

**Preliminary Efficacy Signals**
- ≥ 10 letter improvement in VA experienced in 1 patient 2 wks after EYS606 treatment
- Reduction in retinal edema on OCT observed within the first 4 weeks after EYS606 treatment in 2 patients treated with the highest dose and maintained for 6 months

**Next Steps:** to evaluate the therapeutic potential of EYS606 in patients with active uveitis
- in Part 2, of the EYS606-CT1 study in the EU
- in the EYS606-CT2 phase 2 study in the US
EYS611 for Retinitis Pigmentosa and Dry AMD

EYS611 is coding for a potent iron chelator with antioxidant and endogenous neuroprotective properties. Efficacy for preserving retina and safety demonstrated in animal models of dry AMD and RP.

EYS611 preserves the survival of photoreceptors after light damage and the functionality of the retina as measured by ERG.

Retinal function

Light-exposed (LID) vs. No LID

Protein concentration in vitreous

N-acetyl cysteine amide (NACA) is under development for RP; Carnosic acid (CA) is a natural antioxidant.
Primary goals for Eyevensys Device Development team:
- Develop enhanced versions of the Ocular Device and Pulse Generator
  - Leverage learnings from clinical trials to help optimize the Eyevensys System design and improve performance and ease of use.
  - Complete device builds and testing to support regulatory submissions and clinical trials.
- Eyevensys has developed a second-generation Ocular Device and Pulse Generator, planned for use in the upcoming US-based clinical trial for EYS611
  - FDA recognizes the Eyevensys System as a combination biologic-device, requiring the creation of an IND (Investigational New Drug) submission and subsequent FDA approval to proceed with trial.
  - Generation II devices have enhanced ergonomics and improved manufacturability.
    - Gen II Devices and Generators to be built in France at contract manufacturers.
- Future work to include development of third-generation devices that will be co-developed with US-based contract manufacturers.
  - New devices will enable execution of the entire procedure with ease by a single practitioner.
  - Generation III devices are planned for inclusion in Phase III clinical trials and commercialization.
# High Potential Value Pipeline

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<th>Indication</th>
<th>Mechanism of action</th>
<th>Pre-Clinical</th>
<th>IND-Enabling</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
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<tr>
<td>EYS606 Non-Infectious Uveitis</td>
<td>Anti-TNF</td>
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Management Team:
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