Restoring vision lost to corneal disease using an enhanced form of naturally occurring FGF-1 protein to regenerate corneal tissue.
Investment Highlights

Two first in class products to treat indications in the front and back of the cornea

Innovative treatment – No current pharmacologic therapy for corneal endothelial dystrophy or most corneal epithelial diseases

> $2.5bn combined revenue projections

Next value inflection point – Clinical PoC in Fuchs endothelial corneal dystrophy and IND in corneal surface indication
The Endothelial Opportunity

Back of Cornea

**Endothelium**

- Fuchs corneal dystrophy and related diseases cause a decline in vision driven by endothelial dysfunction
- Leading cause of corneal transplantation

Front of Cornea

**Epithelium**

- Epithelial defects lead to corneal opacity and glare and induce severe pain
- Disease process (Herpetic keratopathy) and generalized keratitis
Corneal Endothelial Dystrophy

**NORMAL CORNEA**
- Normal focus

**DISEASED CORNEA**
- Cornea thickens
- Cornea becomes opaque
- Poor focus → Poor visual acuity

**Corneal Endothelial Cells**
(Loss of cells from organic disease or surgical trauma)

**Normal** → **Worsening** → **Diseased**

**Regenerate Corneal Endothelial Cells**
- Proliferation
- Migration

**TTHX1114**

**Reduced Edema | Restoration of Visual Acuity**
Corneal Endothelial Market Opportunity: US and EU

~4% of Population with Endothelial Disease

12 million

12 million

FUCHS

~600K
Total diagnosed/high risk

~200K
Late stage Fuchs (Transplant within 24 months)

Cataract/Glaucoma Surgery-Enabling Population

~900K
Mild endothelial dystrophy makes cataract surgery risky

Today
Corneal transplantation only treatment option

Opportunity
Pharmacologic therapy dramatically increases diagnosis and treatment rates
TTHX1114 Stimulates Proliferation in Dystrophic Human Corneas

Untreated Fuchs Cornea + TTHX1114

Green = Proliferating Cells

% of Cells with EdU, +/- sem

control TTHX1114

4X increase

P = 0.0055
Endothelial Dystrophy/Fuchs Program Summary

Multiple validating efficacy studies

- **Proliferation, acceleration** of healing of corneal endothelial cells *in vitro*

- **Corneal clearing** in rabbit cryoinjury model

- **Proliferation of endothelial cells** in human dystrophic (Fuchs) corneas *ex vivo*
The Epithelial Opportunity

**BACK OF CORNEA**

**Endothelium**

- Fuchs corneal dystrophy and related diseases cause a decline in vision due to corneal edema (swelling) and opacity
- Result of decreased corneal endothelial cell count

**FRONT OF CORNEA**

**Epithelium**

- Epithelial defects lead to corneal opacity and glare and induce severe pain
- Disease process (Herpetic keratopathy) and generalized keratitis
Topical TTHX1114 Reduces Corneal Damage

Reduction in Edema Following Sulphur Mustard Challenge

- Corneal Thickness, mean µm +/- sem
- Reduction in Edema following Sulphur Mustard Challenge
- * p < 0.05

Reduction in Keratitis in Herpetic Keratopathy

- Keratitis Score +/- sem
- * p < 0.05
- Drug Treatment

Days

Days
Revenue Overview >$2.5B (US/EU)

BACK OF CORNEA

**Endothelial**

- **Fuchs Endothelial Corneal Dystrophy**
- **Surgery-Enabling Therapy**

**Fuchs**

- **$1.0B**

**Other**

FRONT OF CORNEA

**Epithelial**

**Ocular Surface**

- **Ulcerative Keratitis**
- **HZO**
- **HSV**
- **Other**

**Glaucoma**

**Cataract**

- **$0.7B**

**Other**

- **$0.8B**
Development Timeline and Financing Plan

**Endothelial**
- IND enabling
- POC study
- Phase 2b/3

**Epithelial**
- HK IND enabling
- Phase 1
- HK POC

Series A financing delivers **Proof of Concept** in 1 indication and **IND** in 2nd indication
Experienced Management

Ben F. McGraw, III, PharmD
Executive Chairman
- Chairman and CEO of TheraVida, Inc.
- Board member Aerie Pharmaceuticals
- Chairman/CEO numerous early stage companies
- Previous senior executive positions at Valentis, Allergan, Marion Merrell Dow

David Eveleth, PhD
Chief Executive Officer
- 20+ years in biotech and pharma (Pfizer, Pharmacia, Bayer, Cortex Pharma)
- Gained approval for 3 NCEs; 7 INDs / Phase IIs
- Managed Pfizer ophthalmic R&D group, peak sales ~1.7 billion

Schalon Newton, DM
Chief Business Officer
- 30+ years experience in ophthalmology, Allergan and Santen
- Roles in finance, marketing, corporate strategy, business development
- Independent advisor to numerous early stage start-up companies
Summary

Two First-in-Class products
Innovative regenerative approach for corneal disease

US/EU revenue potential >$2.5B
Conservative market share assumptions with demographics driving growth

Efficient development plan
Potential for proof of concept in two indications with two products within 3 years

Experienced Ophthalmic Management and investors
Focused on Cornea Therapeutics