Glaucoma: The Silent Thief

- Leading cause of irreversible blindness
- Over 60 million patients
- 120,000 Americans go blind per year
- There is no cure
- Preventable
Current Glaucoma Treatment

- Eye drops
- Difficult to administer by 2/3 of patients
- Patient compliance is less than 50%

http://www.glaucoma-association.com/glaucoma-treatments/how-to-use-your-eye-drops.html
Testimonials

“Compliance is the major issue concerning glaucoma treatment.”
– Emmanuel Mahlis, MD, Alcon Laboratories, Inc.

“Patients can be forgetful due to the many medications.”
– Rohit Varma, MD, Interim Dean, USC Keck School of Medicine; Professor and Chair, Department of Optamology; Director, USC Gayle and Edward Roski Eye Institute; President, USC Care

“Sustained drug delivery could solve this problem.”
– Joshua Stein, MD, University of Michigan
The Solution: *AesclusaGel*

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>90 day drug release</td>
<td>No daily application</td>
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<tr>
<td>Inserted by ophthalmologist</td>
<td>Guaranteed compliance</td>
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<tr>
<td>Biodegradable</td>
<td>No need for removal</td>
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## Competitive Matrix

<table>
<thead>
<tr>
<th>Solution</th>
<th>Pros</th>
<th>Cons</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Drops</td>
<td>• Proven solution&lt;br&gt;• Self-administered</td>
<td>• Daily applications&lt;br&gt;• Poor compliance</td>
<td>$600-2400/yr</td>
</tr>
<tr>
<td>Surgeries</td>
<td>• Temporary control (months to years)</td>
<td>• High cost&lt;br&gt;• Complications&lt;br&gt;• Last resort</td>
<td>&gt;$5,000/Procedure</td>
</tr>
<tr>
<td>AesculaGel</td>
<td>• Long-term drug release&lt;br&gt;• Guarantees compliance</td>
<td>• New approach</td>
<td>$2,400/yr</td>
</tr>
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In the US:

- 2,800,000 patients in 2010 → 3,600,000 in 2020
- 30,000,000 prescriptions in 2013
Milestones

IP and Technical

- Proof of concept
- U.S. Provisional patent filed May 6, 2016 62/333,102
- Animal studies

Business and Regulatory

- Recruit management Team
- Pre-clinical studies
- Enter licensing agreement
Financials

In Vivo
- $450K SBIR/STTR, Angel, Grants
- 2016 2017

Preclinical
- $3M VC, Partner
- 2018

Clinical Trials
- $18M Partner
- 2019 2020 2021

Partner License

Revenue Assumptions
- AesculaGel $2,400/yr
- Royalty (5%) $120
- COGS $2.66

Revenue Forecast
- 2022 Year 6
  - Sales (patients) 30,000
  - Market share (%) 1
  - Revenues $3,600,000

- 2023 Year 7
  - Sales (patients) 150,000
  - Market share (%) 4
  - Revenues $18,200,000

- 2024 Year 8
  - Sales (patients) 370,000
  - Market share (%) 10
  - Revenues $44,700,000
AesculaTech

Advisory Board

Mark Humayun, MD, PhD
Professor of Ophthalmology, Biomedical Engineering USC
Co-Director of the USC Eye Institute

Mark Thompson, PhD
Professor of Chemistry, USC
Ranked 11th most influential chemist 2000-2010 by Thompson Reuters; Consultant for Universal Display Corporation

Dimitri Villard
Executive, Tech Coast Angels
Mentor, The Founder Institute

Niki Bayat
PhD Student, USC
Chemical Engineering

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PhD Student, USC
Chemistry