Comparison of
Suprachoroidal and Intravitreal Injection
Flow Mechanics Analyzed via Multimodal Imaging

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1. Clearside Biomedical, Inc.
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Core Advantages of Treating via the Suprachoroidal Space

**TARGETED**
The back of the eye is the location of many irreversible and debilitating visual impairments\(^1\)

**COMPARTMENTALIZED**
Drug is compartmentalized in the suprachoroidal space, which helps keep it away from non-diseased tissues\(^2\)

**BIOAVAILABLE**
Fluid spreads circumferentially and posteriorly when injected within the suprachoroidal space, bathing the choroid and adjacent areas with drug\(^3\)

_for efficacy_  _for safety_  _for durability_
Suprachoroidal injection shows posterior and diffuse spread; IVT injection shows injectate bolus in vitreous.

**Intravitreal Injection**
- Injectate located as a bolus in the vitreous

**Suprachoroidal Injection**
- Injectate spreads from scleral spur towards macula

*Dye injected followed by immediate freezing, then sectioned across injection plane*
Suprachoroidal injectate spreads immediately in circumferential and posterior directions.

*Fluorescing dye Injected under UV Light, filmed in real time*
Suprachoroidal injectate spreads immediately in circumferential and posterior directions

**Intravitreal** Injection

No injectate spread visible, fluorescence is muted by the overlying pigmented choroid and retinal pigment epithelium

**Suprachoroidal** Injection

Fluorescing particles spread immediately around the globe circumferentially and posteriorly
Endoscopic video of suprachoroidal and IVT injection to visualize injection internally

Diagram of Endoscopy Set-Up

Endoscope View
Key anatomic features labeled

- Edge of Lens
- Pars Plana
- Retina
- Ora Serrata
Suprachoroidal injection shows localized tissue depression, then expansion with no needle penetration through choroid & retina.

For Reference: Images oriented per cross-section diagram above.
Suprachoroidal injection shows localized tissue depression, then expansion with no needle penetration through choroid & retina.
Core Advantages of Treating via the Suprachoroidal Space

**Targeted Delivery**  
Directly to posterior tissues

**Compartmentalized**  
Away from non-diseased tissues

**Bioavailable**  
Bathing choroid & adjacent tissues
Key Takeaways

- Imaging of suprachoroidal injections demonstrates
  - acute opening of the SCS
  - circumferential, posterior spread of injectate
  - compartmentalization of injectate to posterior tissues

- These multimodal imaging methodologies support the potential of suprachoroidal injections to target affected tissue layers in chorioretinal disorders.