CLEARSIDE BIOMEDICAL

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Update on CLS-AX for wAMD

Key Takeaways for CLS-AX Program for Wet AMD

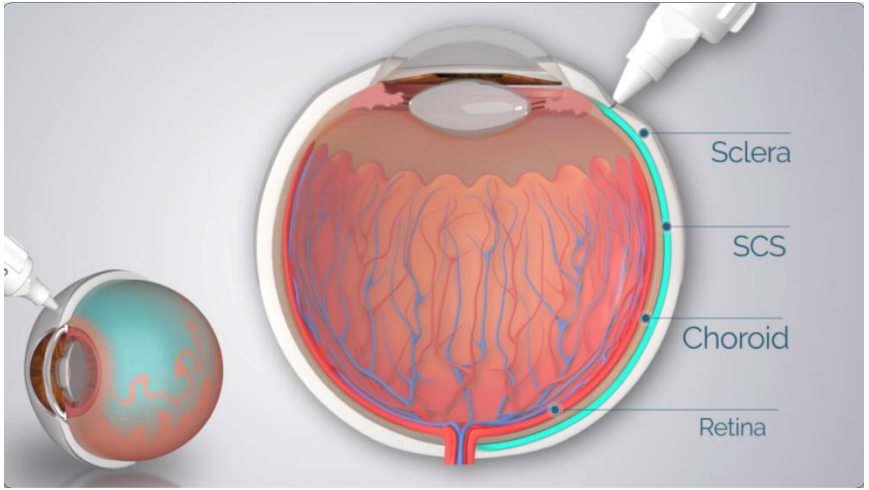
Suprachoroidal delivery of **axitinib** injectable suspension

ODYSSEY

- **Suprachoroidal injections deliver therapy to the back of the eye without any implants or devices in the vitreous**
- **ODYSSEY[1] will evaluate patients for 36 weeks, in line with the guidance from the FDA**
- **ODYSSEY trial design includes retreatment with CLS-AX rather than rescue only**
- **Top line data from ODYSSEY expected Q3 2024**
- **Patients recruited with an emphasis on active disease to target clinically-relevant patient population with need for treatment**

[1] ODYSSEY is a Phase 2b, randomized, double-masked, parallel-group, active-controlled, multicenter, 36-week study

SCS Microinjector®: Drug/Device Combination with Proven Versatility



SUPRACHOROIDAL SPACE INJECTION

Novel SCS Microinjector® shows a demonstrated ability for precise delivery into the suprachoroidal space (SCS)

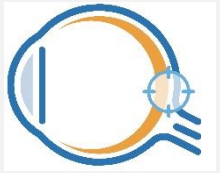
- **6 ongoing clinical trials with 4 potential therapies in 5 indications:**
  Wet AMD, UME, DME, DR, Choroidal Melanoma
- **Safety profile of SCS Microinjector comparable to intravitreal injections[1]**
- **Well-accepted by retinal physicians with thousands of injections performed to date**
- **30-gauge needle equivalent to most commonly used intravitreal injections**
  Smaller than TKI competitors in development

Sources: Clearside data on file | [1]Kurup, et. al, Macula Society 2021 *Safety of the Suprachoroidal Injection Procedure Utilizing SCS Microinjector® across Three Retinal Disorders.*

Benefits for Patients and Physicians Using SCS Microinjector® Delivery

Enhanced Safety

Much lower risk of endophthalmitis as direct contact to immune system vs intravitreal injection

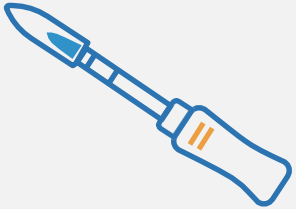


Injectate Flows to Back of the Eye

Reduced risk of floaters, snow globe effect, or other visual disturbances

No Implants or Devices in the Vitreous

Can be easily re-dosed for potentially longer durability



Injection Similar to Intravitreal

Advanced technology requires only a few seconds longer for each injection

CLS-AX OASIS + Extension Trial: Demonstrated Excellent Safety Profile and Promising Durability and Biologic Effect

SAFETY DATA

- Excellent safety profile at all doses and timepoints
- No Serious Adverse Events
- No dose limiting toxicities
- No Adverse Events (AEs) from inflammation
- No AEs related to intraocular pressure

DURABILITY

- Patients not requiring additional therapy:
  - ≥ 3 Months: 11/12 (92%)
  - ≥ 4 Months: 10/12 (83%)
  - **≥ 6 Months: 8/12 (67%)**

BIOLOGIC EFFECT

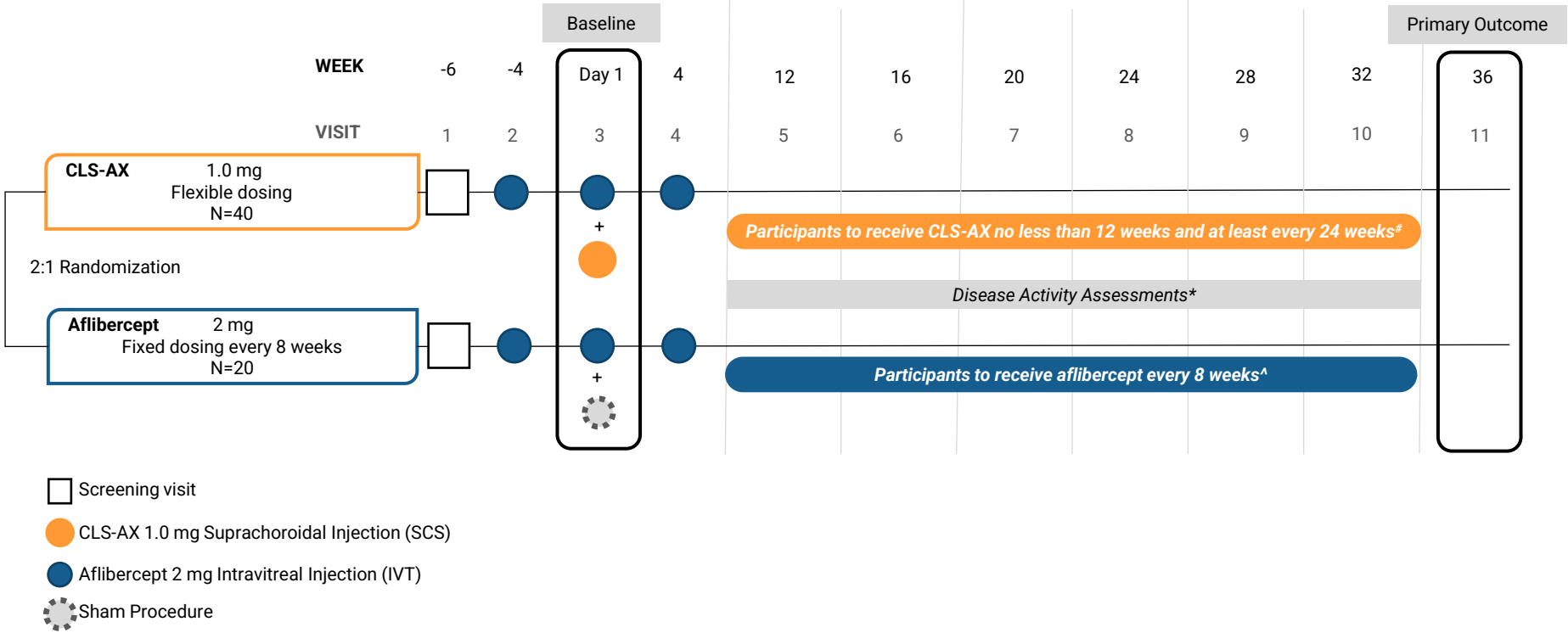
- Stable mean Best Corrected Visual Acuity (BCVA)
- Stable mean Central Subfield Thickness (CST)
- On OCT, anatomical signs of TKI biologic effect observed in anti-VEGF treatment-experienced sub-responders

REDUCED TREATMENT BURDEN

- ≥72% reduction in treatment burden In OASIS, to 3 months:
- **77% to 85% reduction in treatment burden in Extension Study, to 6 months**

Source: Clearside data on file. Data from OASIS 3-Month and 6-Month Extension Data from Cohorts 3 & 4.

ODYSSEY Trial Designed to Provide Data for Phase 3



* Disease Activity Assessments (DAA): Conducted at Week 12 through 32 to determine need for supplemental treatment.
# In CLS-AX arm, following 3 loading doses of aflibercept and initial dose of CLS-AX at Baseline, participants will receive CLS-AX at least every 24 weeks unless more frequently required based on DAA;
if disease is active and participant is <12 weeks since last CLS-AX injection, participant receives dose of aflibercept;
if disease is active and participant is >12 weeks since last CLS-AX injection, participant receives dose of CLS-AX.
^ In aflibercept arm, following 3 loading doses of aflibercept, participants will receive aflibercept on fixed dosing regimen every 8 weeks unless more frequently required based on DAA;
if disease is active, participant receives dose of aflibercept.

Multiple Dosing Requirement Helps Inform Phase 3 Development Program

Disease Activity Assessments (DAA) conducted every 4 Weeks starting at Week 12 to determine need for supplemental treatment.

CLS-AX Arm

- Ability to re-treat with CLS-AX if needed based on DAA
  - Weeks 4-12: Re-treat with aflibercept
  - Weeks 12-24: Re-treat with CLS-AX
- Protocol mandates re-dosing
  - Week 24: Re-dose with CLS-AX if not previously re-treated

Aflibercept Control Arm

- Protocol mandates on-label dosing with aflibercept every 8 weeks unless re-treatment required based on DAA

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