Post Hoc Analysis of Suprachoroidal CLS-TA versus Rescue Therapies for Uveitic Macular Edema: Safety and Visual Function

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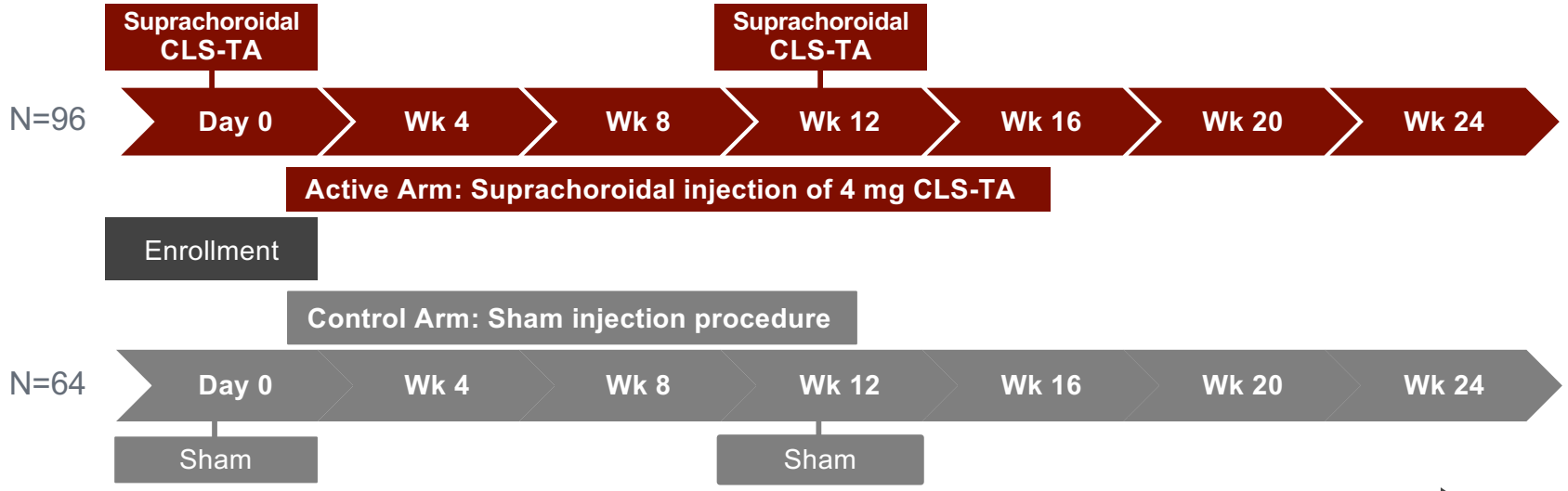
Disclosure

- ES: Abbvie, Clearside Biomedical, EyeGate, EyePoint, Eyevensys, Gilead (research support and consultant);
- BK: Clearside Biomedical: Employee & Shareholder
- TC: Clearside Biomedical: Employee & Shareholder

PEACHTREE: Phase 3, Randomized, Controlled, Double-Masked, Multicenter Trial

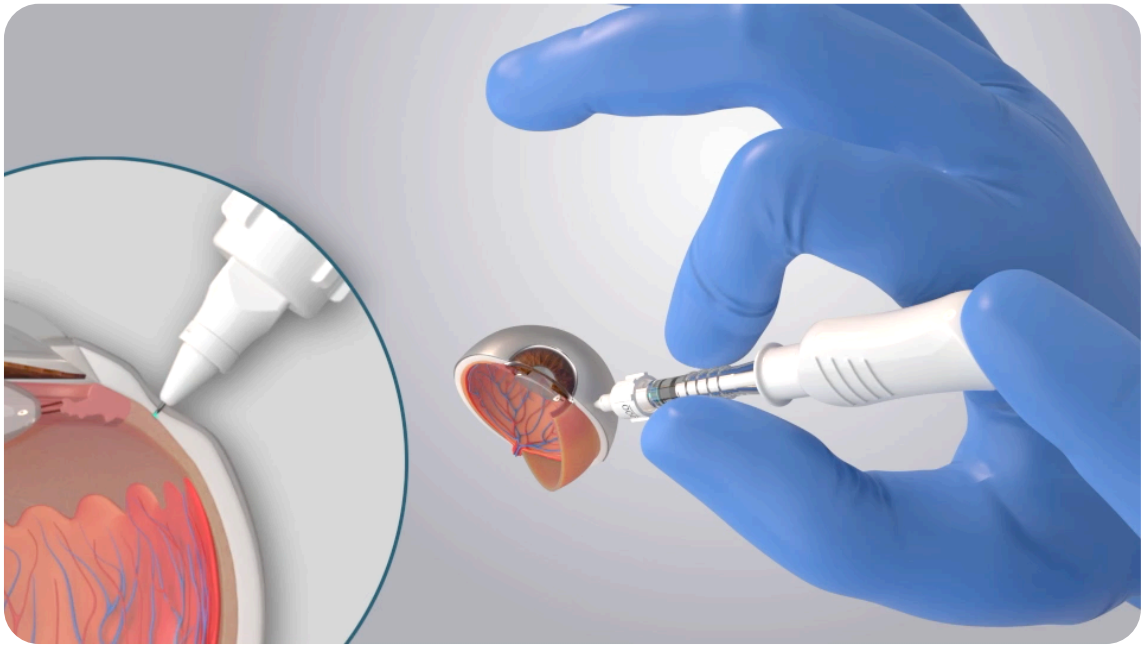
Primary Endpoint: Proportion of patients with an improvement from baseline ≥15 letters in BCVA at Week 24



RESCUE CRITERIA

- BCVA: ↓ 10+ letters
- CST: ↑ 100+ µm or 20% (whichever is lower)
- Inflammation level: ↑ 1.5+ or 3+ to 4+
- Investigators' medical judgement

The Suprachoroidal Space
Targeted and Compartmentalized Delivery



Key Inclusion and Exclusion Criteria

Inclusion

- Diagnosis of macular edema with central subfield thickness ≥300 microns on SD-OCT
- Noninfectious uveitis of any associated diagnosis/etiology
- Any anatomic location: anterior, intermediate, posterior and panuveitis
- Visual acuity: 20/800 to 20/40 (≥5 to ≤70 ETDRS letters)

Exclusion

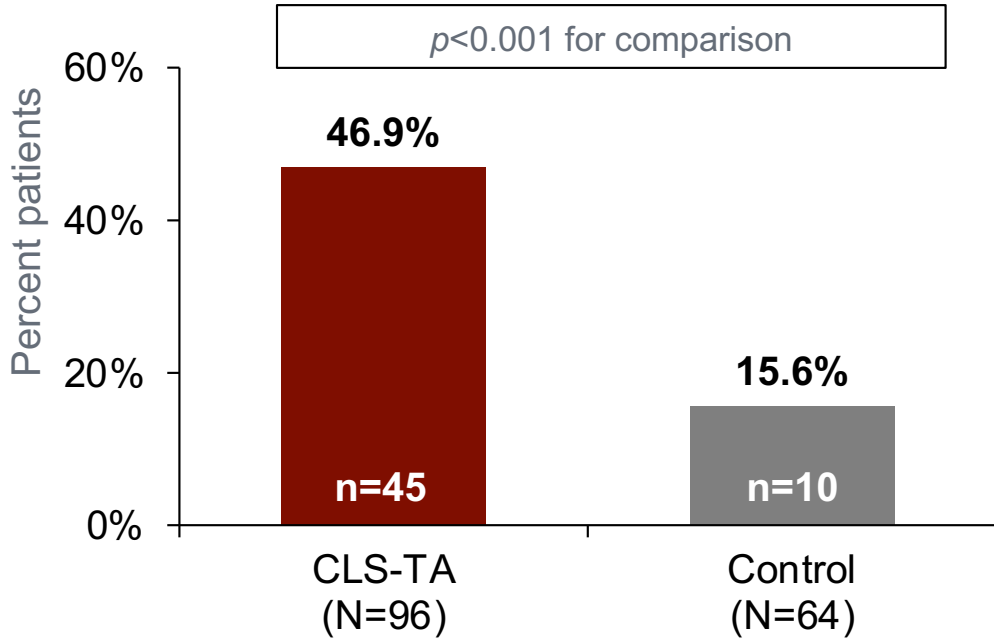
- Any active ocular disease or infection in the study eye other than uveitis
- Intraocular pressure >22 mmHg or uncontrolled glaucoma; patients ≤22 mmHg could be on up to 2 IOP-lowering medications

Subjects could have active or controlled disease at enrollment

ETDRS: Early Treatment Diabetic Retinopathy Study
IOP: intraocular pressure

PEACHTREE: Met Primary Efficacy Endpoint

Primary Endpoint: Subjects gaining ≥15 BCVA letters from baseline at Week 24, %



Intention-to-treat population; Last Observation Carried Forward imputation.
The p-value is based on a Cochran-Mantel-Haenszel test for general association between treatment and response with stratification by country.

Safety

IOP-Related Events	CLS-TA N = 96	Control N = 64
Elevated IOP adverse events	11 (11.5%)	10 (15.6%)
IOP elevation ≥10 mmHg change from baseline at any visit*	9 (9.4%)	7 (10.9%)
IOP elevation ≥30 mmHg absolute reading at any post baseline visit*	5 (5.2%)	4 (6.3%)
Given any additional IOP-lowering medication	7 (7.3%)	6 (9.4%)
Any surgical intervention for an elevated IOP Adverse Event	0	0

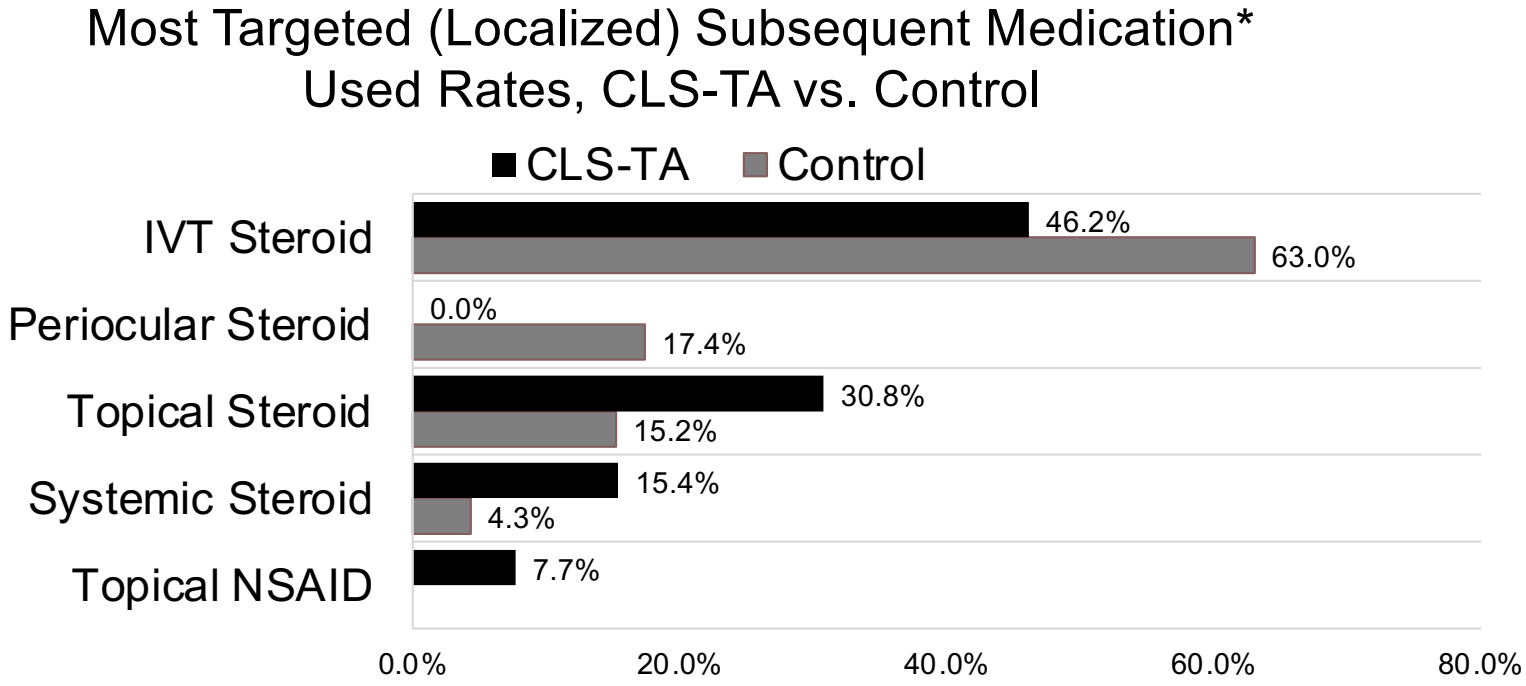
One serious ocular AE

- Retinal detachment 8 weeks after CLS-TA, in different quadrant
- Determined to be unrelated to study drug by the Investigator

Cataract: 7.3% (7/96) in the CLS-TA arm vs. 6.3% (4/64) in the sham arm

Safety population; includes patients in the control group who received rescue medication
*Based on elevated intraocular pressure adverse reactions

Rescue Therapy Rates: CLS-TA (n=13) vs. Control (n=46)



*Rescue medications classified by most targeted type of therapy used during study, where:
Intravitreal Corticosteroid > Periocular corticosteroid > Topical Corticosteroid > Systemic Corticosteroid > Topical NSAID

Post-Hoc Analysis. Rescue medication used per investigator discretion.

Sub-Analysis by Rescue Status in PEACHTREE

Purpose: To compare outcomes between CLS-TA and real-world rescue therapies

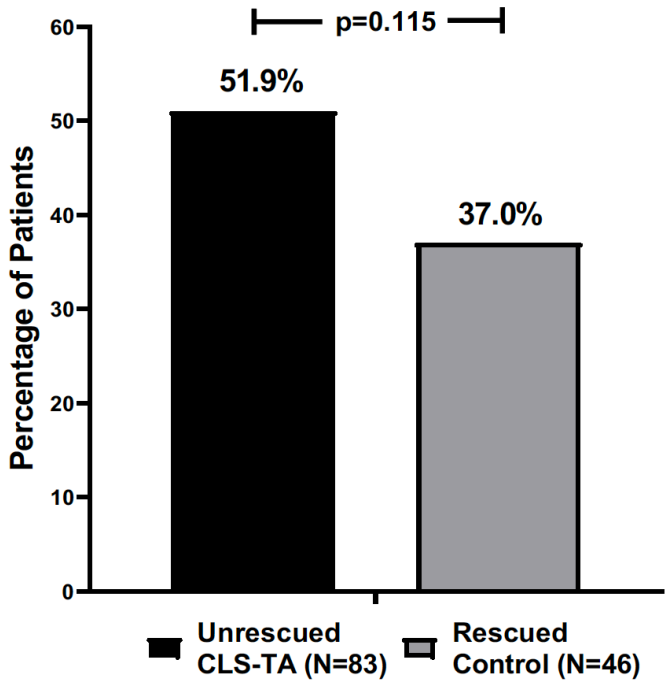
Methods: VA and safety in unrescued CLS-TA versus rescued control group

Two (2) subgroups analyzed:

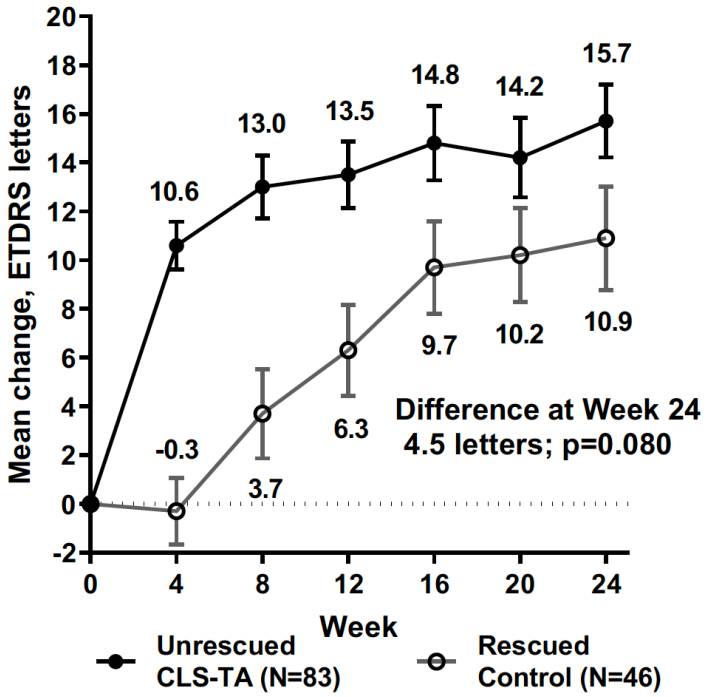
	Unrescued	Rescued
CLS-TA	n=83/96 (86.5%)	n=13/96 (13.5%)
Control	n=18/64 (28.1%)	n=46/64 (71.9%)

Visual acuity in unrescued CLS-TA: Greater mean BCVA and more 3 line gainers at week 24

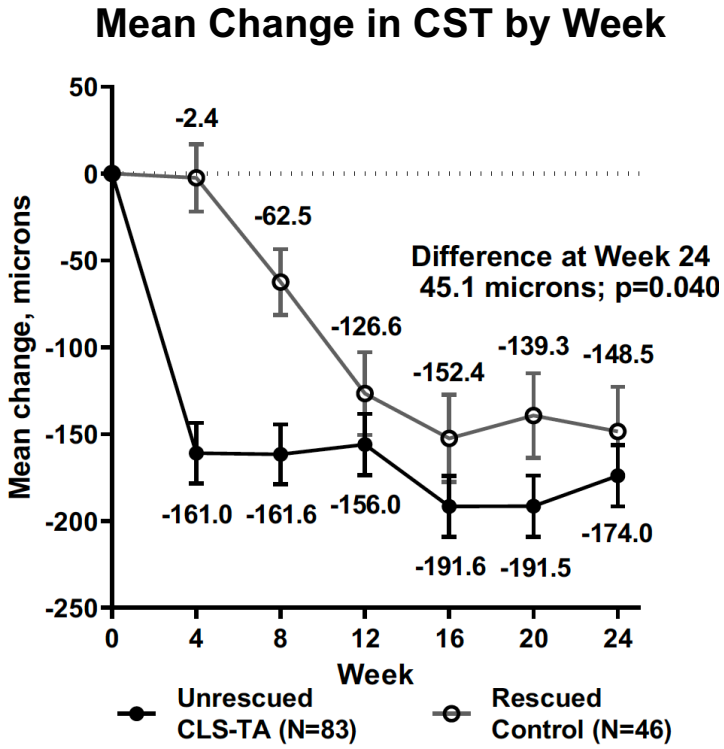
≥ 15 Letter Improvement from Baseline in BCVA at Week 24



Mean BCVA by Week



A significantly greater mean reduction in CST was observed for unrescued CLS-TA subjects versus rescued control subjects



At Week 24, the unrescued CLS-TA subjects who completed the study with gradable images showed a 174.0 µm reduction, compared to a 148.5 µm reduction in the rescued control subjects (95% CI for difference -88.2 to -2.0 µm, *P* = 0.040).

Safety: Treatment Emergent Adverse Events (TEAE)

	Unrescued CLS-TA	Rescued Control
% of subjects with ≥1 TEAE	48.2%	63.0%
AEs related to elevated IOP	10.8%	21.7%
Incidence of Cataract	4.8%	8.7%
IOP-related surgical interventions	none	none

Conclusion

- This post hoc analysis corroborates the pre-specified endpoints of the PEACHTREE study
  - Unrescued CLS-TA subjects experienced significantly greater reduction in CST than rescued subjects in the control group
  - Unrescued CLS-TA subjects tended towards greater improvement in BCVA compared with rescued control subjects
  - Suprachoroidally administered CLS-TA appeared associated with a lower incidence of IOP-related safety findings.
- This post hoc analysis represents a “real world” mix of rescue treatments, with expected limitations in terms of sample size, treatment type, etc.