Suprachoroidally Injected CLS-TA Improves Visual Acuity and Macular Edema in Noninfectious Uveitis: Results of the Phase 3 PEACHTREE Study

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Thank You to the PEACHTREE Investigators!

USA

India

Israel

Macular Edema Due to Noninfectious Uveitis

Uveitis and Macular Edema

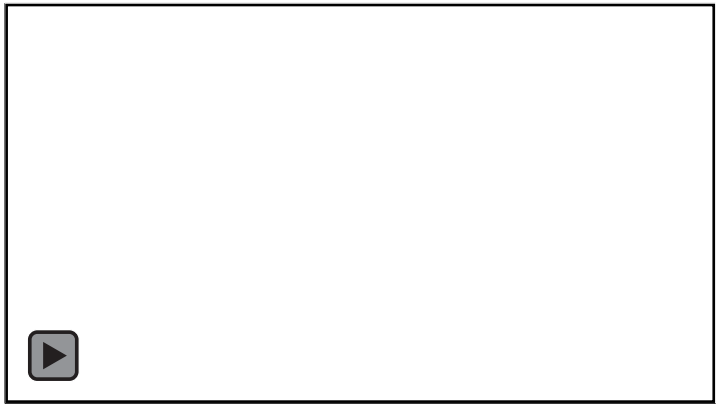
- Macular edema (ME) is the leading cause of vision impairment and vision loss in uveitis
- ME is common
  - 40% to 60% of intermediate, posterior and panuveitis
  - 20% anterior

Therapeutic options for ME

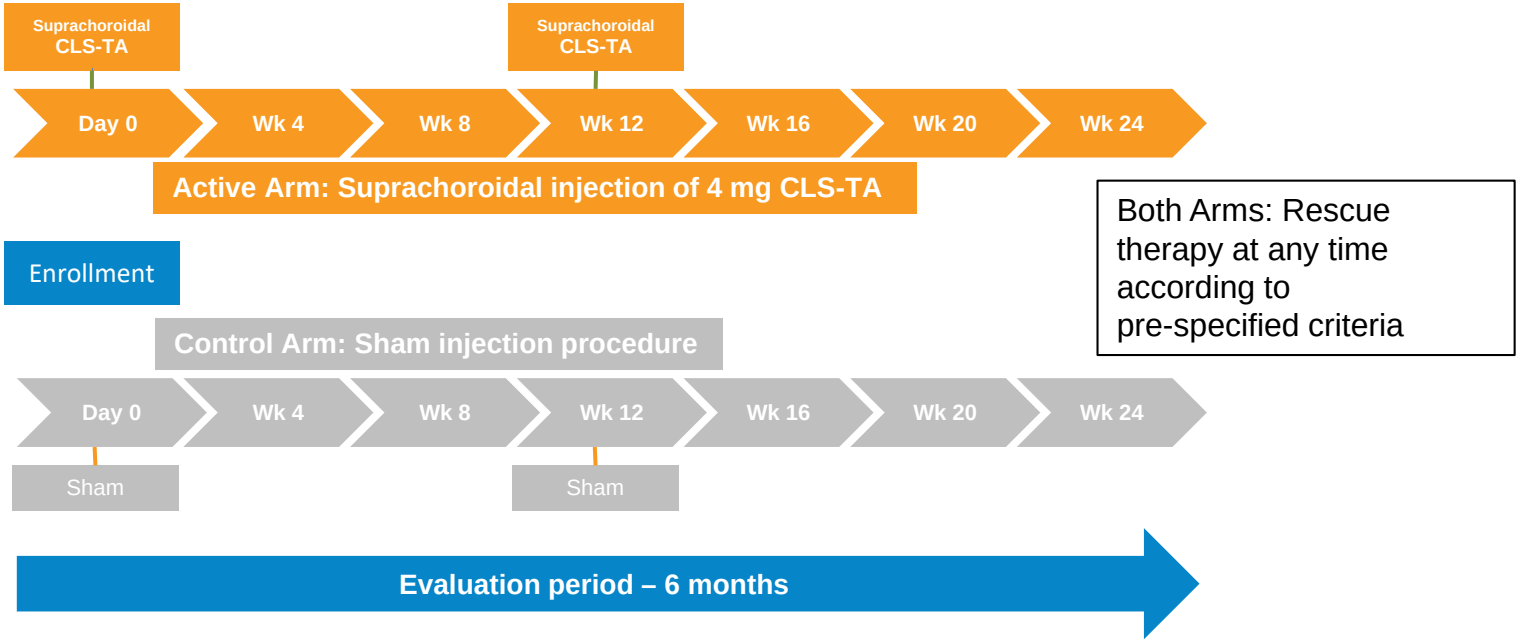
- Local periocular and intravitreal corticosteroids
- Systemic corticosteroids and steroid-sparing medications

Suprachoroidal Injection for Posterior Segment Disease

- **Novel technique for suprachoroidal injection**
  - 30G needle approx. 1000 microns in length
  - Proprietary microinjector syringe
- **Laboratory data: Suprachoroidal vs. intravitreal injection**
  - Higher bioavailability in the choroid, RPE, and retina
  - Lower exposure to the anterior segment
  - Potential for improved efficacy and safety



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



- **Primary endpoint:** Proportion of subjects in each arm gaining ≥15 ETDRS letters in BCVA from baseline at week 24
- 3:2 randomization of suprachoroidally injected CLS-TA (N=96) vs. sham procedure (N=64)

Key Inclusion and Exclusion Criteria

Inclusion

- Non-infectious uveitis of any associated diagnosis/ etiology
- Any anatomic location: anterior, intermediate, posterior and panuveitis
- Diagnosis of macular edema with central subfield thickness >300 microns
- Visual acuity: ≥5 and ≤70 ETDRS letters; 20/40 to 20/800
- Patients could have active or controlled disease at enrollment

Exclusion

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

ETDRS: Early treatment of diabetic retinopathy study

IOP: intraocular pressure

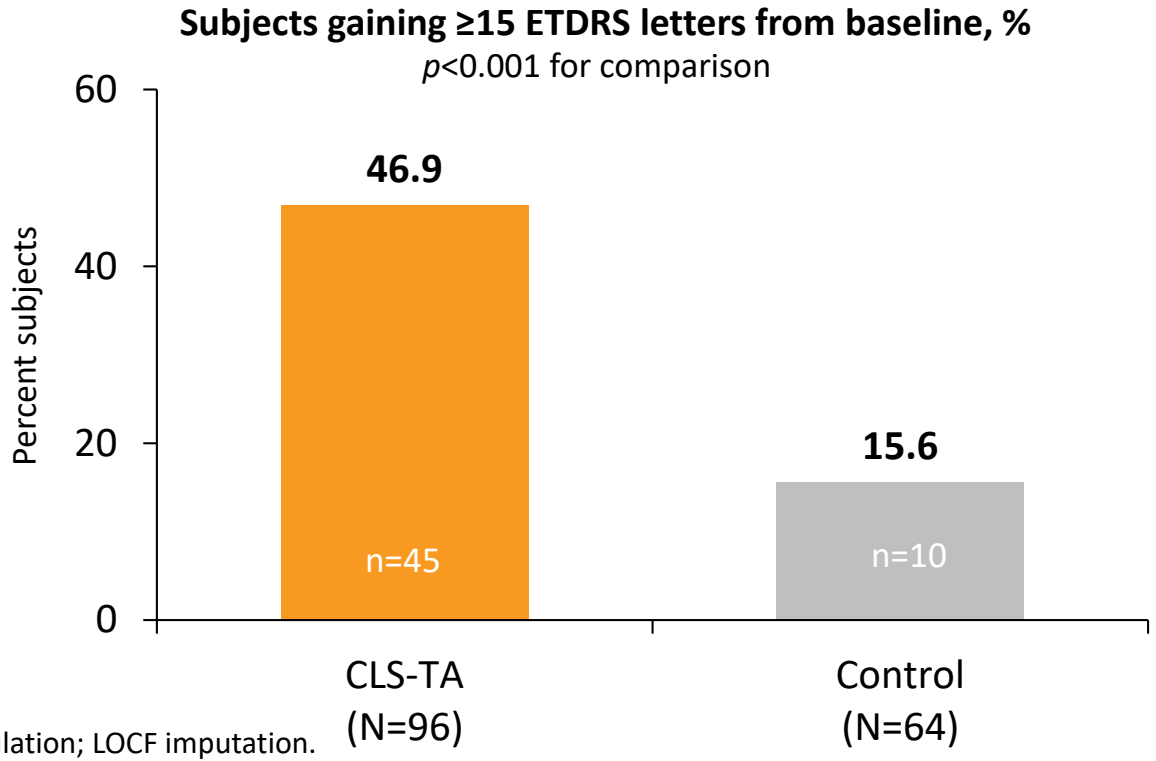
Baseline Demographic Characteristics Were Similar Between Treatment Groups

Characteristic	CLS-TA N=96	Control N=64	Overall N=160
Gender, n (%)			
Male	42 (43.8)	30 (46.9)	72 (45.0)
Female	54 (56.3)	34 (53.1)	88 (55.0)
Age (years), mean (SD)	50.4 (14.2)	50.0 (15.1)	50.2 (14.5)

Baseline Ocular Characteristics Were Similar Between Treatment Groups

Characteristic	CLS-TA N=96	Control N=64	Overall N=160
BCVA, study eye (ETDRS letters)			
Mean (SD)	54.7 (13.9)	53.5 (12.9)	54.2 (13.5)
Median (range)	57 (9-89)	54 (12-79)	56 (9-89)
CRT, study eye (µm)			
Mean (SD)	479.8 (149.7)	518.0 (150.0)	495 (150.5)
Median (range)	456 (256-857)	517 (274-861)	481 (256-861)
Uveitis anatomic location, n (%)			
Anterior	27 (28.1)	14 (21.9)	41 (25.6)
Intermediate	34 (35.4)	23 (35.9)	57 (35.6)
Posterior	22 (22.9)	13 (20.3)	35 (21.9)
Panuveitis	28 (29.2)	24 (37.5)	52 (32.5)

PEACHTREE Met Its Primary Efficacy Endpoint: Visual Acuity Gain ≥15 ETDRS Letters from Baseline



Intention-to-treat population; LOCF imputation.

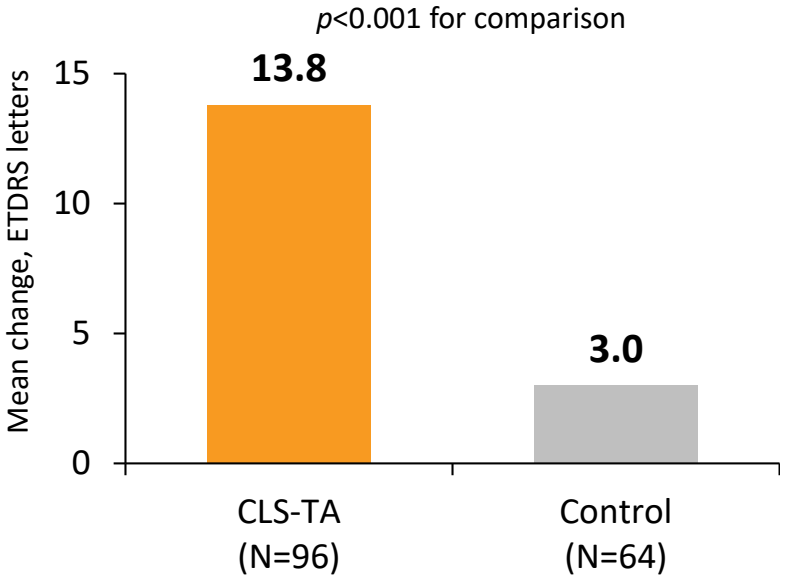
The *p*-value is based on a CMH Cochran-Mantel-Haenszel test for general association between treatment and response with stratification by country.

ETDRS, Early treatment diabetic retinopathy study; LOCF, last observation carried forward.

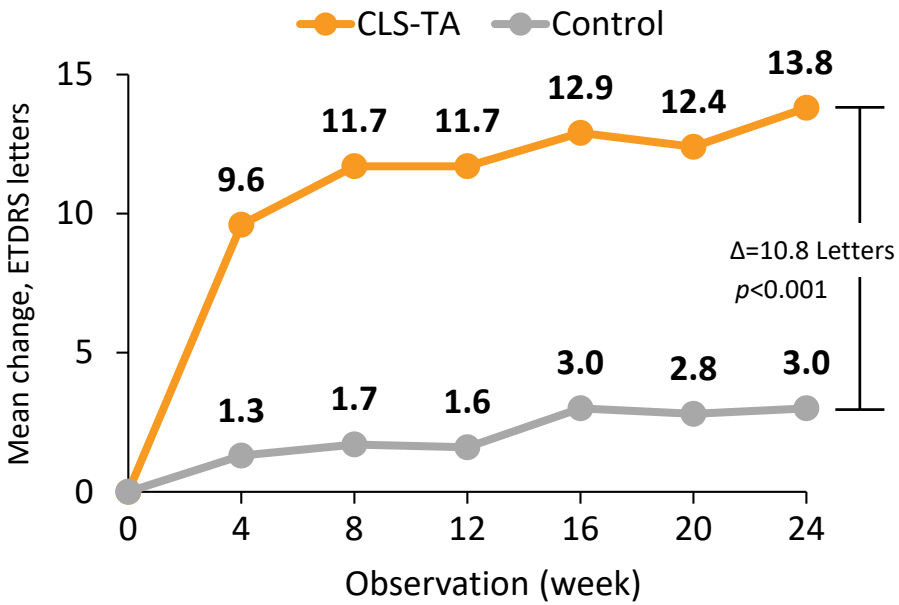
Mean Change in BCVA

Improvement From as Early as Week 4 Through Week 24 in the CLS-TA Arm

Mean change at week 24 from baseline in BCVA in ETDRS letters read



Mean change at each visit from baseline in BCVA in ETDRS letters read

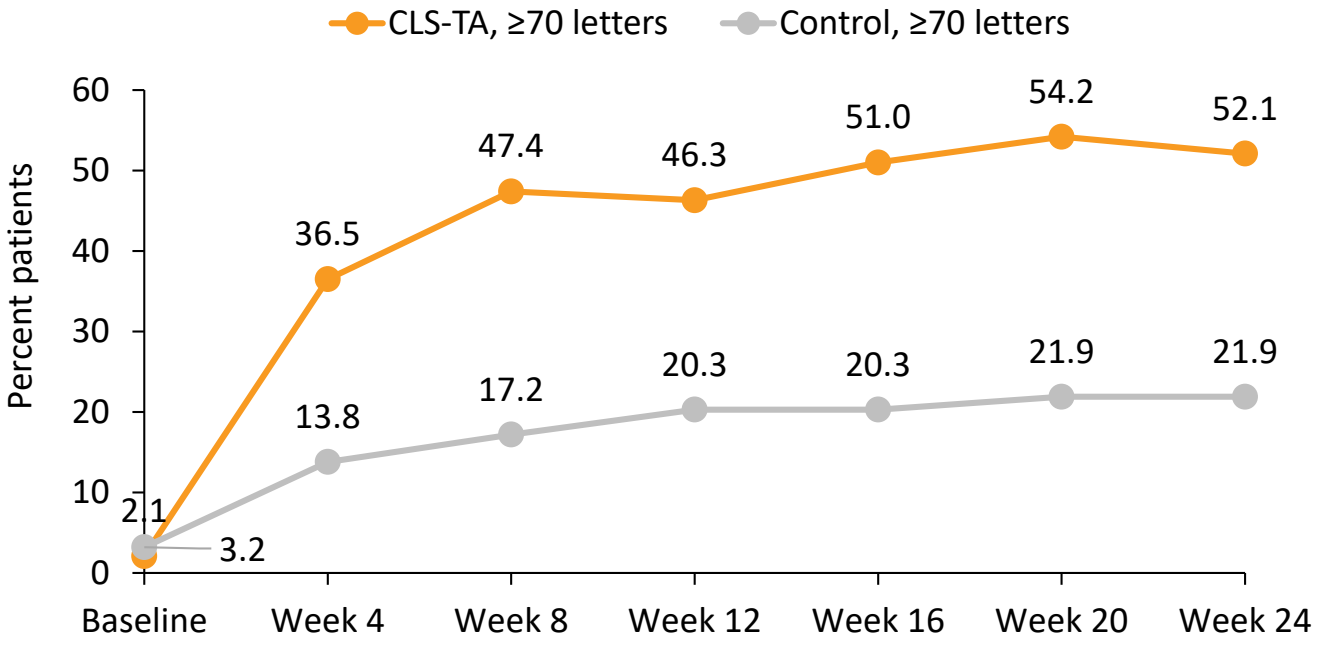


Intention-to-treat population; LOCF imputation.

t-test. Differences between the CLS-TA and control arms were significant at each visit.

BCVA, best corrected visual acuity.

% Subjects Reading ≥70 ETDRS Letters (20/40 or Better) by Treatment Arm

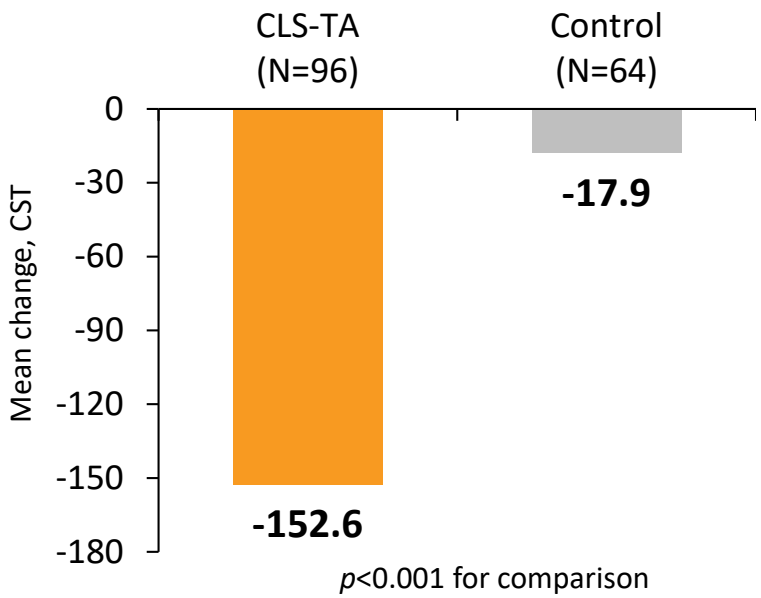


Intention-to-treat population; LOCF imputation.

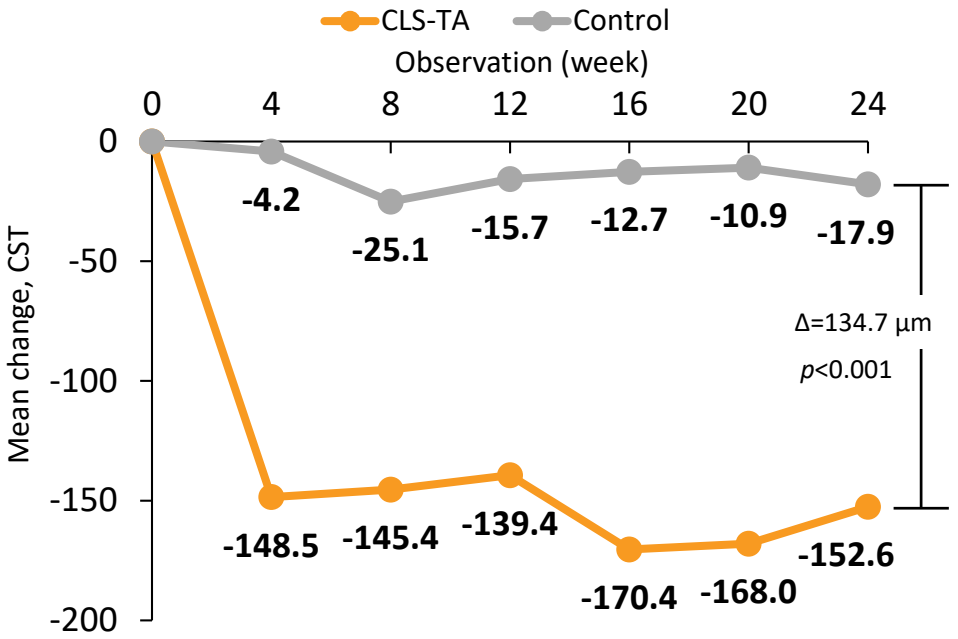
Mean Change in Central Subfield Thickness

Improvement From as Early as Week 4 through Week 24 in CLS-TA Arm

Mean change from baseline at week 24 in central subfield thickness (µm)



Mean change at each visit from baseline in central subfield thickness (µm)

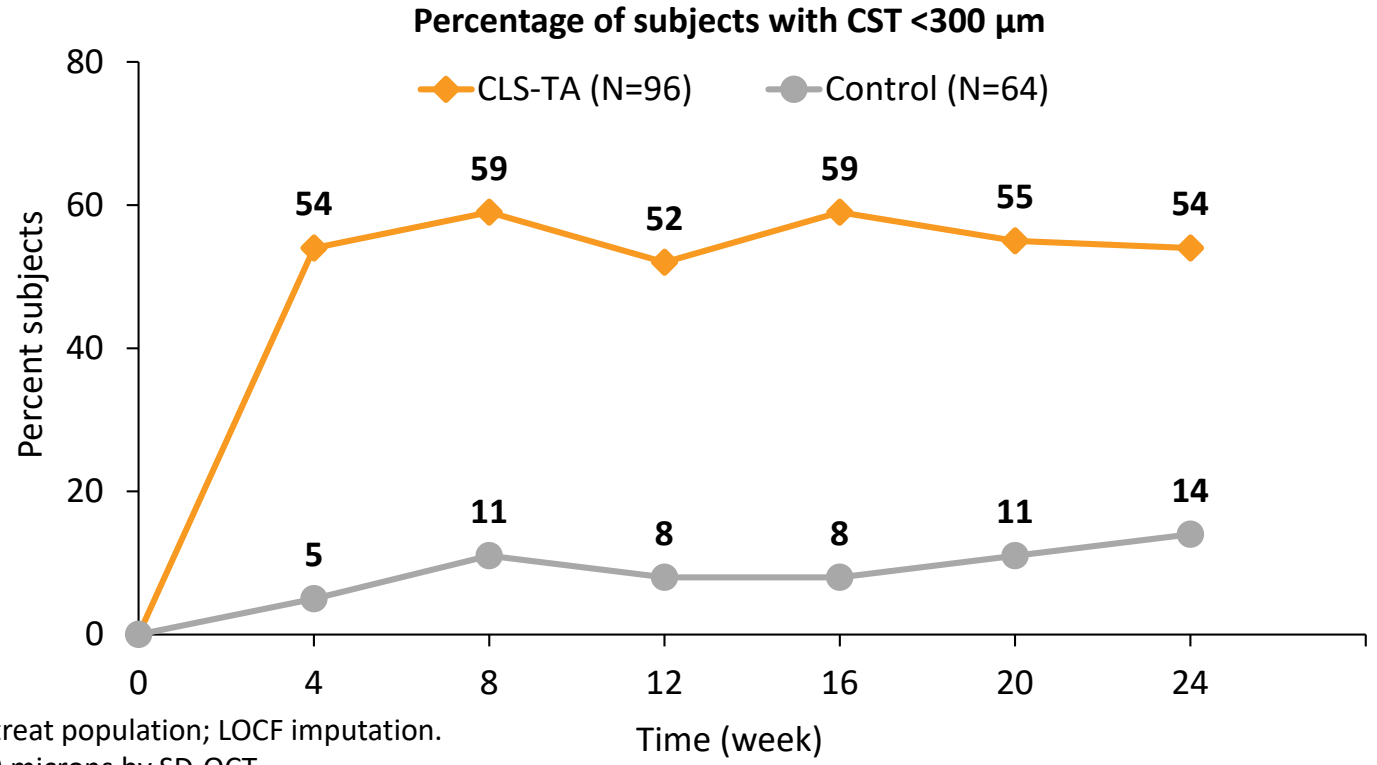


Intention-to-treat population; LOCF imputation.

CST, central subfield retinal thickness.

Resolution of Macular Edema, CST <300 µm

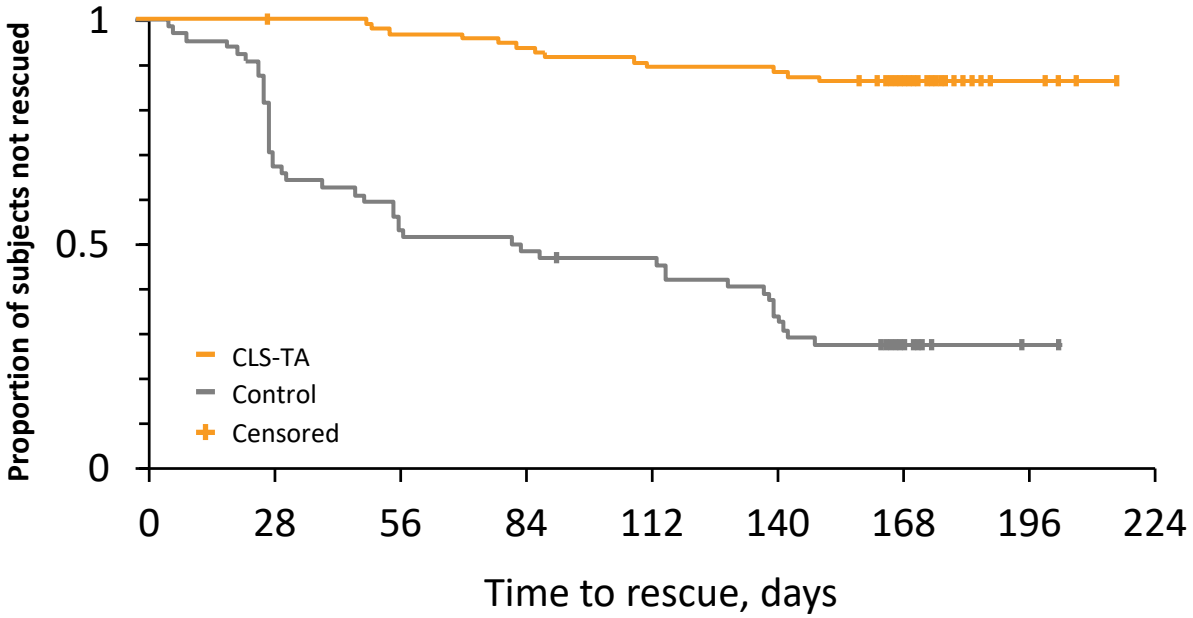
Improvement in CLS-TA group at Week 4, Maintained through Week 24



Intention-to-treat population; LOCF imputation.
Less than 300 microns by SD-OCT

CST, central subfield retinal thickness.

Kaplan–Meier Analysis: Time to Rescue



Over 85% of the patients in the CLS-TA arm did not require rescue therapy

Safety

Patient Retention

- 97% of patients completed the study

Serious Adverse Events

- There were no deaths in the study
- Three serious adverse events none considered to be treatment-related; none led to study discontinuation

Ocular Adverse Events: Study Eye

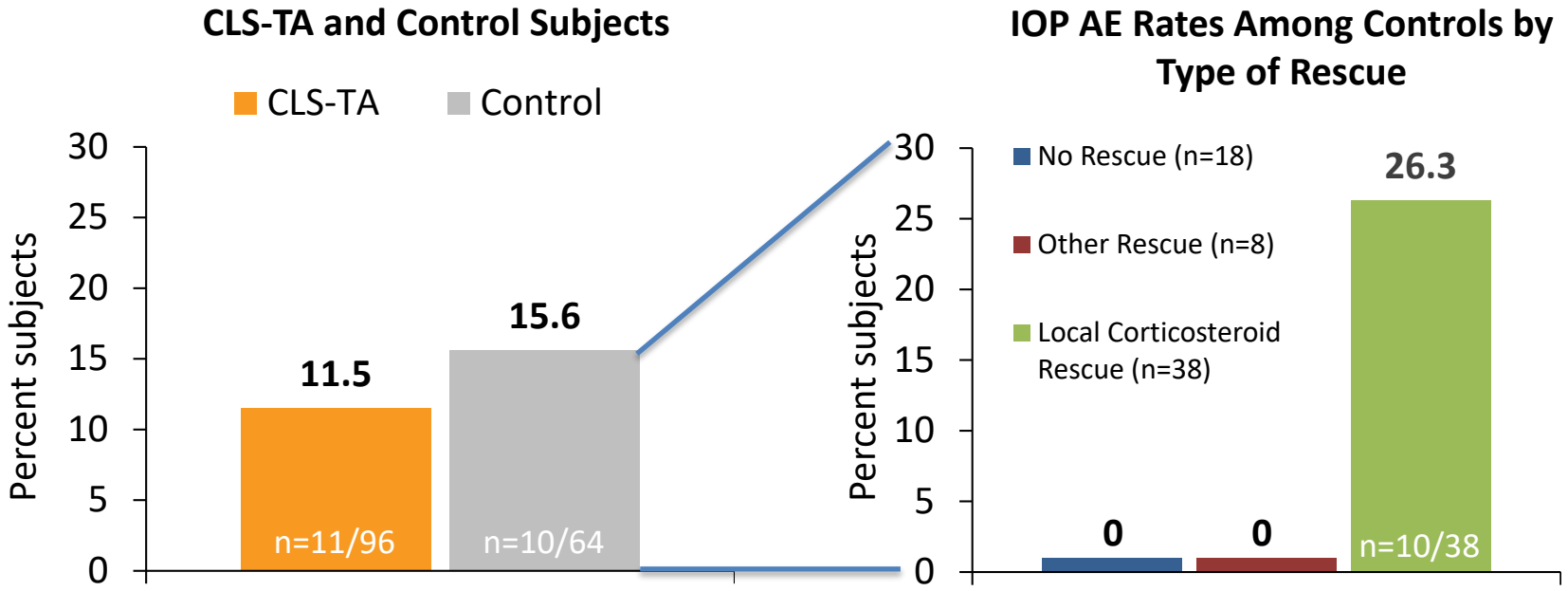
Adverse Events, n (%)	CLS-TA 4.0 mg N=96	Control N=64
Total number of ocular adverse events	122	54
Number of subjects with ≥1 ocular AEs	49 (51.0)	37 (57.8)
Treatment-related ocular AEs	29 (30.2)	8 (12.5)
Serious ocular AEs	1 (1.0)	0
Treatment-related serious AEs	0	0
Number of subjects with ≥1 eye disorder	41 (42.7)	34 (53.1)

Ocular Adverse Events in ≥5% of Subjects

Adverse Events, n (%)	CLS-TA 4.0 mg N=96	Control N=64
Cataract	7 (7.3)	4 (6.3)
Cystoid macular edema	0	11 (17.2)
Eye pain: time of procedure	12 (12.5)	3 (4.7)
Eye pain: any time post procedure	6 (6.3)	0
Elevated IOP: time of procedure	8 (8.3)	0
Elevated IOP: corticosteroid-related	11 (11.5)	(10) 15.6*
Uveitis	2 (2.1)	7 (10.9)
Vitreous detachment	5 (5.2)	1 (1.6)

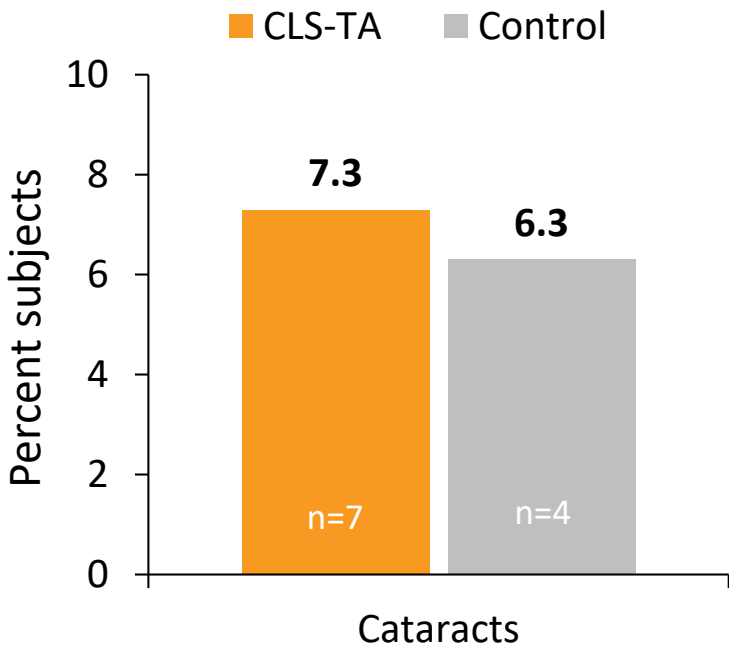
*All IOP-related events in the control group occurred after rescue local corticosteroid administration.

Elevated IOP Adverse Events



"Elevated IOP" includes (a) increased IOP, (b) ocular hypertension, and (c) glaucoma.
AE, adverse event; IOP, intraocular pressure.

Cataract Adverse Events



- New or worsening cataracts occurred with similar frequency in the CLS-TA and control groups
- No AE of cataract-related surgeries in this trial

"Cataract" includes (a) cataract, (b) cataract subcapsular, and (c) cataract nuclear.

PEACHTREE Study: Take Home Points

Efficacy

- Suprachoroidal CLS-TA met the primary study endpoint, with a significantly greater proportion of subjects vs. control with ≥15 ETDRS BCVA gain at 6 months
- CLS-TA improved macular edema in uveitis patients by OCT criteria
- Vast majority of patients in CLS-TA arm did not require rescue therapy during study

Safety

- Favorable safety profile overall with no SAEs attributable to suprachoroidal CLS-TA
- Low rates of elevated IOP and cataract

THANK YOU