

Primary Results of the Phase 3 SatraGO-1 and SatraGO-2 Trials: Efficacy and Safety of Satralizumab in Thyroid Eye Disease

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On behalf of all SatraGO investigators

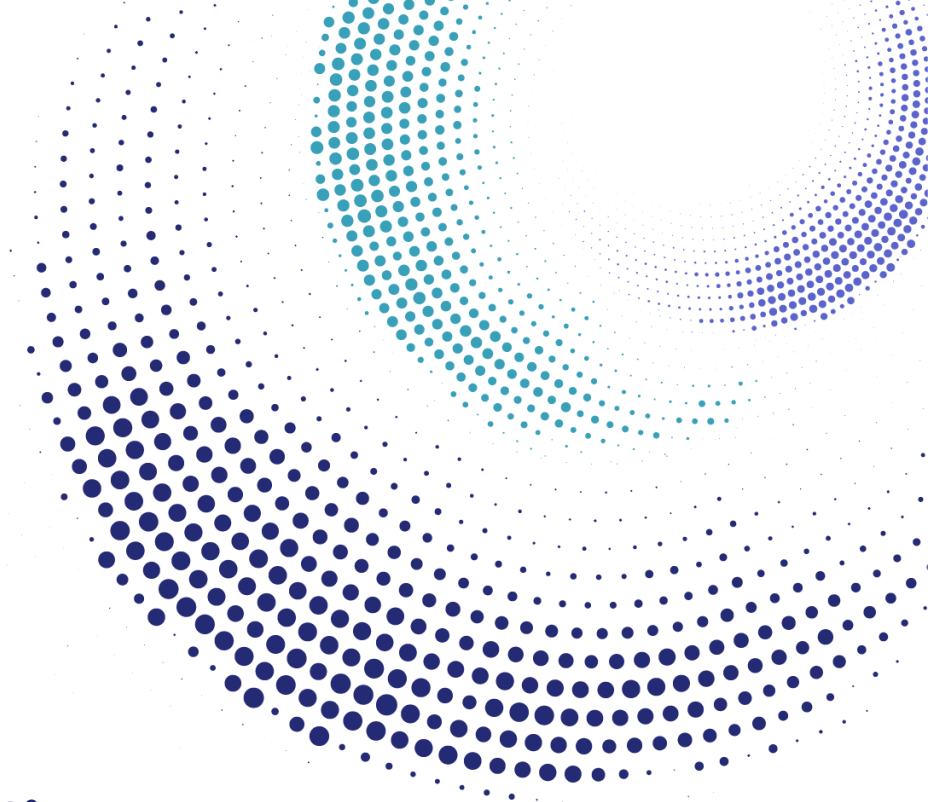
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Note: Additional monitoring is in place for satralizumab in neuromyelitis optica spectrum disorders.

***Presented at the North American Society of Academic Orbital Surgeons (NASAOS)
Palos Verdes, CA | April 24–27, 2026***



Disclosures

Financial Disclosures

- PS: Consultant: Alumis, Amgen, Roche/Genentech, Inc., Kriya, Tourmaline Bio, Viridian; Research Support: Amgen, Immunovant, Tourmaline Bio, Viridian
- CAB: Consultant: Amgen, argenx, Regeneron, Roche/Genentech, Inc.; Research Support: Amgen, argenx, Roche/Genentech, Inc., Viridian
- OOI, CB, GB: Employee: Genentech, Inc.; Stocks/Stock Options: Roche
- LB: Employee: Roche Products Ltd.; Stock/Stock Options: Roche
- TR, TK: Employee: F. Hoffmann-La Roche AG; Stocks/Stock Options: Roche
- SO-P: Consultant: Amgen, Roche/Genentech, Inc., Thea

Acknowledgments

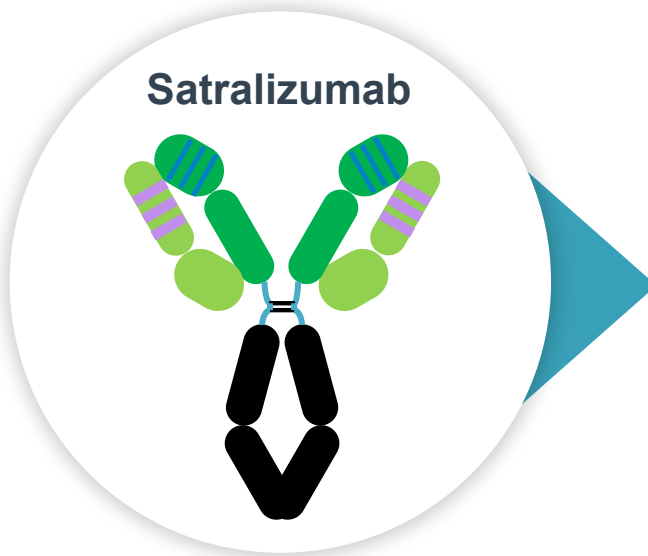
- The authors would like to acknowledge Zdenka Haskova, Naz Jehangir, and Ying Liu (Genentech, Inc.), Mahtab Salami (F. Hoffmann-La Roche AG), and Shinya Yokoe (Chugai Pharmaceutical Co. Ltd.) for their contributions to the study

Study and Product Disclosures

- The SatraGO-1 and SatraGO-2 trials are funded by F. Hoffmann-La Roche AG
- This study includes research conducted on human subjects
- Institutional Review Board approval was obtained prior to study initiation
- Funding was provided by F. Hoffmann-La Roche AG for the study and third-party writing assistance, which was provided by Nilisha Fernando, PhD, CMPP, of Envision Pharma Group

Satralizumab: A Humanized Monoclonal Antibody That Targets the IL-6R Pathway

Humanized monoclonal antibody that targets the IL-6R pathway



Designed using novel antibody recycling technology, enabling extended subcutaneous delivery

- This technology protects the antibody from being degraded by binding to the neonatal fragment crystallizable receptor and allows for recirculation, thereby extending the antibody's half-life



Approved for the treatment of NMOSD in > 85 countries, with a well-established and highly favorable safety profile



Prevents IL-6 from binding, thus inhibiting the inflammatory IL-6 signaling pathways^{1,2}



Reduces proinflammatory signaling processes¹⁻³

Satralizumab is designed to enable **maximal sustained suppression** of IL-6 signaling and allow **practical subcutaneous dosing** for patients

Baseline Demographic and Clinical Characteristics

SatraGO participants represent the global TED population

Characteristic	SatraGO-1		SatraGO-2		OPTIC ¹		THRIVE ²		REVEAL-1 ³		
	Satralizumab n = 68	Placebo n = 63	Satralizumab n = 64	Placebo n = 63	Teprotumumab n = 41	Placebo n = 42	Veligrotug n = 75	Placebo n = 38	Elegrobart Q4W n = 44	Elegrobart Q8W n = 44	Placebo n = 44
Age, years, mean (SD)	50.8 (11.6)	51.8 (12.3)	46.6 (13.3)	48.5 (13.2)	51.6 (12.6)	48.9 (13.0)	48.9 (12.4)	49.1 (12.5)	52.6 (12.1)	48.1 (12.4)	48.5 (12.9)
Female, n (%)	53 (77.9)	39 (61.9)	48 (75.0)	38 (60.3)	29 (71)	31 (74)	56 (75)	31 (82)	35 (80)	34 (77)	35 (80)
Race											
Asian	16 (23.5)	17 (27.0)	20 (31.2)	29 (46.0)	2 (5)	1 (2)	NA	NA	NA	NA	NA
White	46 (67.6)	36 (57.1)	44 (68.8)	30 (47.6)	35 (85)	37 (88)	NA	NA	36 (82)	36 (82)	35 (80)
Clinical Activity Score, Active TED, mean (SD)	4.0 (1.1)	3.9 (1.2)	4.3 (1.0)	4.5 (1.2)	5.1 (0.9)	5.3 (1.0)	4.5 (1.0)	4.8 (1.1)	4.3 (1.0)	4.2 (1.0)	4.0 (0.9)
Active TED symptom duration, ^a months, mean (SD)	6.5 (3.5)	6.0 (3.8)	6.2 (4.1)	6.3 (4.3)	6.2 (2.3)	6.4 (2.4)	7.9 (3.7)	7.2 (3.8)	6.6 (4.4)	7.7 (4.3)	8.3 (5.2)
Exophthalmometry (Hertel), mm, mean (SD)	23.4 (3.2)	23.5 (3.2)	22.6 (3.3)	22.1 (2.6)	22.6 (3.3)	23.2 (3.2)	23.2 (3.1)	23.2 (3.3)	22.3 (2.6)	22.7 (3.3)	21.8 (2.5)

^a Initial diagnosis to randomization. NA, not available; Q4W, every 4 weeks; Q8W, every 8 weeks; SD, standard deviation; TED, thyroid eye disease. 1. Douglas RS et al. *N Engl J Med*. 2020;382(4):341-352. 2. Tamhankar MA et al. THRIVE phase 3 trial of veligrotug in active thyroid eye disease (TED): efficacy, safety, and quality of life at 15 weeks, presentation. Presented at: NANOS 2026; Boston, MA; March 23, 2026. 3. Viridian Therapeutics announces positive topline results from elegrobart phase 3 REVEAL-1 clinical trial in active thyroid eye disease. News release. Viridian Therapeutics. March 30, 2026. Accessed April 21, 2026. <https://investors.viridiantherapeutics.com/news/news-details/2026/Viridian-Therapeutics-Announces-Positive-Topline-Results-from-Elegrobart-Phase-3-REVEAL1-Clinical-Trial-in-Active-Thyroid-Eye-Disease/default.aspx>.

Satralizumab Was Efficacious in Participants With TED

Satralizumab was efficacious in participants with Active TED
Clinical benefits were also observed in the Active + Inactive TED population

Pooled SatraGO-1 and SatraGO-2 Active TED

% of Participants Achieving Week 24 Endpoints	Satralizumab	Placebo	<i>P</i> Value
Proptosis response	50.9%	26.8%	0.0004
CAS reduction	83.7%	59.0%	0.0001
CAS of 0 or 1	68.4%	43.0%	0.0002
Overall response	46.9%	19.0%	< 0.0001
Diplopia reduction	52.7%	30.2%	0.0086

Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events; after the intercurrent events handling, missing data will be imputed as nonresponder. Analysis was stratified by smoking status (IxRS-based). AE, adverse event; CAS, Clinical Activity Score; IxRs, interactive voice/web response system; TED, thyroid eye disease.

Satralizumab Has a Highly Favorable Safety Profile

There was a low incidence of SAEs and treatment discontinuations, and no serious infections. The safety results from SatraGO-1 and SatraGO-2 reaffirm the **highly favorable profile of satralizumab**, as demonstrated in > 10,000 patients for up to 7 years

Most Common Adverse Events: Active + Inactive TED

Participants Experiencing AEs Through Week 24, n (%)	SatraGO-1		SatraGO-2	
	Satralizumab n = 67	Placebo n = 62	Satralizumab n = 64	Placebo n = 62
Nasopharyngitis	7 (10.4)	4 (6.5)	4 (6.2)	7 (11.3)
Headache	6 (9.0)	5 (8.1)	6 (9.4)	7 (11.3)
Influenza	4 (6.0)	4 (6.5)	1 (1.6)	4 (6.5)

Satralizumab safety profile is distinct from other treatments for TED



Versus Corticosteroids¹

Low incidence of adverse events commonly seen with corticosteroids



Versus Teprotumumab²⁻⁷

No events of hearing loss, hyperglycemia; 1 event per arm per trial of muscle spasms, alopecia



For women of child-bearing age

1 event of menstrual disruption (patient had a history of preexisting menorrhagia)



Versus Tocilizumab⁸

Low rate (< 3%) of neutropenia and no serious infections

Only AEs with a rate ≥ 6% are included on this slide. Investigator text for AEs encoded using MedDRA version 28.0. Only events up to 4 weeks after the last dose in Part I are considered. AE, adverse event; MedDRA, Medical Dictionary for Regulatory Activities; TED, thyroid eye disease. SAE, serious adverse event. 1. Walasik-Szemplińska D et al. *Thyroid Res.* 2019;12:13. 2. Keen JA et al. *Ophthalmology.* 2024;131(1):30-36. 3. Kahaly GJ et al. *Thyroid.* 2024;34(7):880-889. 4. Douglas RS et al. *J Clin Endocrinol Metab.* 2024;109(1):25-35. 5. Hiromatsu Y et al. *Lancet Reg Health West Pac.* 2025;55:101464. 6. Kahaly GJ et al. *Lancet Diabetes Endocrinol.* 2021;9(6):360-372. 7. Malik A et al. *Orbit.* Published online January 13, 2026. doi:10.1080/01676830.2025.2609906. 8. Moots RJ et al. *Rheumatology (Oxford).* 2017;56(4):541-549.

Satralizumab Has the Potential to be a New Treatment Paradigm for Patients with TED

- ▶ TED is a **complex inflammatory autoimmune disease** with limited durable treatment options
 - Current treatments targeting the IGF-1 pathway are associated with serious adverse events and relapse of disease activity¹⁻³

There is an unmet need for **targeted** therapies that **modify disease progression** and **minimize long-term complications**

- ▶ IL-6 is known to drive inflammation and fibrosis in TED^{4,5}



Satralizumab is the **first IL-6R inhibitor** combining a **positive benefit-risk profile for active and inactive TED** with convenient subcutaneous dosing, and could represent a new treatment paradigm



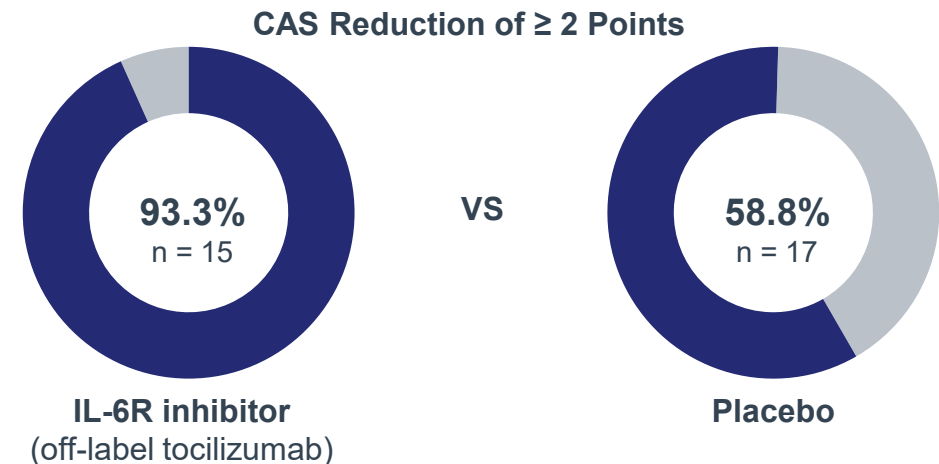
Back-Up Slides: NANOS 2026

Unmet Need in Thyroid Eye Disease (TED)

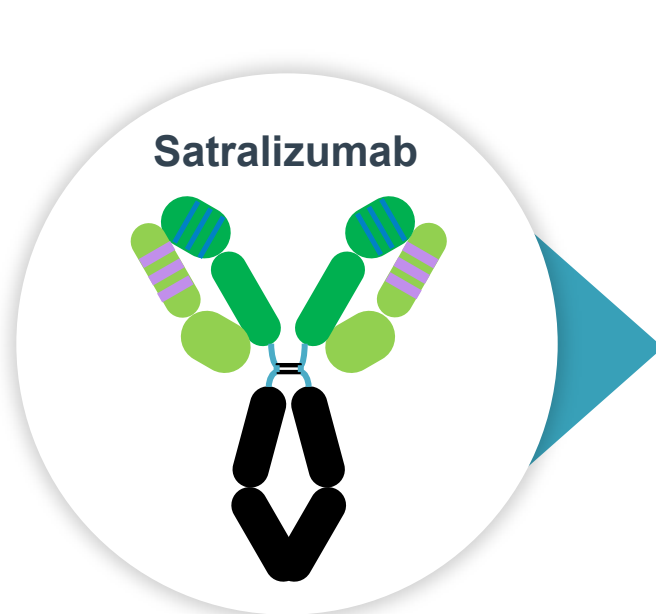
- ▶ TED is a **complex inflammatory autoimmune disease** with limited durable treatment options
 - Current treatments targeting the IGF-1 pathway are associated with serious adverse events and relapse of disease activity¹⁻³

There is an unmet need for **targeted** therapies that **modify disease progression** and **minimize long-term complications**

- ▶ Interleukin-6 (IL-6) is known to drive inflammation and fibrosis in TED^{4,5}
- ▶ Clinical evidence supports the **anti-IL-6R mAb** mechanism of action in TED
 - **IL-6R inhibition** was shown to **reduce CAS** in steroid-resistant patients with TED⁶



Satralizumab: A Humanized Monoclonal Antibody That Targets the IL-6R Pathway



Designed using novel antibody recycling technology, enabling subcutaneous delivery



Approved for the treatment of NMOSD in > 85 countries, with a well-established and highly favorable safety profile



Prevents IL-6 from binding, thus inhibiting the inflammatory IL-6 signaling pathways^{1,2}



Reduces proinflammatory signaling processes¹⁻³

Satralizumab is designed to enable **maximal sustained suppression** of IL-6 signaling and allow **practical subcutaneous dosing** for patients

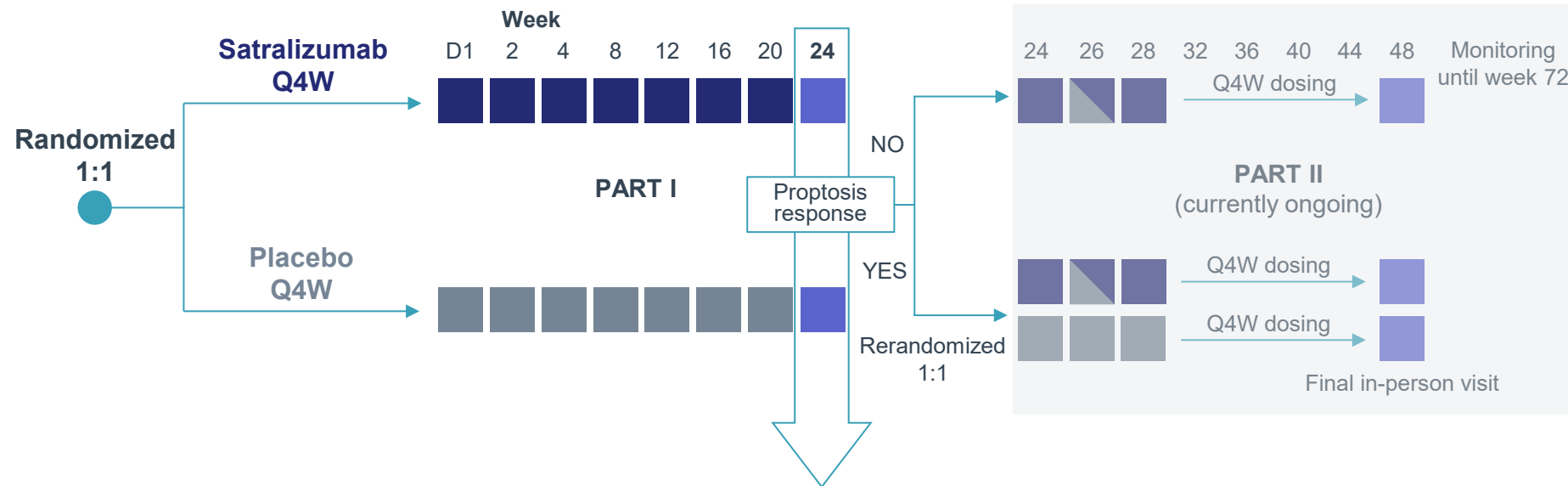
SatraGO-1 and SatraGO-2: Identically Designed, Phase 3, Randomized, Placebo-Controlled, Multicenter Studies

Key Eligibility Criteria

- Age ≥ 18 years with TED diagnosis
- Euthyroid, or mild hypo- or hyperthyroidism
- Proptosis ≥ 3 mm above normal range
- ≥ 1 of lid retraction, soft tissue involvement, or diplopia

Participants With Active + Inactive TED

- SatraGO-1: $n = 131$ ($n = 101$ active)
- SatraGO-2: $n = 127$ ($n = 97$ active)
- Active TED: CAS ≥ 3 at baseline; Inactive TED: CAS < 3 for ≥ 6 months prior to screening and at baseline



Primary endpoint: Proportion of active participants with TED achieving ≥ 2 -mm reduction in proptosis from baseline at Week 24

Baseline Demographics and Clinical Characteristics

Active + Inactive TED

Characteristic, n (%) ^a	SatraGO-1		SatraGO-2	
	Satralizumab n = 68	Placebo n = 63	Satralizumab n = 64	Placebo n = 63
Age, years, mean (SD)	50.8 (11.6)	51.8 (12.3)	46.6 (13.3)	48.5 (13.2)
Sex, female	53 (77.9)	39 (61.9)	48 (75.0)	38 (60.3)
Race				
Asian	16 (23.5)	17 (27.0)	20 (31.2)	29 (46.0)
White	46 (67.6)	36 (57.1)	44 (68.8)	30 (47.6)
Other ^b	6 (8.8)	10 (15.9)	0	4 (6.3)
Thyroid dysfunction^c				
Graves disease	53 (77.9)	48 (76.2)	53 (82.8)	57 (90.5)
Hashimoto thyroiditis	4 (5.9)	4 (6.3)	3 (4.7)	5 (7.9)
Other hyperthyroidism	17 (25.0)	15 (23.8)	14 (21.9)	10 (15.9)
Other hypothyroidism	11 (16.2)	14 (22.2)	13 (20.3)	7 (11.1)
Acropachy (clubbing)	2 (2.9)	1 (1.6)	0	0
Pretibial myxoedema	3 (4.4)	1 (1.6)	0	0
Clinical Activity Score, mean (SD)	3.2 (1.8)	3.4 (1.6)	3.5 (1.7)	3.6 (2.0)
Active TED	4.0 (1.1)	3.9 (1.2)	4.3 (1.0)	4.5 (1.2)
Active TED symptom duration,^d months, mean (SD)	6.5 (3.5)	6.0 (3.8)	6.2 (4.1)	6.3 (4.3)
Diplopia	34 (50.0)	39 (61.9)	32 (50.0)	32 (50.8)
Exophthalmometry (Hertel), mm, mean (SD)	23.4 (3.2)	23.5 (3.2)	22.6 (3.3)	22.1 (2.6)

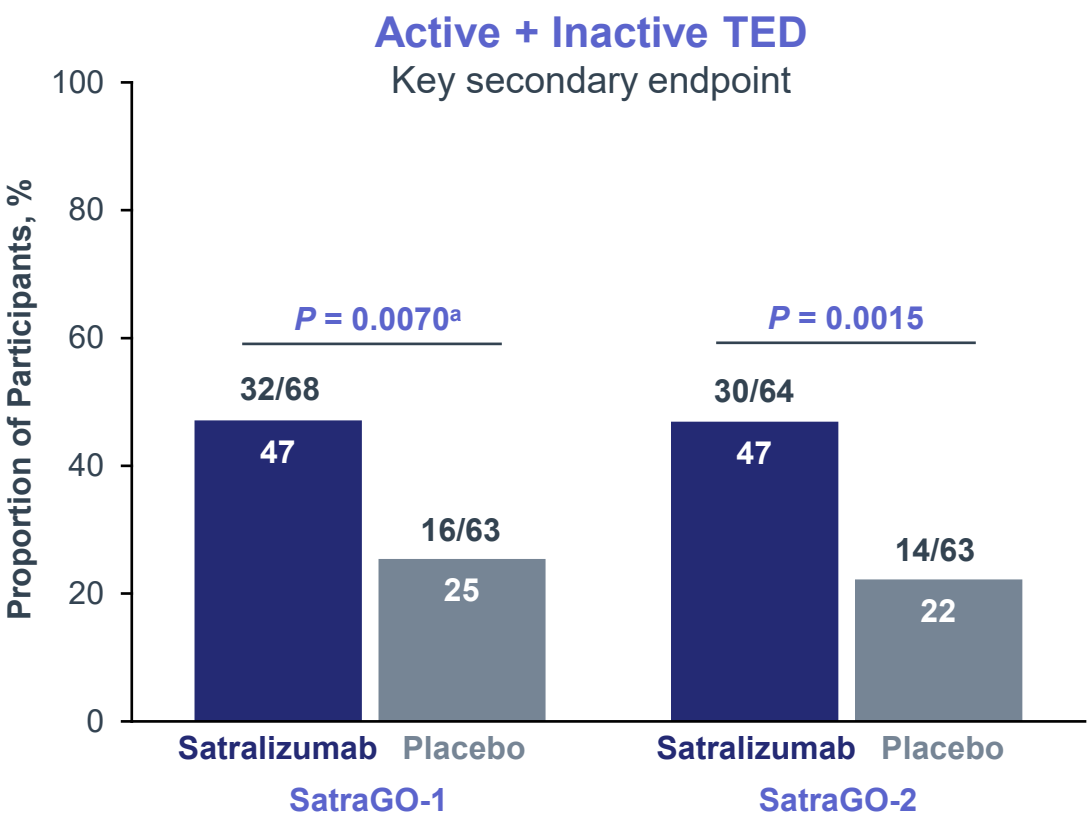
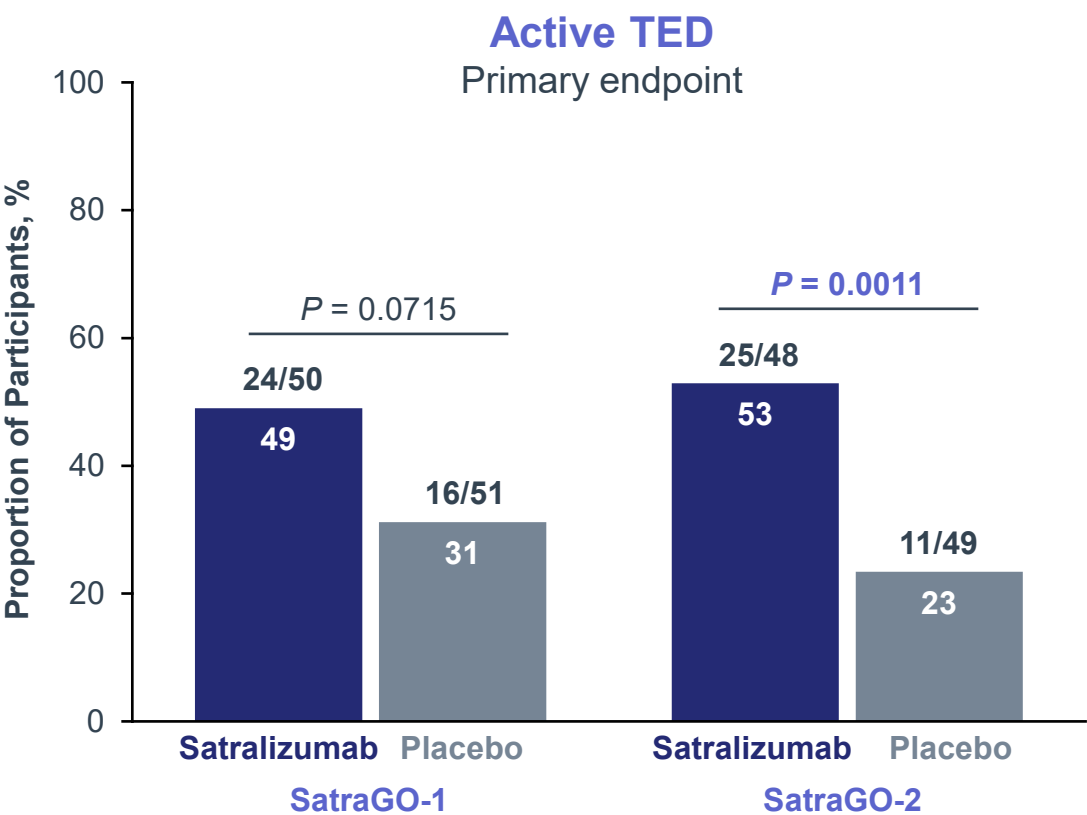
Baseline characteristics in the active population were also balanced

^a Unless stated. ^b Includes Black or African American, Native Hawaiian or Other Pacific Islander, multiple, not reported, and unknown. ^c Participants may be included in ≥ 1 category. ^d Initial diagnosis to randomization. SD, standard deviation; TED, thyroid eye disease.

Proptosis Response Was Observed in a Higher Proportion of Participants Receiving Satralizumab

Proptosis Response at Week 24

≥ 2-mm reduction in proptosis in the study eye, without ≥ 2-mm worsening in the fellow eye

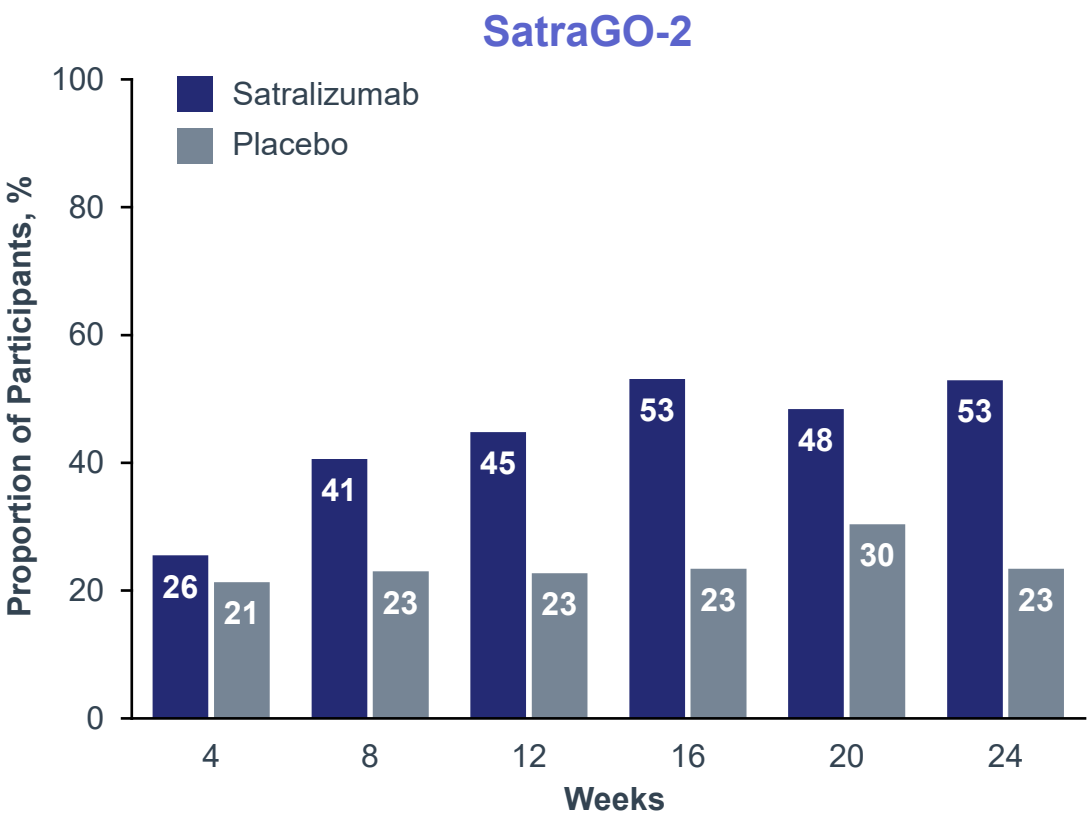
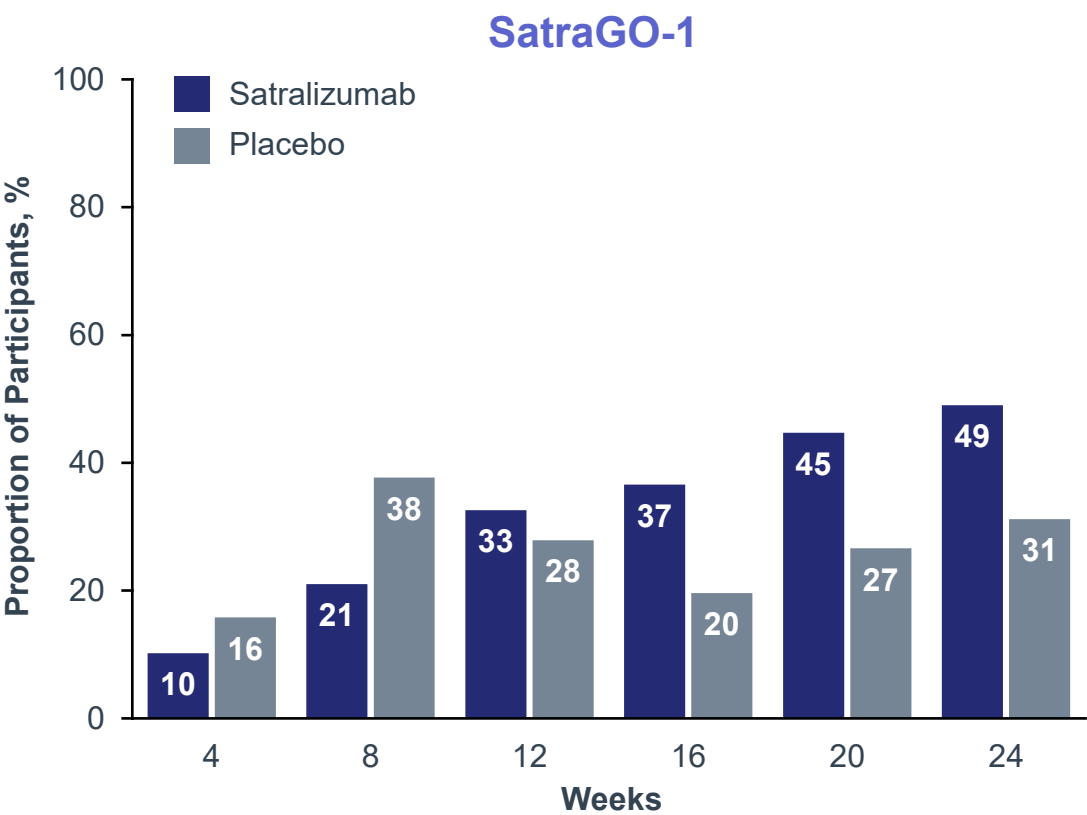


^a Nominal *P* value, not adjusted for multiplicity. Mantel-Haenszel weights were used for risk differences; multiple imputation handled missing data (MAR assumption). Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events. Analysis was stratified by smoking status and TED disease status if applicable (IxRS-based). AE, adverse event; MAR, missing at random; TED, thyroid eye disease.

Satralizumab Improved Proptosis Response Over Time in Participants with Active TED

Proptosis Response Over Time: Active TED

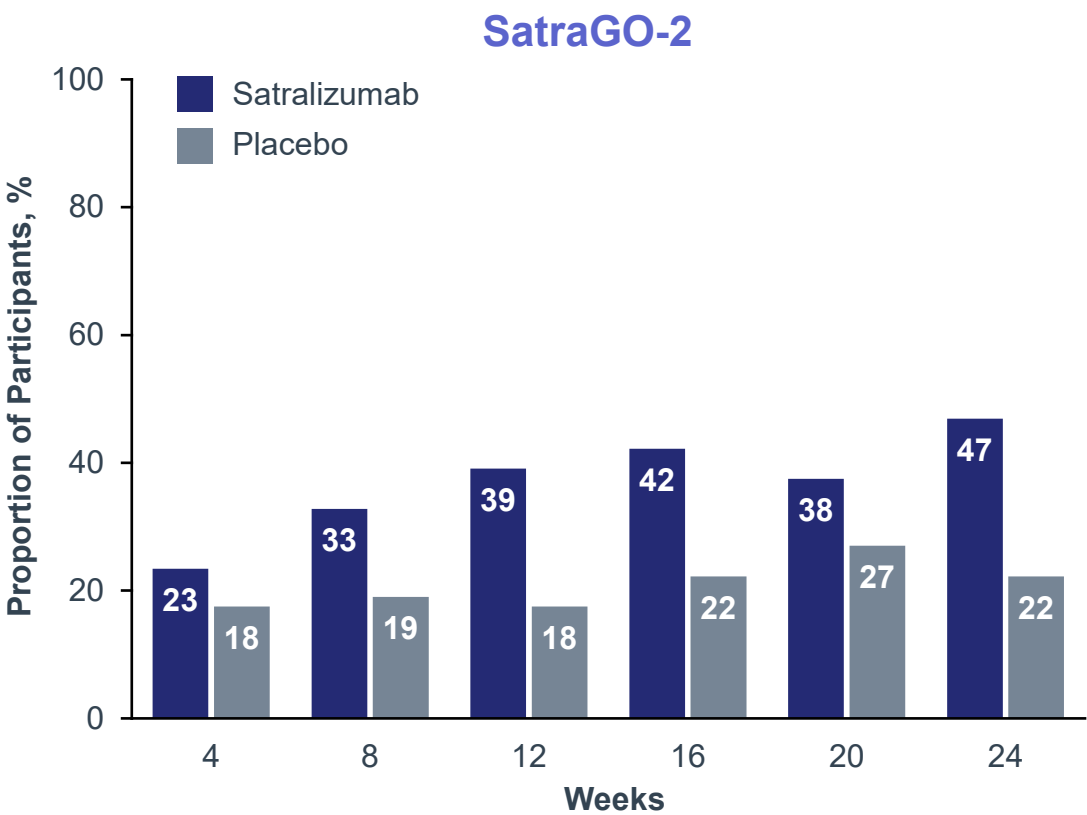
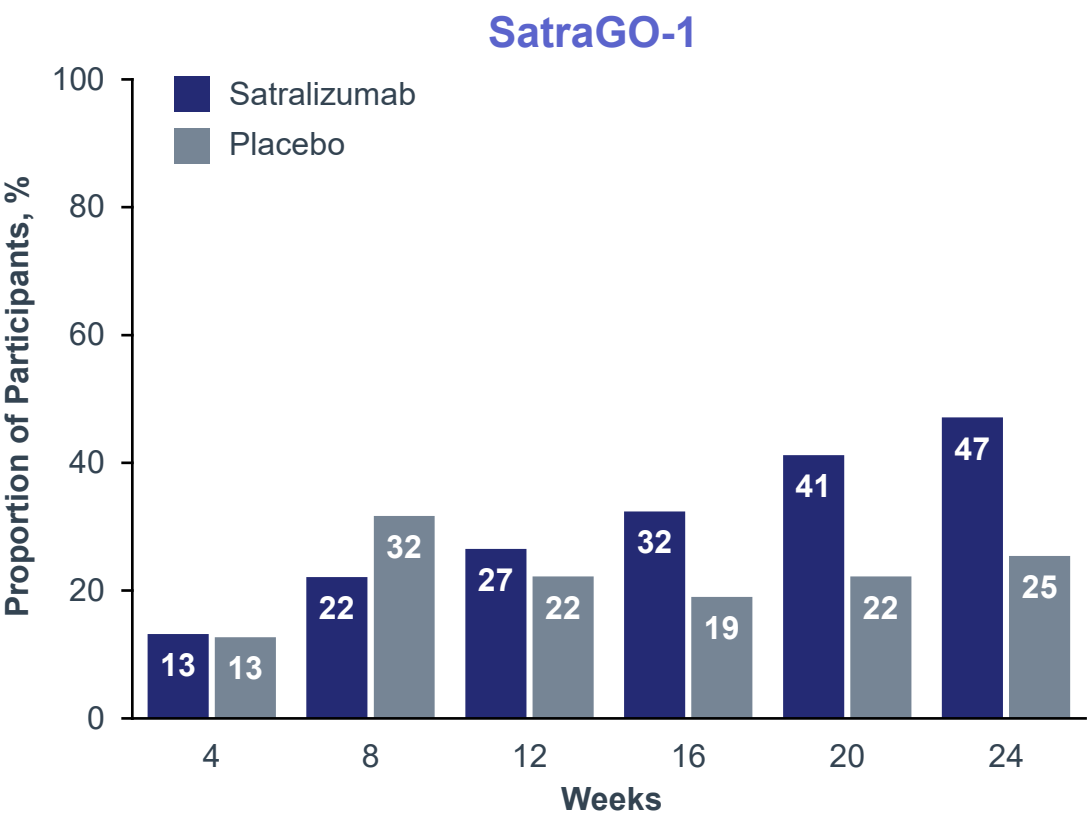
≥ 2-mm reduction in proptosis in the study eye, without ≥ 2-mm worsening in the fellow eye



Multiple imputation handled missing data (MAR assumption). Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events. Analysis was stratified by smoking status (IxRS-based). AE, adverse event; MAR, missing at random; TED, thyroid eye disease.

Satralizumab Improved Proptosis Response Over Time in Participants with Active + Inactive TED

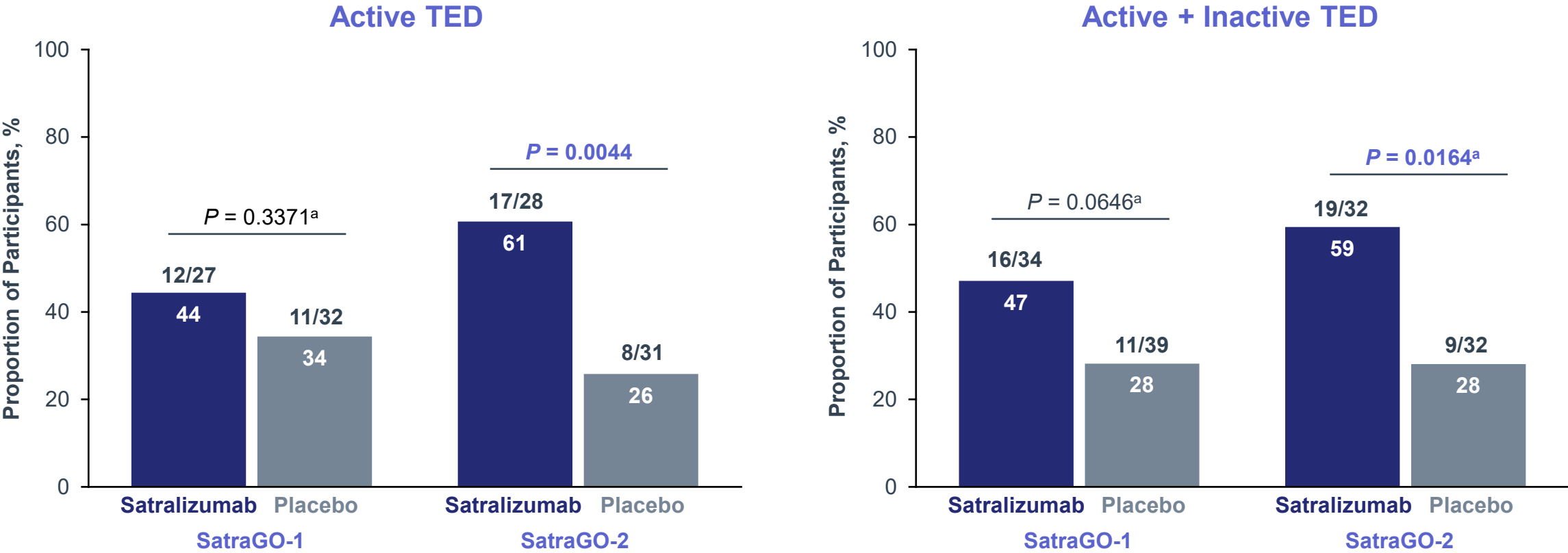
Proptosis Response Over Time: Active + Inactive TED
≥ 2-mm reduction in proptosis in the study eye, without ≥ 2-mm worsening in the fellow eye



Multiple imputation handled missing data (MAR assumption). Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events. Analysis was stratified by smoking status and TED disease status (IxRS-based). AE, adverse event; MAR, missing at random; TED, thyroid eye disease.

Diplopia Was Reduced in a Higher Proportion of Participants Receiving Satralizumab

Diplopia Reduction at Week 24
≥ 1-grade reduction in diplopia

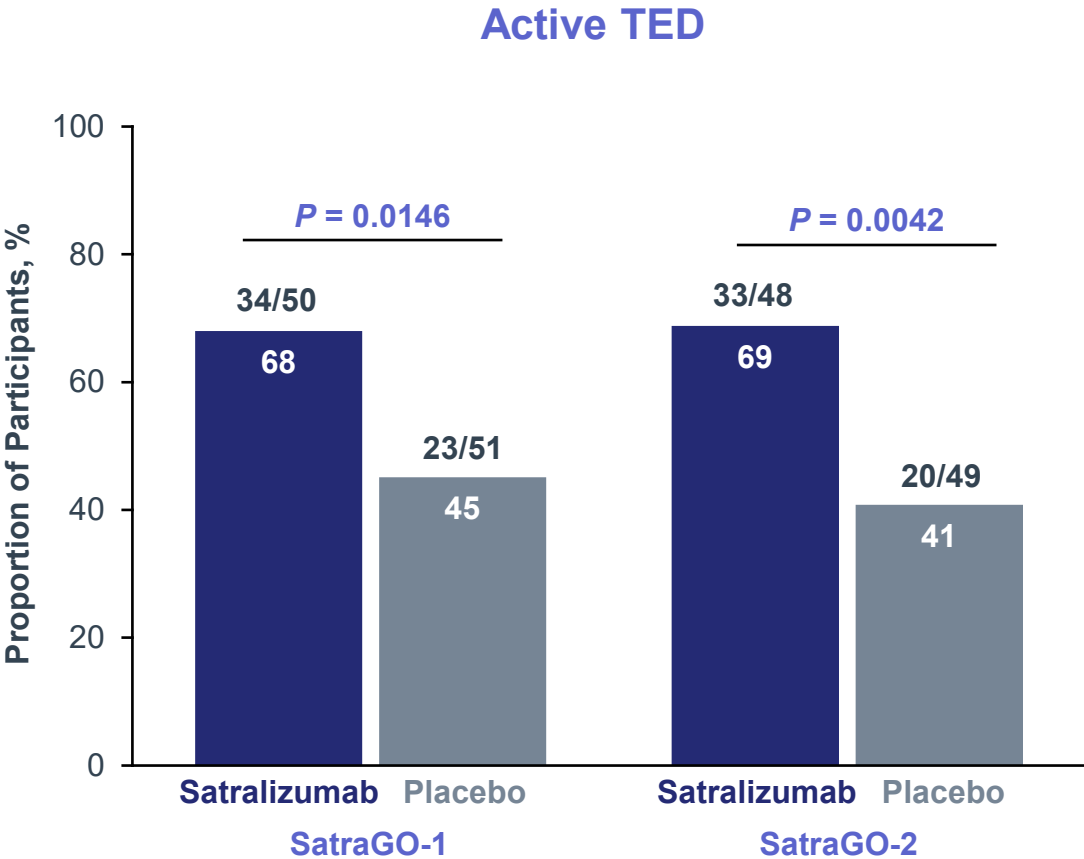
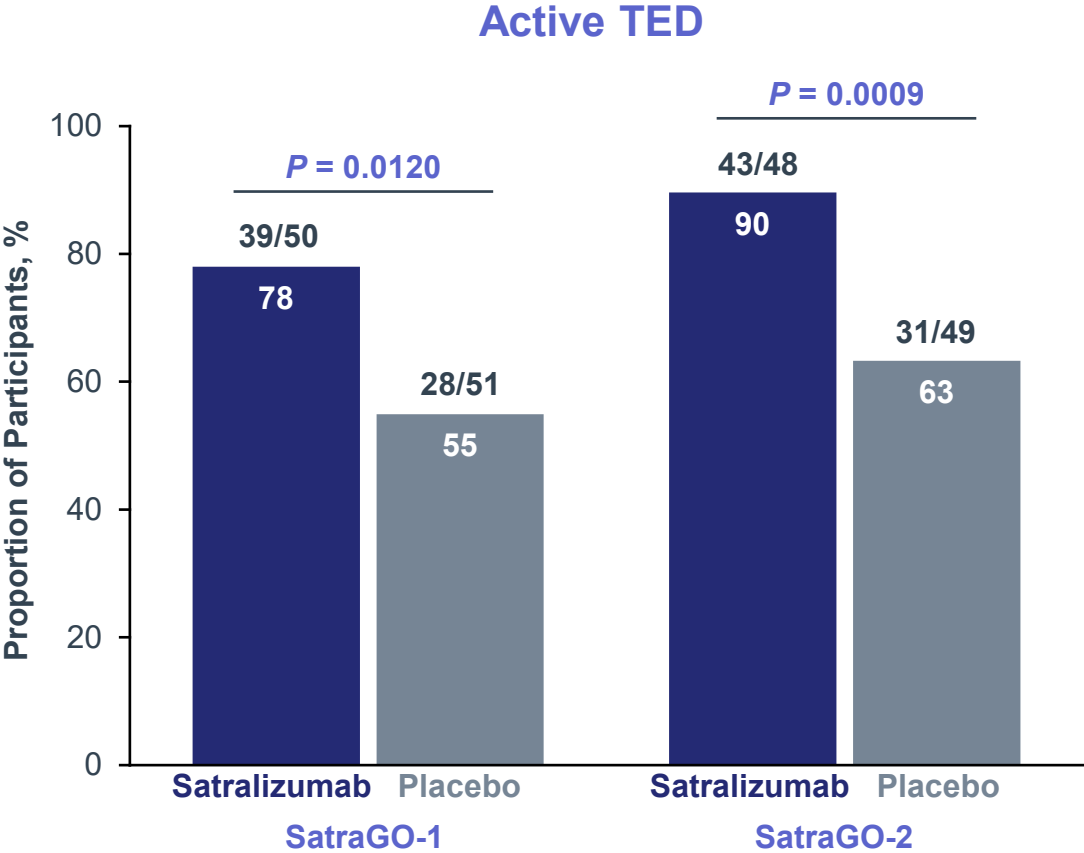


^a Nominal *P* value, not adjusted for multiplicity. Using Gorman scale. Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events; after the intercurrent events handling, missing data will be imputed as non-responder. Analysis was stratified by smoking status and TED disease status if applicable (IxRS-based). AE, adverse event; TED, thyroid eye disease.

CAS Was Reduced in a Higher Proportion of Participants Receiving Satralizumab

CAS Reduction at Week 24
≥ 2-point reduction in CAS

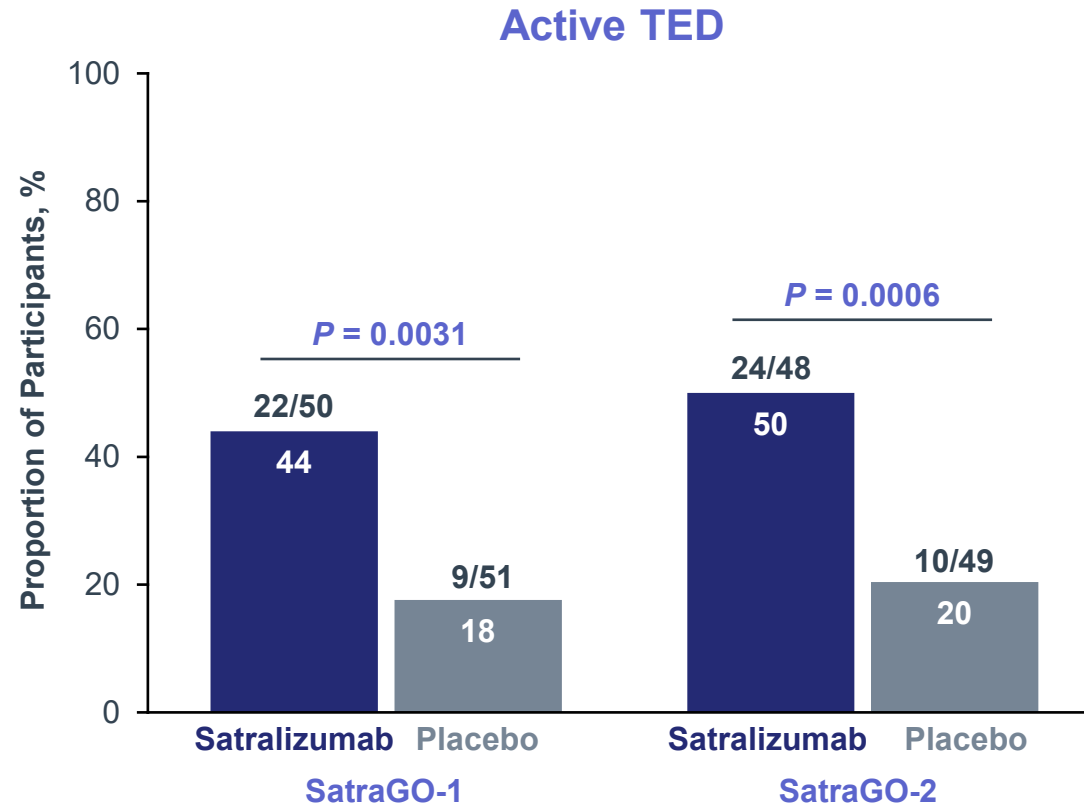
CAS 0 or 1 at Week 24
Noninflammatory or inactive disease



Nominal *P* values are presented (not adjusted for multiplicity). Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events; after the intercurrent events handling, missing data will be imputed as non-responder. Analysis was stratified by smoking status (IxRS-based). AE, adverse event; CAS, clinical activity score; TED, thyroid eye disease.

Overall Response Was Observed in a Higher Proportion of Participants Receiving Satralizumab

Overall Response at Week 24
≥ 2-point reduction in CAS and ≥ 2-mm reduction in proptosis^a



^a From baseline in the study eye, provided there is no corresponding deterioration in CAS or proptosis (≥ 2 point/mm increase) in the fellow eye. Nominal *P* values are presented (not adjusted for multiplicity). Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events; after the intercurrent events handling, missing data will be imputed as non-responder. Analysis was stratified by smoking status (IxRS-based). AE, adverse event; CAS, clinical activity score; TED, thyroid eye disease.

Low Incidence of SAEs and Treatment Discontinuations, and No Serious Infections

Active + Inactive TED

Participants Experiencing AEs Through Week 24, n (%)	SatraGO-1		SatraGO-2	
	Satralizumab n = 67	Placebo n = 62	Satralizumab n = 64	Placebo n = 62
≥ 1 AE	48 (71.6)	41 (66.1)	48 (75.0)	50 (80.6)
AEs with fatal outcome	0	0	0	0
Serious AEs	3 (4.5)	2 (3.2)	2 (3.1)	3 (4.8)
AEs leading to treatment discontinuation	2 (3.0)	4 (6.5)	2 (3.1)	5 (8.1)
AEs leading to dose modification	6 (9.0)	5 (8.1)	7 (10.9)	4 (6.5)
Infections	22 (32.8)	17 (27.4)	19 (29.7)	24 (38.7)
Serious infections	0	0	0	1 (1.6)
Injection reactions	6 (9.0)	2 (3.2)	6 (9.4)	10 (16.1)

The safety results from SatraGO-1 and SatraGO-2 reaffirm the **highly favorable profile of satralizumab**, as demonstrated in > 10,000 patients for up to 7 years

Low Rates of Most Common AEs (By Preferred Term)

Active + Inactive TED

Participants Experiencing AEs Through Week 24, n (%)	SatraGO-1		SatraGO-2	
	Satralizumab n = 67	Placebo n = 62	Satralizumab n = 64	Placebo n = 62
Nasopharyngitis	7 (10.4)	4 (6.5)	4 (6.2)	7 (11.3)
Headache	6 (9.0)	5 (8.1)	6 (9.4)	7 (11.3)
Influenza	4 (6.0)	4 (6.5)	1 (1.6)	4 (6.5)
Abdominal pain	3 (4.5)	1 (1.6)	0	1 (1.6)
Blood creatine phosphokinase increased	3 (4.5)	1 (1.6)	0	3 (4.8)
Back pain	2 (3.0)	0	3 (4.7)	2 (3.2)
Diarrhea	2 (3.0)	3 (4.8)	1 (1.6)	2 (3.2)
Nausea	2 (3.0)	1 (1.6)	3 (4.7)	1 (1.6)
Neutropenia	2 (3.0)	0	2 (3.1)	2 (3.2)
Upper respiratory tract infection	2 (3.0)	0	5 (7.8)	3 (4.8)
Alanine aminotransferase increased	1 (1.5)	0	6 (9.4)	1 (1.6)
Aspartate aminotransferase increased	1 (1.5)	0	4 (6.2)	1 (1.6)
COVID-19	1 (1.5)	2 (3.2)	3 (4.7)	2 (3.2)
Rash	1 (1.5)	3 (4.8)	3 (4.7)	0
Arthralgia	0	1 (1.6)	4 (6.2)	1 (1.6)
Bronchitis	0	5 (8.1)	2 (3.1)	0
Constipation	0	1 (1.6)	3 (4.7)	0
Insomnia	0	0	3 (4.7)	0
Myalgia	0	0	3 (4.7)	2 (3.2)
Neutrophil count decreased	0	0	4 (6.2)	1 (1.6)

Only AEs with a rate $\geq 4\%$ are included on this slide, except for neutropenia. Investigator text for AEs encoded using MedDRA version 28.0. Only events up to 4 weeks after the last dose in Part I are considered. AE, adverse event; MedDRA, Medical Dictionary for Regulatory Activities; TED, thyroid eye disease.

In Summary, Satralizumab Was Efficacious and Well Tolerated in Participants With TED

Pooled SatraGO-1 and SatraGO-2 Active TED

% of Participants Achieving Week 24 Endpoints	Satralizumab	Placebo	P Value
Proptosis response	50.9%	26.8%	0.0004
CAS reduction	83.7%	59.0%	0.0001
CAS of 0 or 1	68.4%	43.0%	0.0002
Overall response	46.9%	19.0%	< 0.0001
Diplopia reduction	52.7%	30.2%	0.0086

Clinical benefits were also observed in the Active + Inactive TED population

The safety results from SatraGO-1 and SatraGO-2 reaffirm the highly favorable profile of satralizumab

Treatment policy applied to AE/efficacy-related discontinuation; composite strategy for other intercurrent events; after the intercurrent events handling, missing data will be imputed as non-responder. Analysis was stratified by smoking status (IxRS-based). CAS, Clinical Activity Score; TED, thyroid eye disease.

The Totality of the Clinical Data Collected in the SatraGO Program Supports Satralizumab for the Treatment of Patients With TED



Satralizumab showed **clinically meaningful improvements** across key efficacy endpoints, including proptosis, diplopia, and CAS in active TED



The **safety profile** of satralizumab in TED was **highly favorable**, with no reports of AEs commonly associated with other treatments for TED



Satralizumab is the **first IL-6R inhibitor** combining a **positive benefit-risk profile for active and inactive TED** with convenient subcutaneous dosing, and could represent a new treatment paradigm

**Thank you to all the investigators and patients involved in the
SatraGO-1 and SatraGO-2 trials**

