

Evaluation of LYR-220 Corticosteroid Matrices at Week 24 from the BEACON Study in CRS

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This data was presented at the 69th Annual Meeting of the ARS in Nashville, TN.
Saturday, September 30, 2023 (9:20-9:25am CT)
Session: Sinus Surgery and Postop Therapies

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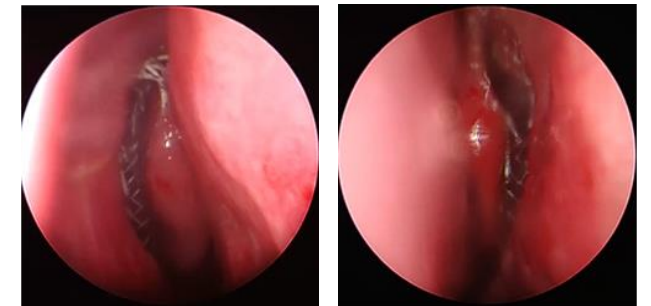
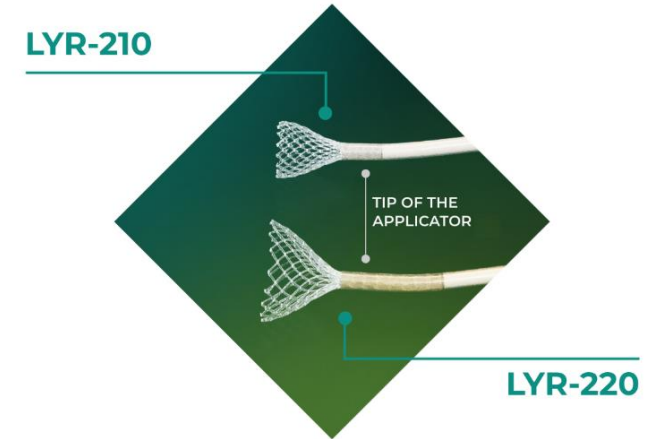
This presentation also includes statistical and market data that we obtained from industry, publications and research, surveys and studies conducted by third parties or us. Industry publications and third-party research, surveys and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. All of the market data used in this presentation involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. While we believe these industry publications and third-party research, surveys and studies are reliable, we have not independently verified such data. The industry in which we operate is subject to a high degree of uncertainty, change and risk due to a variety of factors, which could cause results to differ materially from those expressed in the estimates made by the independent partners and by us.

Disclosures

- BAS is the Lead Principal Investigator for the Phase 2 BEACON study, consultant for Lyra Therapeutics and Stryker, and VP of Development and Strategy for the ARS.
- RAO, MSM, SLS, and JR are principal investigators in the BEACON study. RAO and SLS are consultants for Lyra Therapeutics.
- RCK is Chief Clinical Advisor for Lyra Therapeutics.
- LB, MM, ES, ML, VB, and RN are employees of and have stock options at Lyra Therapeutics.
- Lyra Therapeutics is the sponsor of the BEACON study.

LYR-210 and LYR-220: Investigational Products for CRS

- Bioresorbable nasal matrix
- Designed to continuously deliver mometasone furoate (7500µg) over 24 weeks to the sinonasal passages
- Administered in a straightforward, in-office procedure
- LYR-220: For CRS patients with post-surgical anatomy
 - Phase 2 BEACON trial – Topline results presented today
- LYR-210: For CRS patients with unoperated sinuses
 - Phase 3 ENLIGHTEN trials ongoing



LYR-220 bilaterally placed in the ethmoid cavity of a patient with CRS

BEACON: Phase 2 Clinical Study of LYR-220

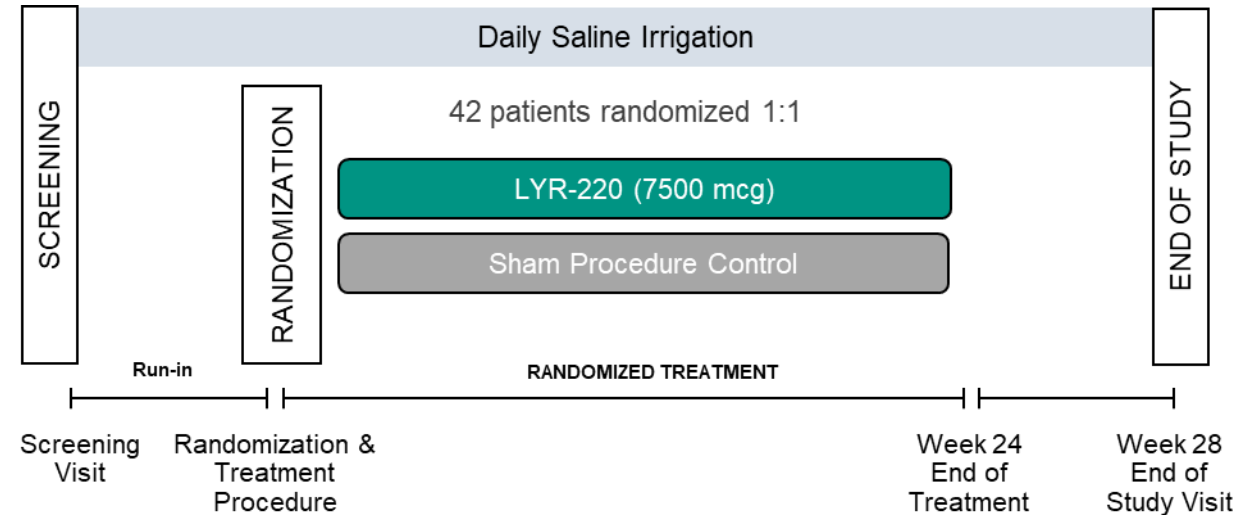
- **CRS patients (polyp and non-polyp)** who have had a prior bilateral ethmoidectomy
- Randomized, blinded, sham-controlled Phase II study to assess safety and efficacy of LYR-220*
- **Safety endpoint:**
 - Serious adverse events
- **Key efficacy endpoints:**
 - 3 cardinal symptoms (3CS)** scores
 - SNOT-22 scores

Clinicaltrials.gov ID: NCT05035654

*Preceded by feasibility phase to choose matrix design

**3 cardinal symptoms are defined as nasal blockage / obstruction, facial pain / pressure, and nasal discharge

BEACON Study Design



Note: Primary outcome measure was product-related serious adverse events

BEACON: Patient Disposition

Part 2	LYR-220 (n=21)	Sham (n=21)	Total (n=42)
Completed study treatment (n, %)	19 (90.5)	17 (81)	36 (85.7)
Discontinued early from treatment (n, %)	2 (9.5)	4 (19)	6 (14.3)
Withdrawal by subject	0	4 (19)	4 (9.5)
Adverse Event	1 (4.8)	0	1 (2.4)
Investigator decision	1 (4.8)	0	1 (2.4)

BEACON: Patient Demographics and Baseline Characteristics

	LYR-220 (n=21)	Sham (n=21)	Total (n=42)
Age in years (<i>mean, SD</i>)	48 (12.51)	55 (11.29)	51 (12.35)
Sex (<i>n, %</i>)			
Male	7 (33.3)	10 (47.6)	17 (40.5)
Female	14 (66.7)	11 (52.4)	25 (59.5)
Race (<i>n, %</i>)			
White	20 (95.2)	18 (85.7)	38 (90.5)
Black or African American	1 (4.8)	2 (9.5)	3 (7.1)
Baseline SNOT-22 Total Score (<i>mean, SD</i>)	56.1 (17.16)	50.0 (16.65)	53.1 (16.9)
Baseline 3CS Score (<i>mean, SD</i>)	6.4 (1.47)	6.8 (1.65)	6.6 (1.56)

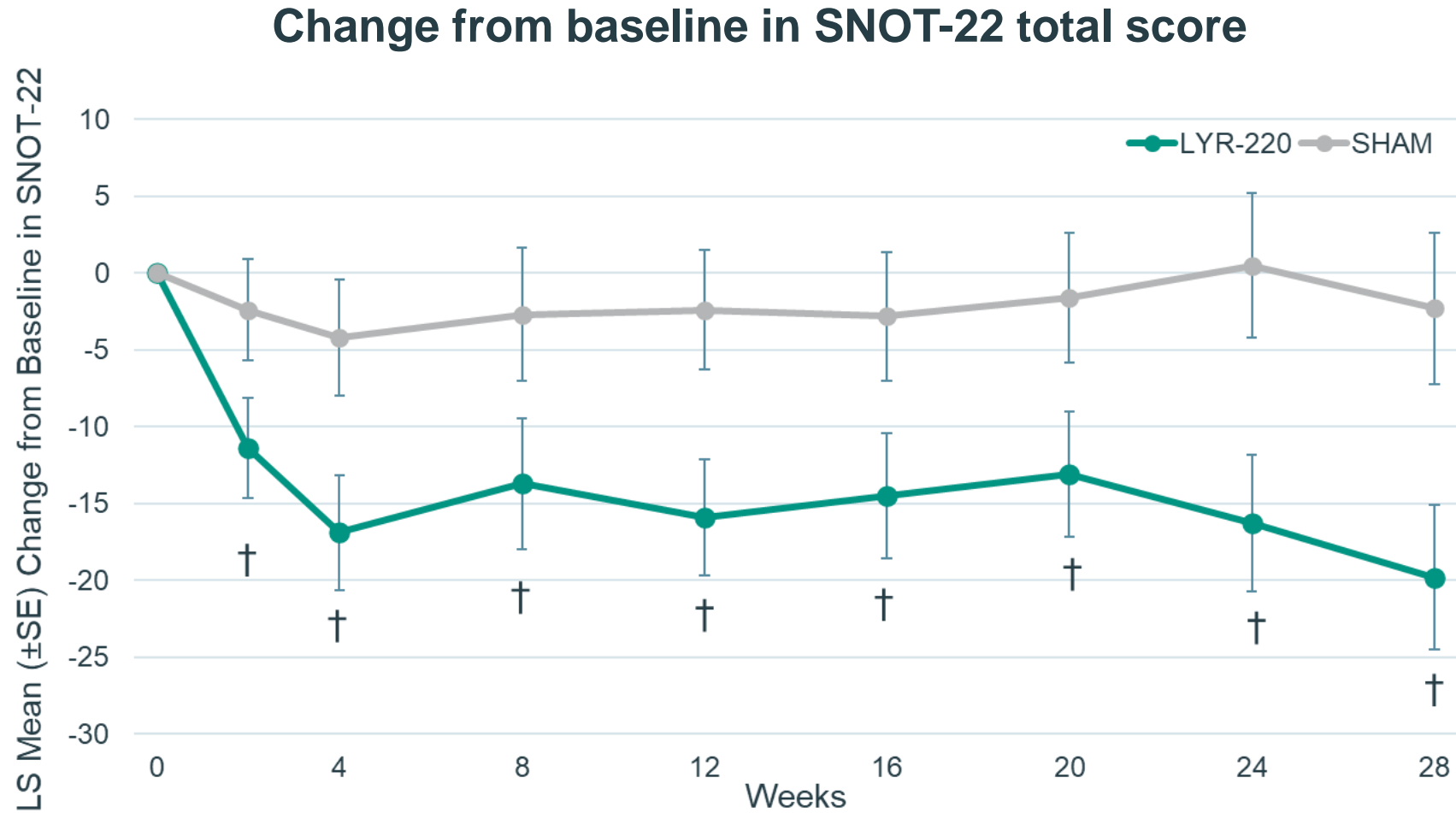
BEACON: No Serious Adverse Events

Adverse Events occurring in >2 subjects in any group

MedDRA Preferred Term	LYR-220 N=24*	SHAM N=21
Sinusitis	8 (33.3%)	4 (19%)
Acute sinusitis	6 (25%)	2 (9.5%)
Nasopharyngitis	4 (16.7%)	2 (9.5%)
Bronchitis	4 (16.7%)	0
Chronic sinusitis	2 (8.3%)	2 (9.5%)
Covid-19	3 (12.5%)	0
Upper respiratory tract infection	2 (8.3%)	1 (4.8%)

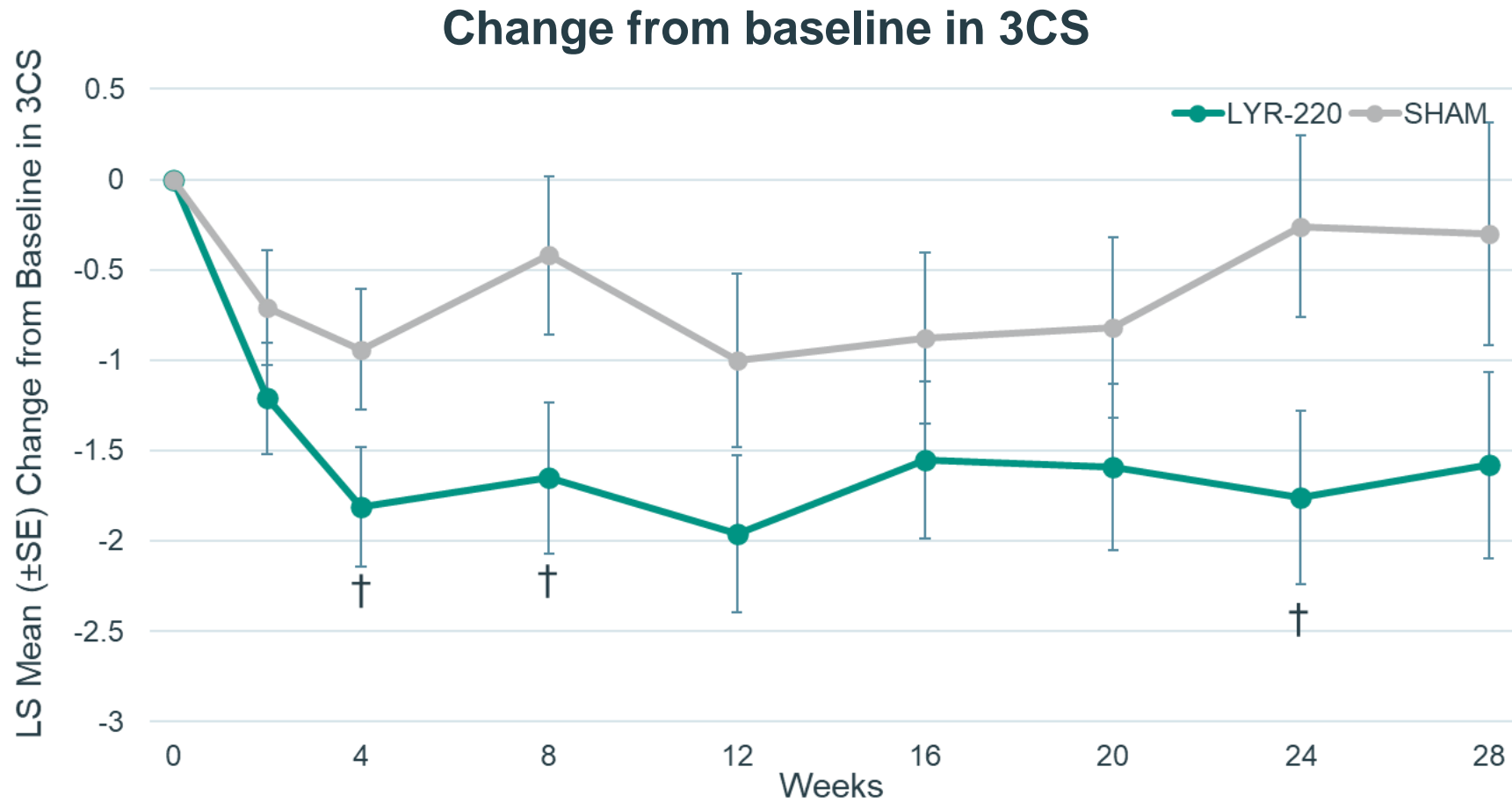
* Includes 3 subjects that received LYR-220-32 in Part 1 of the study

BEACON: Early and Sustained Improvement in SNOT-22



† p < 0.05

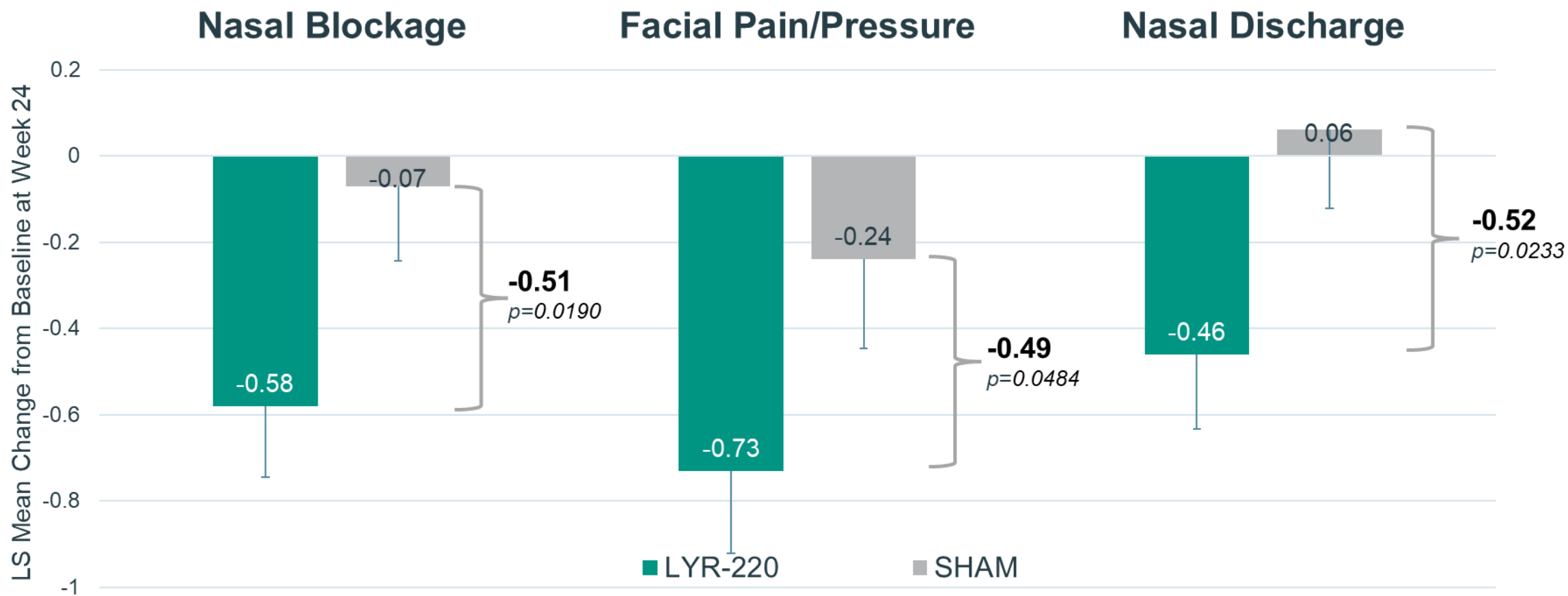
BEACON: Statistically Significant Improvements in 3CS



† p < 0.05

3CS: 3 cardinal symptoms of CRS (nasal obstruction, nasal discharge, facial pain/pressure)

BEACON: Statistically Significant Improvements in Individual CS at Week 24



Error bars represent SE

BEACON Study Summary

- Achieved Primary Endpoint: No serious adverse events
- Statistically significant improvements in a composite of the 3CS (nasal obstruction, nasal discharge, facial pain/pressure) as early as week 4 (-0.87; p=0.037) and at week 24 (-1.50; p=0.02)
 - Statistically significant improvements for each individual cardinal symptom at week 24
- Clinically relevant and statistically significant improvements over sham in SNOT-22 as early as week 2 (-9.0; p=0.031) and at week 24 (-16.8; p=0.007)
- Improvements in SNOT-22 were sustained throughout the study and clinically meaningful with almost twice the MCID* at week 24 compared to sham (-16.8 points)

*MCID-minimal clinically important difference; 8.9 points