

# Quality of life in CRS patients treated with long-acting implantable corticosteroid matrices

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# DISCLOSURES

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- Anders Cervin was a clinical investigator in the LANTERN Phase 2 randomized controlled study

# CHRONIC RHINOSINUSITIS (CRS)

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- CRS is highly prevalent and negatively impacts patients' quality of life (QOL)
- CRS patients exhibit persistent sinonasal symptoms, often accompanied by fatigue, sleep disruption, and/or depression that affects their overall well-being and productivity
- No FDA-approved therapies for CRS without nasal polyps
- ***Long-acting effective treatments for chronic rhinosinusitis are needed that deliver a therapeutic daily dose of anti-inflammatory medication directly to the sinonasal mucosa and improve the QOL of patients***

# LYR-210 FOR CRS

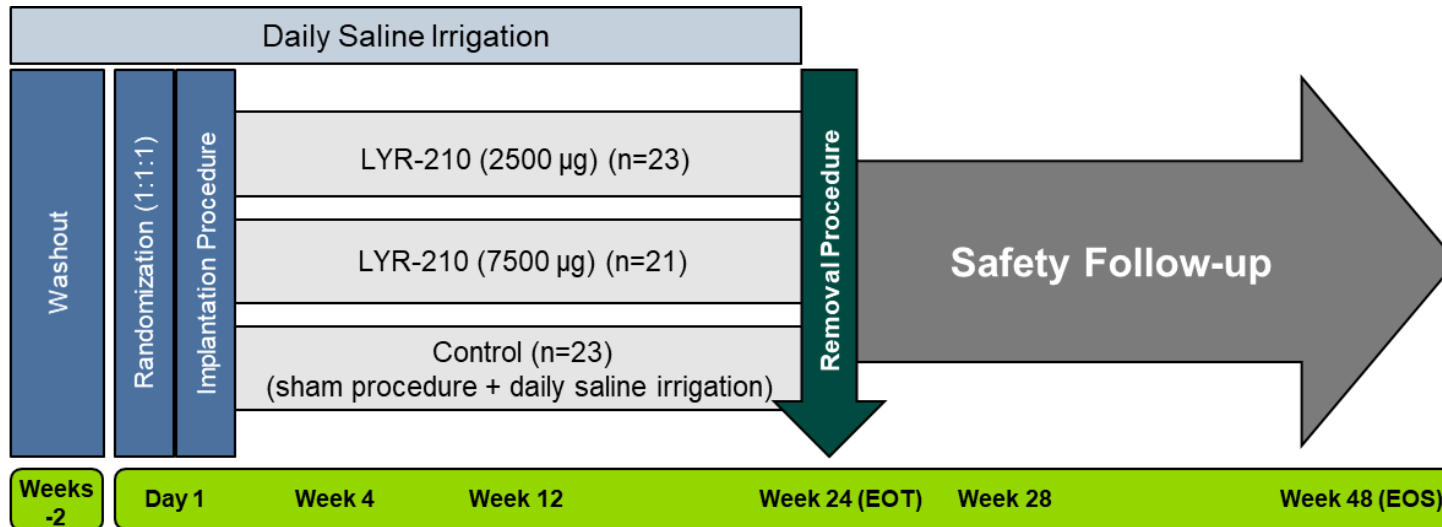
*LYR-210 is designed for CRS patients who failed previous medical management*

- Continuously delivers a therapeutic dose of mometasone furoate deep in the sinonasal passages
- Provides up to 24-weeks of benefit from a single administration
- Self-expanding properties allowing it to dynamically conform to the middle meatus
- Straightforward office-based placement and removal
- Improves patient compliance



# LANTERN PHASE 2 STUDY DESIGN

*Multicenter, blinded, randomized, controlled dose-ranging study*



*Study enrollment was curtailed to 67 total subjects due to the COVID-19 global pandemic*

**Study Population:** Adults with CRS who failed previous medical management and have not undergone FESS

- Approximately half had nasal polyps

**Primary Endpoint:** Composite of CRS cardinal symptoms\*

**Secondary Endpoints:**

- SNOT-22
- Individual Cardinal Symptoms
- Ethmoid Opacification (MRI)
- Time to first rescue treatment
- Adverse events

\*CRS cardinal symptoms are nasal blockage, facial pain/pressure, nasal discharge, and olfactory loss

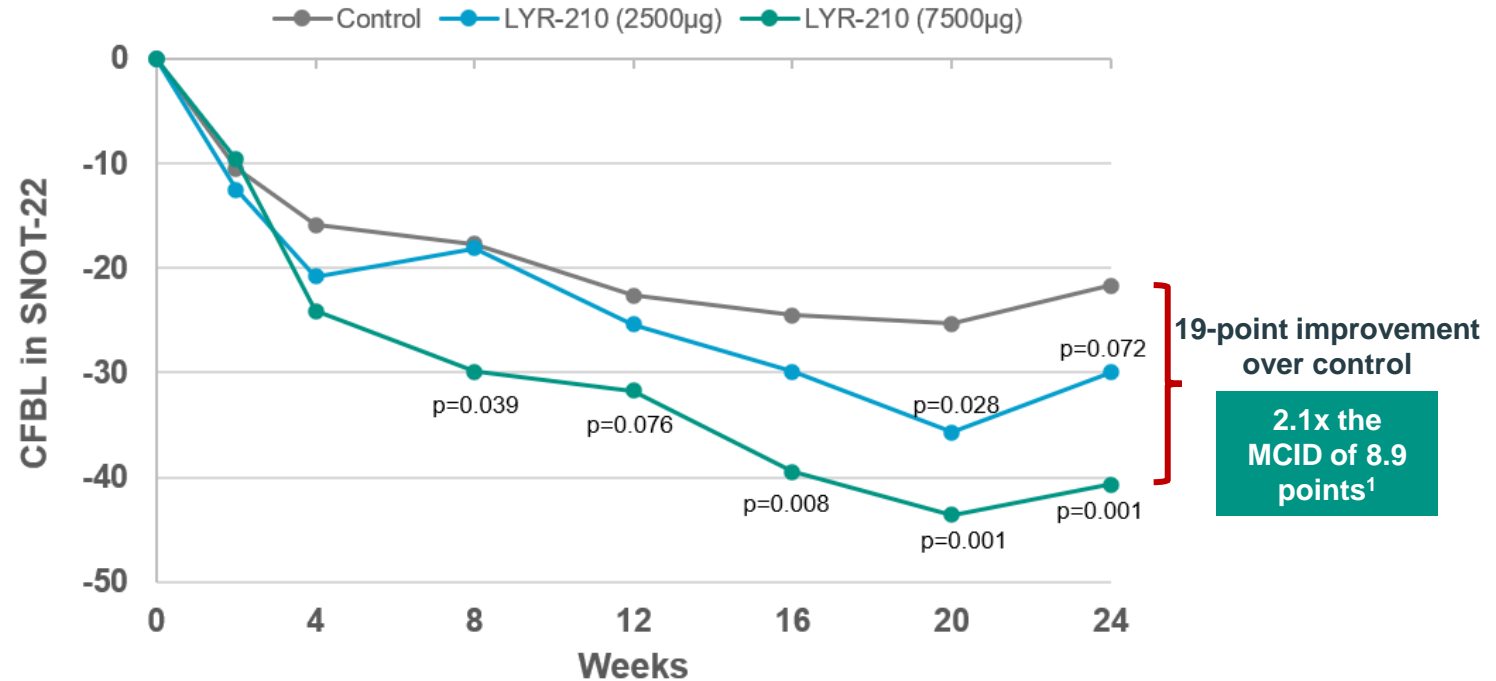
EOT = End of Treatment; EOS = End of Study

# LANTERN STUDY

LYR-210 (7500µg) demonstrated safety and statistically significant and clinically meaningful benefit in:

- Cardinal symptom composite scores
- Reduced need for rescue treatment
- Ethmoid opacification (MRI)

**LYR-210 achieved rapid, durable, and dose-dependent global CRS improvement over 24 weeks in SNOT-22**



**All patients administered LYR-210 (7500µg) achieved MCID of 8.9 points by week 24**

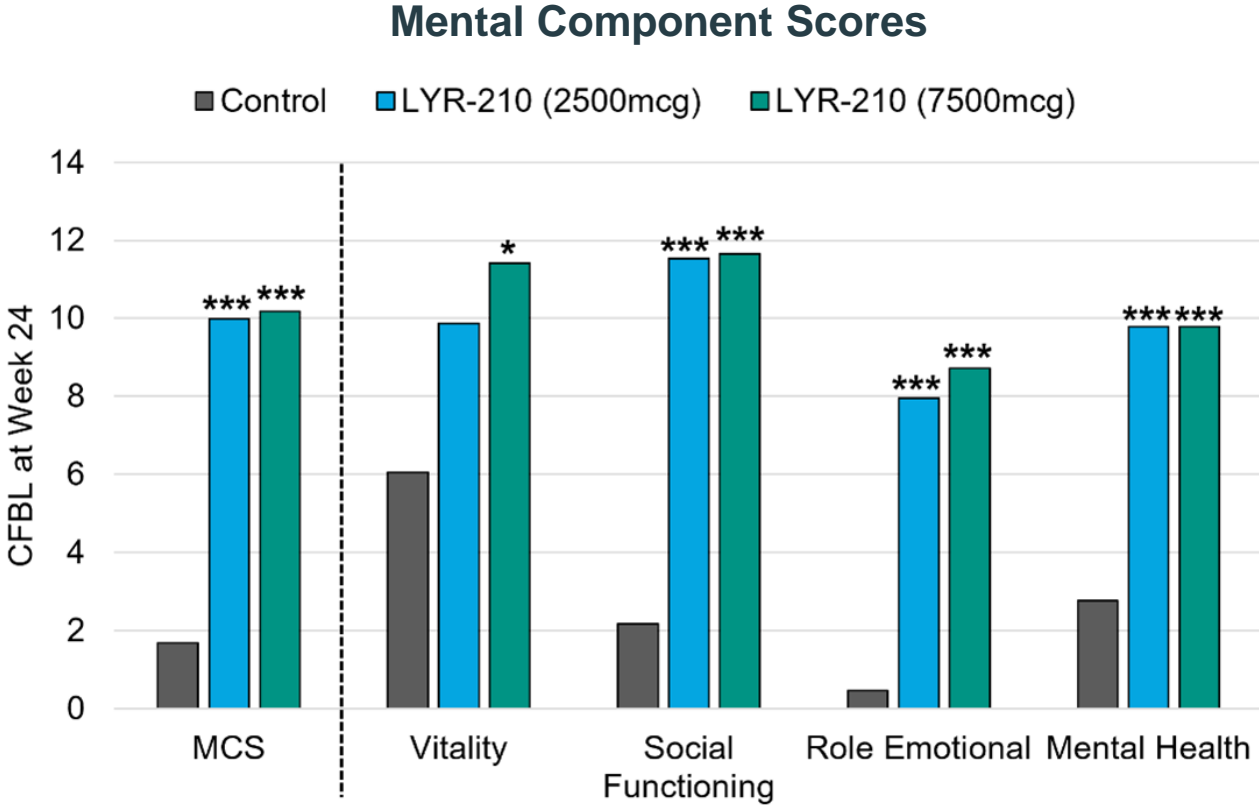
# SF-36V2: GENERIC QUALITY OF LIFE ASSESSMENT

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- SF-36v2 = 36-item short form health survey, version 2
- Validated and frequently used patient-reported outcome instrument to measure physical and mental health in clinical trials across multiple diseases
- Comprised of 8 health domain scales and psychometrically based physical component summary (PCS) and mental component summary (MCS) scores
  - Mental Component Domains: vitality, social functioning, role-emotional, mental health
  - Physical Component Domains: physical functioning, role-physical, bodily pain, general health
- Higher SF-36v2 scores represent a better health-related quality of life
- LANTERN study subjects completed the SF-36v2 at baseline (before placement procedure) and week 24

# SF-36V2 MENTAL COMPONENT SCORES AT WEEK 24

*LYR-210 (7500µg) demonstrated statistically significant improvement in the mental component summary (MCS) score and all four domain scales compared to control*

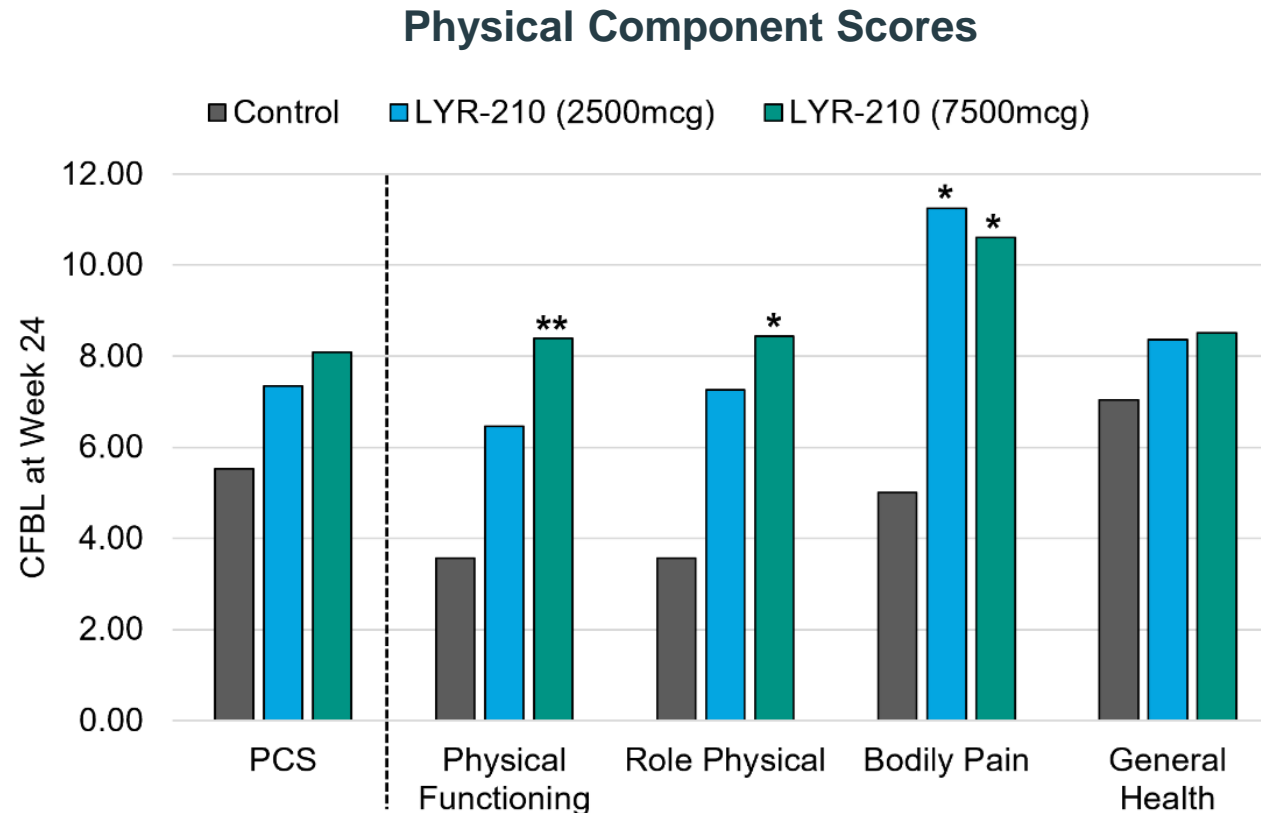


Data represents LS means. CFBL=change from baseline; MCS=mental component summary. P-values are 1-sided vs. Control \* p<0.05; \*\* p<0.025; \*\*\* p<0.01.



# SF-36V2 PHYSICAL COMPONENT SCORES AT WEEK 24

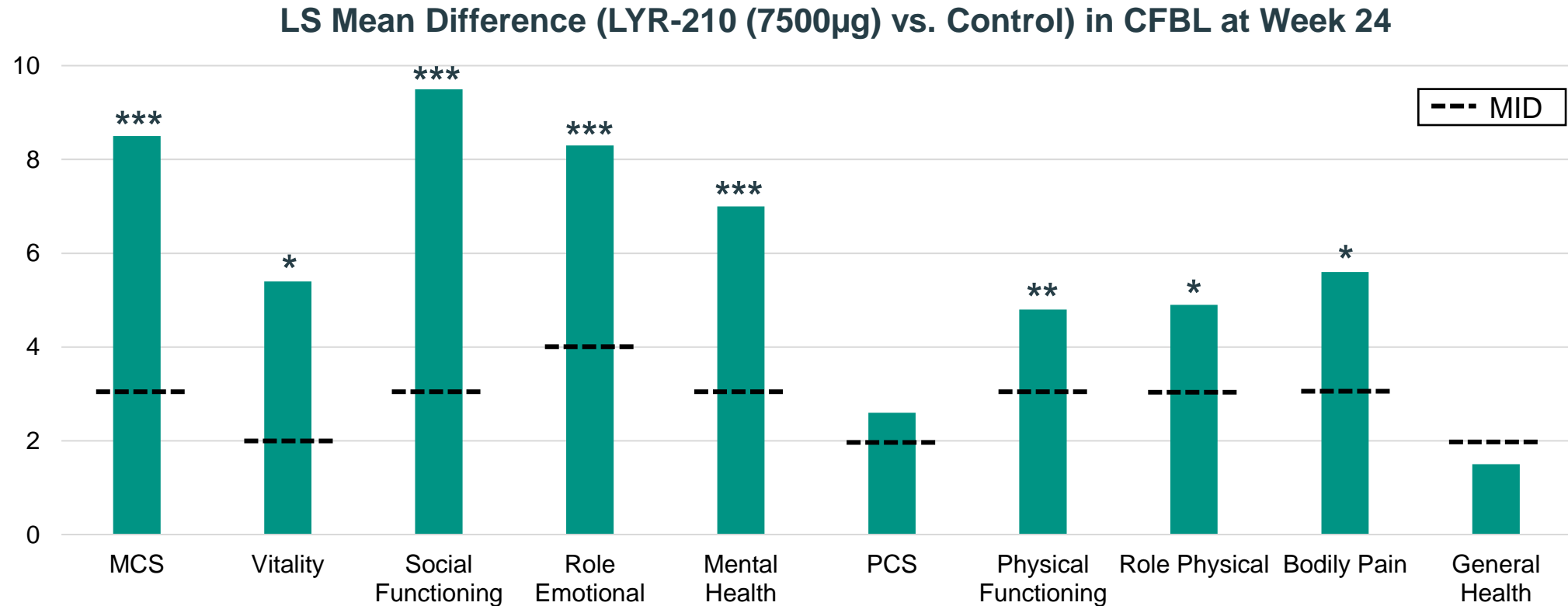
*LYR-210 (7500µg) demonstrated statistically significant improvement vs. control in the mean CFBL in physical functioning, role physical, and bodily pain*



Data represents LS means. CFBL=change from baseline; PCS=physical component summary. *P*-values are 1-sided vs. Control \*  $p < 0.05$ ; \*\*  $p < 0.025$ ; \*\*\*  $p < 0.01$ .

# RESPONDER ANALYSIS OF SF-36V2 SCORES AT WEEK 24

*LYR-210 (7500µg) demonstrated statistically significant and clinically important improvement vs. control in the mean CFBL in MCS and all individual scales except general health*



CFBL=change from baseline; MCS=mental component summary; PCS=physical component summary; MID=minimally important difference . *P*-values are 1-sided. \*  $p < 0.05$ ; \*\*  $p < 0.025$ ; \*\*\*  $p < 0.01$ .  
Maruish ME (Ed.). User's manual for the SF-36v2 Health Survey (3rd ed.). Lincoln, RI: QualityMetric Incorporated. 2011.

# CONCLUSIONS

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## *LYR-210 (7500µg) may improve the mental and physical health and QOL of CRS patients*

- LYR-210 reported higher scores than control in all SF-36v2 domains
- LYR-210 (7500µg) significantly improved the MCS and the 4 mental component domain scores, as well as physical functioning, role-physical, and bodily pain at week 24
- SF-36v2 results are consistent with the effect of LYR-210 (7500µg) on SNOT-22, a CRS-specific assessment of disease burden and QOL, which achieved a significant 40-point reduction from baseline at week 24
- Study limitation includes smaller numbers of enrolled subjects than planned due to COVID-19 pandemic
- LYR-210 (7500µg) is being evaluated in a 2 parallel multicenter, blinded, randomized, controlled Phase 3 trials