



In chronic rhinosinusitis with nasal polyps & severe asthma,

THE EPITHELIUM IS TAKING A BEATING¹⁻⁴

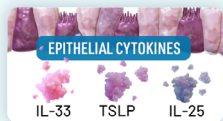
PROTECT AGAINST A FLOOD OF
DOWNSTREAM MEDIATORS BY TAKING A CLOSER LOOK
AT EPITHELIAL-DRIVEN INFLAMMATION¹⁻⁴

UNCOVER MORE >>

TAKE A CLOSER LOOK AT EPITHELIAL-DRIVEN INFLAMMATION IN CRSwNP—FROM THE TOP



The **epithelium** is the **first point of contact** between environmental insults and the upper and lower airway and is where the **immune response begins**.²⁻⁴



Focusing on **epithelial cytokines—TSLP, IL-33, and IL-25—at the top of the inflammatory cascade** may provide a new perspective on the **epithelial-driven inflammation** underlying chronic symptoms and polyp formation in CRSwNP.^{2,3}

CRSwNP=chronic rhinosinusitis with nasal polyps; IL=interleukin; OCS=oral corticosteroid; TSLP=thymic stromal lymphopoietin.

References: **1.** Langdon C, Mullol J. Nasal polyps in patients with asthma: prevalence, impact, and management challenges. *J Asthma Allergy*. 2016;9:45-53. **2.** Ha J-G, Cho H-J. Unraveling the role of epithelial cells in the development of chronic rhinosinusitis. *Int J Mol Sci*. 2023;24(18):14229. **3.** Kato A, Schleimer RP, Bleier BS. Mechanisms and pathogenesis of chronic rhinosinusitis. *J Allergy Clin Immunol*. 2022;149(5):1491-1503. **4.** Calvén J, Ax E, Rådinger M. The airway epithelium—a central player in asthma pathogenesis. *Int J Mol Sci*. 2020;21(23):8907. **5.** Mullol J, Azar A, Buchheit KM, Hopkins C, Bernstein JA. Chronic rhinosinusitis with nasal polyps: quality of life in the biologics era. *J Allergy Clin Immunol Pract*. 2022;10(6):1434-1453.e9. **6.** Claeys N, Teeling MT, Legrand P, et al. Patients unmet needs in chronic rhinosinusitis with nasal polyps care: a patient advisory board statement of EUFOREA. *Front Allergy*. 2021;2:761388. **7.** van der Veen J, Seys SF, Timmermans M, et al. Real-life study showing uncontrolled rhinosinusitis after sinus surgery in a tertiary referral centre. *Allergy*. 2017;72(2):282-290. **8.** DeConde AS, Mace JC, Levy JM, et al. Prevalence of polyp recurrence after endoscopic sinus surgery for chronic rhinosinusitis with nasal polyposis. *Laryngoscope*. 2017;127(3):550-555. **9.** Stary A, Hardtstock F, Wilke T, et al. Epidemiology and treatment of patients with chronic rhinosinusitis with nasal polyps in Germany—a claims data study. *Allergy*. 2022;77(9):2725-2736. **10.** Peters AT, et al. Real-world outcomes following biologic initiation in US patients with chronic rhinosinusitis with nasal polyps. Oral presentation at: American College of Allergy, Asthma & Immunology (ACAAI); October 24-28, 2024.

AstraZeneca



Proprietary and confidential.
©2025 AstraZeneca. All rights reserved.
US-99725 Last Updated 4/25