**Methods**

**Objectives**

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| OT | Prospective | Double-blind, randomized, placebo-controlled | 12 months | ≥ 3 CRS symptoms for ≥ 6 months; polyp grade 2-3 | Recurrence within or beyond 12 months |}

**Blood eosinophil levels were higher in patients with versus without recurrent NP**

<table>
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**Aims**

CRS/CRS-NP is characterized by chronic inflammation of the paranasal sinuses, with inflammatory outgrowths of sinonasal tissue.1,2

Surgery is used to treat severe or recalcitrant NP, which remains uncontrolled even after treatment with inhaled corticosteroids, saline irrigation, or systemic corticosteroids.3

Type 2 inflammation with high levels of IL-5, IL-13, and eosinophils are seen in the most severe NP, high expression IL-5, CRTh2, ELL, IL-13, associated with comorbid asthma4 and both eosinophilic profile and comorbid asthma are associated with more recalcitrant disease.5

The aim of this study was to perform two separate SLRs, to determine:

- The recurrence rate of NP after surgery in patients with and without an eosinophilic profile.
- Eosinophils counts in patients with and without NP recurrence.

**References**

3. Brescia et al., one reporting blood and the other tissue eosinophil data in the same cohort were included.7,8

**Results**

**Blood and Tissue Eosinophil Counts in Recurrent Nasal Polyps Patients**

Weibman, 2017: asthma was significantly associated with a higher NP recurrence rate ($P=0.007$).

Hoseini, 2012: significant correlation between elevated blood eosinophils and eosinophilic NP ($P=0.005$).

Ottaviano, 2015: asthma was significantly associated with a higher NP recurrence rate ($P=0.007$).

**Conclusions**

- Overall, the studies included in this review reported higher NP recurrence rates in patients with eosinophilic NP than in those with non-eosinophilic NP. Patients with recurrent NP had higher blood eosinophil levels and/or higher tissue eosinophil levels than those without recurrent NP.

- Most studies reported a positive correlation/association between blood and tissue eosinophil counts. Further research may therefore enable the use of blood eosinophil counts to identify patients at risk of NP recurrence.