



Cumulative corticosteroid-sparing effect of anti-interleukin-5/5Ra in eosinophilic asthma

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Anti-IL-5/5Ra therapy leads to a reduction in cumulative oral corticosteroid exposure over a 2-year period. This study suggests that early anti-IL-5/5Ra intervention leads to a better long-term prognosis in patients with severe eosinophilic asthma. <https://bit.ly/3jzVGqW>

Cite this article as: Kroes JA, Zielhuis SWJ, De Jong K, et al. Cumulative corticosteroid-sparing effect of anti-interleukin-5/5Ra in eosinophilic asthma. *Eur Respir J* 2022; 60: 2102983 [DOI: 10.1183/13993003.02983-2021].

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This article has an editorial commentary: <https://doi.org/10.1183/13993003.01440-2022>

Received: 20 Nov 2021
Accepted: 31 March 2022

Abstract

Background Anti-interleukin (IL)-5/IL-5 receptor α (IL-5Ra) therapy has been shown to reduce maintenance oral corticosteroid (OCS) dose in severe eosinophilic asthma. However, the effect on cumulative OCS exposure is currently unknown. Neither is it known how prior OCS exposure affects response to anti-IL-5/5Ra treatment. We aimed primarily to compare the cumulative OCS exposure over a 2-year period before and after anti-IL-5/5Ra initiation, and secondarily to investigate whether duration and cumulative OCS exposure prior to anti-IL-5/5Ra influence the ability to discontinue OCS within 2 years of anti-IL-5/5Ra therapy.

Methods This real-world nationwide observational registry-based study evaluated all dispensed OCS from 389 adults with severe eosinophilic asthma included in the Dutch Severe Asthma Registry (RAPSODI) 2 years before and 2 years after initiating anti-IL-5/5Ra. The Wilcoxon signed-rank test and multivariable regression analyses were used.

Results Median (interquartile range) cumulative OCS exposure in the 2 years before and after anti-IL-5/5Ra initiation decreased from 2.715 (1.150–5.539) to 1.050 (0.300–3.640) g ($p < 0.001$). 52% of patients were able to discontinue OCS within 2 years after anti-IL-5/5Ra therapy, which was independently predicted by lower and shorter prior OCS exposure.

Conclusions This real-world study showed that anti-IL-5/5Ra therapy leads to a significant reduction in cumulative OCS exposure over a 2-year period. Patients with lower and shorter OCS exposure were more likely to completely eliminate OCS. Since cumulative exposure increased progressively prior to anti-IL-5/5Ra initiation, our data suggest that early intervention leads to a better long-term prognosis in patients with severe eosinophilic asthma.

