

Oral corticosteroid-sparing effects of anti-IL5 and anti-IL5 receptor treatments. A real-life study

Anne Sofie Bjerrum, Tina Skjold, Johannes Schmid.

Afdeling for Lungesygdomme og Allergi, Aarhus Universitetshospital

Background:

Anti-IL5 treatments (mepolizumab, reslizumab) and anti-IL5 receptor treatment (benralizumab) are novel treatments for severe eosinophilic asthma. Studies have shown oral corticosteroid (OCS) sparing effects of mepolizumab and benralizumab. However, in these studies the tapering of OCS is tightly controlled and the tapering-duration relatively short. With this study we present real-life data on the OCS sparing effects of anti-IL5 treatments and anti-IL5 receptor treatment after 12 months of treatment.

Method:

We performed a retrospective study of severe, eosinophilic asthma patients treated with mepolizumab, reslizumab or benralizumab. Change between the treatments was allowed. Data on OCS and additional immunosuppressive treatment were drawn from patient records before anti-IL5/anti-IL5 receptor treatment and after 12 months of treatment.

Results:

82 patients were treated with anti-IL5 or anti-IL5 receptor treatment for at least 12 months. Before initiating treatment 64 patients (78%) were treated with daily OCS and 16 patients (19.5%) were treated with additional immunosuppressive treatment. After 12 months, the number of patients treated with daily OCS were 41 (50%) and the number of patients treated with additional immunosuppressive treatment were 3 (3.7%). The mean daily OCS dose before anti-IL5/IL5 receptor treatment was 11,1 (CI 9.9-12.3) mg of prednisolone, and after 12 months reduced to 4.3 (CI 3.0-5.5) mg of prednisolone, with a significant reduction of 6.8 (CI 6.6-8.1) mg prednisolone, $p < 0.0001$

Conclusion:

We showed a marked reduction in the number of patients taking daily OCS and additional immunosuppressive treatment and we showed a significant reduction in the daily OCS dose after 12 months of treatment with anti-IL5/anti-IL5 receptor treatment. These real-life data are in line with studies like Sirius and Zonda. Thereto, these data show us a long-term effect of anti-IL5/anti-IL5 receptor treatment on OCS reduction in a clinical setting, where the decision to reduce the daily OCS is a shared decision between the patient and the physician.