

Eosinophils and Inhaled Corticosteroids in Chronic Obstructive Pulmonary Disease[☆]**Eosinófilos y corticoides inhalados en la enfermedad pulmonar obstructiva crónica**

To the Editor:

We welcome and largely agree with the comments on our recent article.¹ Further insight is needed into the role played by blood eosinophilia in the management of chronic obstructive pulmonary disease (COPD). Perhaps the most important aspect to clarify is the absolute or relative number of eosinophils needed for either prognostic or therapeutic purposes, or even to define a potential new COPD phenotype. As the authors point out, most of the studies conducted to date consist of *post hoc* analyses; however, all report the same results, namely, significant response to inhaled corticosteroids is only achieved with certain blood eosinophil levels. We wrote our scientific letter over 1 year ago, and since then new studies have contributed further evidence in support of this finding. A re-analysis of the results of the ISOLDE study showed the FEV1 decline was reduced by around 34 mL/year in patients with eosinophil count $\geq 2\%$ at the start of the study, while no difference in decline was observed with $< 2\%$.² Another approach to this issue was taken in the *post hoc* analysis of the WISDOM trial, where exacerbations were observed to increase after withdrawal of fluticasone in patients with eosinophil counts of $\geq 2\%$, with a relative risk (RR) of 1.22. The increase in the exacerbation rate became more

pronounced as the eosinophil cutoff level rose ($\geq 4\%$, RR: 1.63; $\geq 5\%$, RR: 1.82).³

In conclusion, although we agree with most of the authors' comments, we believe that evidence has shown blood eosinophil levels to be an excellent biomarker of response to inhaled corticosteroids in COPD, and could even constitute a specific COPD phenotype.⁴

References

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