



## LETTER TO THE EDITOR

### Allergic asthma and omalizumab – The experience at the Centro Hospitalar Cova da Beira<sup>☆</sup>

#### Asma alérgica e omalizumab - A experiência no Centro Hospitalar da Cova da Beira

Dear Editor,

Since 2003, when Omalizumab was first approved by the Food and Drug Administration, severe allergic asthma treatment has never been the same. This humanized monoclonal antibody selectively binds to IgE, preventing its interaction with the FcεRI receptor (IgE high-affinity receptor) on the surface of mast cells and basophils. In this way, release of inflammatory mediators is prevented.<sup>1</sup> It is indicated for the treatment of severe uncontrolled allergic asthma, unresponsive to high-dose inhaled corticosteroids.

We wanted to share our rewarding experience with Omalizumab in Centro Hospitalar da Cova da Beira (CHCB), so we carried out a retrospective evaluation of the effects of Omalizumab in terms of clinical control of asthma, pulmonary function, number of visits to health facilities, and dependency on high-dose inhaled corticosteroids and long-acting beta-agonists. From a total of 15 individuals eligible for Omalizumab therapy, we found a statistically significant increase in median FEV1 (from 62.3% before Omalizumab, to 77.4% after 4–6 months and 80.75% after 10–12 months of treatment), in the clinical control of asthma according to the Asthma Control Test (40% partially controlled and 47% totally controlled patients after 4–6 months, and 40% partially controlled and 60% totally controlled patients after 10–12 months of treatment), a statistically significant decrease in the number of hospital admissions (0.56/year to 0.0/year), and in emergency admissions related to asthma exacerbations (1.01–0.14 episodes/year). There were no changes in the inhaled corticosteroids and long-acting beta-agonist doses.

We were expecting the benefits recorded at the CHCB, considering the results of numerous previous studies, which

have consistently showed a significant connection between the administration of Omalizumab and clinical improvement, a decrease in the need for asthma medication, as well as in the number of hospitalizations, unscheduled visits and emergency episodes.<sup>2</sup> Furthermore, several studies have demonstrated that add-on Omalizumab therapy is cost-effective in patients with severe persistent allergic asthma.<sup>3,4</sup>

In conclusion, we believe that the costs of the Omalizumab therapy should not act as a constraint on prescribing it, when indicated. Decisions should be taken with a medium/long term perspective, bearing in mind that those patients for whom Omalizumab is indicated and not prescribed will eventually need extra health care with avoidable expense.

#### Ethical disclosures

**Protection of human and animal subjects.** The authors declare that no experiments were performed on humans or animals for this study.

**Confidentiality of data.** The authors declare that they have followed the protocols of their work center on the publication of patient data and that all the patients included in the study received sufficient information and gave their written informed consent to participate in the study.

**Right to privacy and informed consent.** The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

#### Conflicts of interest

The authors have no conflicts of interest to declare.

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