

Correspondence

Reply

To the Editor:

Matheu et al¹ report an interesting case of insulin allergy treated successfully with omalizumab. Although omalizumab is only approved by the US Food and Drug Administration for moderate-to-severe persistent allergic asthma, there has been an increase in the use of this agent for the management of many disorders thought to be IgE mediated.

Omalizumab has been shown to be effective for the treatment of both seasonal and perennial allergic rhinitis.² Indeed, early studies indicated a clear dose-response relationship between omalizumab dose, suppression of IgE, and clinical efficacy.² In addition, a 9-week pretreatment period with omalizumab has been shown to inhibit approximately 80% of acute allergic reactions caused by rush allergen immunotherapy with ragweed in patients with seasonal allergic rhinitis.³

Because of these and other data, the utility of omalizumab in preventing acute anaphylactic events attributed to allergen immunotherapy is being studied in greater detail. An ongoing multicenter study using omalizumab pretreatment in patients with chronic persistent perennial allergic asthma and FEV₁ values of greater than 75% will hopefully answer whether pretreatment with omalizumab for 12 weeks can inhibit cluster allergen immunotherapy-induced allergic reactions in this patient population. A recent open-label study of 8 patients with moderate-to-severe persistent asthma examined whether acute allergic reactions caused by a modified cluster immunotherapy regimen with multiple allergens could be prevented by omalizumab pretreatment for 2 months. The results presented at the 2006 American College of Allergy, Asthma & Immunology meeting by Sekhsaria et al indicated that all patients tolerated the immunotherapy well, and no systemic reactions occurred.⁴

These studies in patients with allergic rhinitis and asthma indicate that omalizumab can be an effective agent to prevent acute allergic reactions caused by allergen immunotherapy. However, there are many unanswered questions that are pertinent to these studies, as well as the report by Matheu et al,¹ including the following: (1) What is the optimal duration of pretreatment with omalizumab before initiating allergen immunotherapy or treatment with a drug to which a patient is allergic? (2) Once maintenance immunotherapy or maintenance dosage with a drug, such as insulin, is reached without adverse consequences, can you stop the omalizumab and still

tolerate the immunotherapy or drug? (3) What immunologic and clinical end points of interest could help predict the ability to use omalizumab in this fashion and to possibly stop the omalizumab after reaching maintenance therapy?

As omalizumab's use becomes more widespread, additional anecdotal case reports will be forthcoming. For example, omalizumab's successful use in patients with chronic idiopathic urticaria (presented by Shapiro et al at the 2007 American Academy of Allergy, Asthma & Immunology Annual Meeting),⁵ cold-induced urticaria,⁶ and latex allergy⁷ have been reported. Although all of these reports will help us better define the utility of strategies to block IgE in diseases other than chronic persistent allergic asthma, one still needs to exercise caution. Carefully controlled studies in single patients or preferably groups of patients should be done only after obtaining informed consent and evaluating the risk/benefit ratio. The use of omalizumab in this manner should help us to better define the role of IgE in a number of allergic diseases and, more importantly, offer patients safer alternative treatments.

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Disclosure of potential conflict of interest: T. B. Casale has received grant support from, is on the speakers' bureau for, and has consulting arrangements with Genentech and Novartis.

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doi:10.1016/j.jaci.2007.07.035