



The changing landscape of allergy immunotherapy in the United States

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Specific allergy immunotherapy involves exposing the allergic patient to repeated, small, controlled doses of the offending allergen over time, with the ultimate goal to improve immune tolerance to the allergens and decrease symptoms. Immunotherapy is the only form of treatment for allergic rhinitis and allergic asthma that has the potential to modify the natural history of the disease. Subcutaneous immunotherapy (SCIT) has been practiced for decades in the United States, and involves injections administered in the physician's office; a recent systematic review affirms the effectiveness of SCIT for allergic rhinitis and allergic asthma [1]. Sublingual immunotherapy (SLIT) involves dosing the allergen under the tongue, typically in the home setting, and has been an option used with increasing frequency in Europe. Currently, 45% of immunotherapy in Europe has been estimated to be in the form of SLIT [2]. In Europe and elsewhere, SLIT is available in aqueous (drops) and tablet forms. The effectiveness of SLIT for allergic rhinitis has been confirmed by several large-scale contemporary reviews [3–5]. Although in the United States at the time of preparation of this article there is no Food and Drug Administration (FDA)-approved SLIT product, in late 2013, the FDA advisory committees met to consider the approval of SLIT tablets.

With the likely FDA approval of SLIT tablets, it is certainly timely that several articles in this month's issue examine SLIT and the future of allergy immunotherapy in the United States. Drs Toskala and Linkov discuss SLIT and what we can learn from the European experience of the last 25 years. Certainly, if SLIT therapy is approved in the USA, practitioners will ask whether SLIT is superior to SCIT or vice versa. Drs Chelladurai and Lin attempt to answer their question in their review of the literature entitled 'Effectiveness of Subcutaneous versus Sublingual Immunotherapy for Allergic Rhinitis: Current Update'. The authors discuss the potential differences in clinical outcomes and medication use when comparing the

two forms of immunotherapy. Although SLIT is an innovation in allergy immunotherapy, Drs Knisely and Lee provide a broad overview of the new frontiers and treatment options in SCIT, including immune response modifiers, adjuvants, and epitope-based immunotherapy. These new developments will allow practitioners to continue to offer exciting future treatment options for the allergic patient.

Several articles in this month's issue touch on the role of allergy in various forms of sinusitis. Drs Lam, Hirsch, and Tan examine the association of atopic disease and other premorbid conditions with chronic rhinosinusitis (CRS) in their article, in order to identify the potential risk factors for the development of CRS. Dr Tantilipikorn examines the relationship between allergic rhinitis and viral infections in his review article, focusing on the influence in pathogenesis of one condition in relation to the other. The role of allergy immunotherapy and other treatment modalities in allergic fungal sinusitis is included in Drs Plonk and Luong's study on the 'Current Understanding of Allergic Fungal Rhinosinusitis and Treatment Implications'. This article on allergic fungal sinusitis is an excellent review of the current recommended treatment for this disease and the supporting scientific literature. A second form of fungal sinusitis, invasive fungal sinusitis, is examined by Drs Zuniga and Turner in 'Treatment Outcomes in Acute Invasive Fungal Rhinosinusitis'; the authors present a thoughtful discussion of the most recent treatment options for this aggressive and potentially fatal infection.

Although the primary symptoms of allergy manifest in the upper and lower airways, allergy can contribute to many other conditions seen

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by the otolaryngologist. Drs Weinreich and Agrawal examine the line between allergy and Meniere's disease. Their article highlights the potential role allergy may have in endolymphatic hydrops by examining the most recent scientific literature.

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Conflicts of interest

None declared.

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