

**2025 Davee Foundation Lecture**

**and Resident Research Day**

**Abstract**

**Uroosa Amir, DO**

**Northwestern McGaw Family Medicine Residency at Humboldt Park**

**Title: Does Performing Serum IgE Testing for Allergies Improve Patient Outcomes?**

**Background:**About 10 to 30% of the world’s population has an allergic disease. Allergy testing can help with diagnosis and therefore guide treatment. As primary care physicians, we have access to serum allergen testing, however little is known about the impact of serum testing on patient outcomes. This review helped to answer this question that was submitted as an HDA on FPIN.

**Methods:**A literature search was performed using PubMed, PubMed Clinical Queries, Cochrane Library, and ECRI Guidelines Trust.

**Results and Conclusions:**Serum allergy testing has shown to have improved cost and healthcare utilization when compared to skin allergen testing (SOR B: cohort study). It has also been suggested that measuring a ratio of serum specific IgE to total IgE can be used as a predictor of clinical response to immunotherapy (SOR B: cohort study). The Allergy Immunology Joint Task Force on Practice Parameters recommends use of serum or skin allergy testing to confirm diagnosis of allergic rhinitis (SOR C: Allergy Immunology Joint Task Force on Practice Parameters).

Our review highlights that research is limited in this field, particularly with regards to evaluating specific patient outcomes. More research is needed to be able to recommend or not recommend serum allergy testing to patients.