

Symposium – Immunotherapy in Allergic Rhinitis: Where Have We Been and Where Are We Going?

Supported by an educational grant from Schering-Plough Corporation

Webcast

Objectives: Upon completion of this session, participants should be able to: 1) discuss the factors that determine efficacy for subcutaneous immunotherapy; 2) discuss the cost-effectiveness of subcutaneous immunotherapy; 3) discuss the possible preventive effect of subcutaneous immunotherapy in the development of asthma; 4) explain the new immunotherapy approaches including CpG oligonucleotides adjuvants/oral immunotherapy/peptide constructs/ recombinant allergens; 5) review relevant clinical studies published with the above (cited) methodologies; 6) evaluate evidence-based medicine for sublingual immunotherapy; 7) evaluate efficacy and safety of sublingual immunotherapy in adults and children; 8) evaluate the long term effect of sublingual immunotherapy; 9) evaluate the progression of atopy with sublingual immunotherapy; and 10) evaluate dose efficacy of sublingual immunotherapy.

- ❶ Speaker Evaluation—Please evaluate only those speakers you have heard according to the following scale:
(1 = poor; 2 = fair; 3 = good; 4 = excellent)

Speaker/Topic	Met Objectives	Content	Effectiveness of Teaching/Learning Methods	Interest of Topic	Applicability to Your Practice	Quality of AV Material	Bias?	Invite Again?	For office use only
Immunotherapy and Allergic:....U.S... Linda S. Cox, MD							<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	053
Immunotherapy and Allergic...European... Moises A. Calderon-Zapata, MD, PhD							<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	054
The Future of Immunotherapy: Novel.... Peter Creticos, MD							<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	055

- ❷ Overall Evaluation of Importance of Session (4 = very; 3 = moderate; 2 = little; 1 = not at all) _____

- ❸ Do you intend to make any changes in your practice as a result of this activity? Yes _____ No _____

If **Yes**, how? Comment _____

- ❹ Did the speaker(s) make proper disclosure of potential conflict of interest, and clarification to audience of faculty relationship with industry and nature of that relationship? Yes _____ No _____

- ❺ Did you perceive industry bias for or against commercial product(s), services, or commercial supporter of this activity?
Yes _____ No _____ If **Yes**, please comment; e.g., scientific balance, objectivity, etc.

Comment _____

- ❻ Did the speaker(s) disclose with respect to FDA Off-Label use? Yes _____ No _____

If **NO**, please comment _____

- ❼ What related topics should be addressed at future ACAAI meetings? _____

- ❽ Comments:

- ❾ Name (please print): _____

Post-test Questions

1. Which of the following is correct regarding the efficacy of SCIT?
 - a. Ross et al published a metaanalysis that found 94% effectiveness of SCIT in patients with AR
 - b. Symptoms of AR were less likely to improve in patients treated with SCIT than comparison patients
 - c. Medication scores were significantly higher in patients receiving SCIT than comparison patients
 - d. No evidence has shown that SCIT was able to prevent the development of asthma

2. Which of the following is correct regarding the cost-effectiveness of SCIT?
 - a. Immunotherapy (single injection) is generally less expensive than conventional pharmacotherapy (oral and topical) for the treatment of AR
 - b. The greatest immunotherapy costs occur in the first year when immunotherapy is 60% less costly than pharmacotherapy
 - c. In years 2 to 5, immunotherapy is not less expensive than pharmacotherapy
 - d. A European study of patients with asthma with comorbid AR experienced no savings during years 2 through 6 of the study

3. Based on the Abramson et al metaanalysis which assessed allergen immunotherapy in asthma:
 - a. There was a significant reduction in asthma symptoms and in medication use
 - b. There was no significant improvement in bronchial hyper-reactivity following immunotherapy
 - c. It would have been necessary to treat 8 patients with immunotherapy to avoid one deterioration in asthma symptoms
 - d. It would have been necessary to treat 10 patients with immunotherapy to avoid one patient requiring increased medication

4. Which of the following is correct with regard to SLIT?
 - a. The efficacy of SLIT is dependent on the dose, the quality of the allergen, and the duration of administration
 - b. Sublingual placement followed by swallowing is not preferred because prolonged duration of contact with the GI tract decreases efficacy
 - c. Generally, SLIT dosing is 10 to 500 fold lower than SCIT

- d. Dosing frequency and duration do not vary over time with SLIT
5. Which of the following is correct with regard to SLIT efficacy?
- a. SLIT efficacy is not optimized by early preseason treatment
 - b. Higher-dose SLIT correlates with a greater reduction in both symptom and medication scores vs low-dose SLIT
 - c. A minimum of 2 months of SLIT is recommended, with longer durations of SLIT associated with a better symptom score, medication score, and quality of life
 - d. Efficacy is not dose-dependent
6. With regard to safety of SLIT in children and adults:
- a. SLIT has been proven to be safer than SCIT
 - b. Most of the adverse reactions that occur after SLIT are local AEs consisting of itching and swelling of the oral mucosa as opposed to systemic adverse events, which are more commonly seen with SCIT
 - c. Moderate AEs included headaches and dizziness
 - d. In children, most of the systemic reactions were mild to moderate and tended to occur during the maintenance phase as opposed to the up-dosing phase
7. Which of the following is correct with regard to safety of SLIT?
- a. There have been fatalities associated with the use of sublingual therapy
 - b. It is recommended that the first dose of SLIT therapy be administered in the office under physician observation for adverse reactions
 - c. Localized AEs do not generalize to become more systemic
 - d. Most adverse reactions tend to occur within hours of administration and resolve within 1 to 3 days
8. Which of the following is correct with regard to the long-term effects of SLIT?
- a. Immunotherapy has no effect on the expression of allergic disease that persists after immunotherapy has been discontinued
 - b. It has been demonstrated that SCIT has long-lasting efficacy after discontinuation of immunotherapy
 - c. The mean peak expiratory flow rate (PEFR) was significantly lower in the SLIT group than in patients treated with pharmacotherapy alone
 - d. SLIT demonstrated no long-term clinical efficacy

9. Which of the following is correct with regard to the progression of atopy with SLIT?

- a. SLIT-treated children (ages 5-14) with allergic rhinoconjunctivitis mensesitized to grass allergen were found to use less medication and have lower symptom scores than control patients
- b. Development of asthma in year 5 was 10 fold more likely in controls than in children with allergic rhinoconjunctivitis mensesitized to grass allergen who received SLIT
- c. SLIT-treated patients with AR and asthma were found to have 38% new skin sensitizations while controls had 5.9%
- d. Progression of atopy appears to be very different in SCIT-treated and SLIT-treated patients

10. Which of the following was discussed as a novel therapy that shows promise for the future?

- a. Stem cell therapy
- b. Nitric oxide
- c. Toll receptor antagonists
- d. Adjuvants/oral immunotherapy

11. The second update in *Allergen Immunotherapy* was published in 2007 by the Joint Task Force on Practice Parameters. Based on that update, which of the following indications for allergy immunotherapy in AR and allergic rhinoconjunctivitis were specified?

- a. Demonstrable evidence of clinically relevant specific IgE and poor response to pharmacotherapy, allergen avoidance, or both
- b. Minor adverse effects of medications
- c. Wish to reduce or avoid short-term pharmacotherapy
- d. Asthma

12. Which of the following statements related to SCIT is correct?

- a. A patient receiving allergen immunotherapy should be evaluated at least every 9 to 12 months
- b. A determination of whether a patient has failed or no longer requires specific immunotherapy is not needed for most patients
- c. A reason that a patient may fail SCIT is that the allergen dose may be inadequate or there may be deficiencies in the quality of the allergen extract
- e. There is no evidence indicating that SCIT may reduce the rate of development of new allergies