

What is the one, most compelling takeaway from the three studies you presented?

To me, the most amazing thing that is shown is that we can use such a tiny amount of antigen to achieve a significant tolerated dose. For example, 1/100th of a peanut (or 4 mg) maintenance dose equaled tolerance of nine peanuts (2,900 mg) at the end of four years. Nine peanuts is well above the amount that would be eaten accidentally.

What was one of the most common questions you were asked afterwards? And the answer?

Most patients and their families were really surprised that this information hadn't been presented to them before and wanted the references so they could look at the actual studies themselves. I urged them to get the actual articles so that they could discuss it with their own allergist.

How does sublingual immunotherapy (SLIT) stand compared to other food allergy treatments that were presented? With the patch, the efficacy isn't great at this point. They're still working on optimizing the dosing.

With OIT, the goals appeared to have changed over the last several years. When I first heard the presentations about OIT for peanut, the goal was 5,000 mg. Unfortunately, the safety of OIT hasn't been as good as they were hoping and the maintenance dose had to be decreased. I think it's really fascinating, though, that to achieve a meaningful amount of tolerance with OIT, you have to use almost the same amount that they're trying to achieve. For example, to achieve 1,000 mg, they had to use at least 300 mg. Which, when you compare it to SLIT, we need such a small amount in comparison because we're putting it into that immunologically privileged site.

What are the biggest misconceptions about SLIT that you'd like patients and their parents to better understand?

I've heard some of the allergists say "we can't deliver a high amount of antigens sublingually" and that actually isn't a true statement. We could use much higher amounts if we used a more concentrated extract, but what they found is there was no additional benefit to using a higher dose. It didn't cause problems, but it also didn't improve the rate of tolerance.

I often hear "they use such small doses with that" which makes me want to say "yes, and that's the beauty of it!" We only need small amounts and that's why it's so safe, and that's why we can treat more than one allergen at a time.

What do you wish you could have expanded on further?

There was very limited time so I could only present the information about peanut immunotherapy, but SLIT has been looked at for egg, milk, and some of the tree nuts, so there actually is a lot more information regarding a larger range of foods for SLIT than there is for OIT.

What are the top questions you think patients should consider when choosing a treatment path for food allergy?

- 1. What are your goals?
 - If your goal is to be able to eat a peanut butter sandwich, then OIT is a better choice. If your main goal is safely keeping your child out of trouble if they accidentally ate the food, then SLIT is definitely the preferred form of immunotherapy.
- 2. Are you trying to treat more than one allergy at a time?

 I still heard some of the panelists saying things like "we can only treat one food" with their approaches. Our clinical experience is that we can treat multiple food allergies, and I believe that as we treat their airborne allergies and decrease their total allergen load, that we get improvement more quickly than if we treat only one allergen.

STUDY 1: Kim E, Bird A, Kulis M, et al. Sublingual immunotherapy for peanut allergy: Clinical and immunologic evidence of desensitization. Journal of Allergy and Clinical Immunology. 2011;127:640–646.e1.

STUDY 2: Fleischer D, Burks W, Vickery B, et al. Sublingual immunotherapy for peanut allergy: A randomized, double-blind, placebo-controlled multicenter trial. Journal of Allergy and Clinical Immunology. Volume 131, Issue 1, Pages 119-127.e7 (January 2013) DOI: 10.1016/j.jaci.2012.11.011 STUDY 3: Hamad A, Kim E, Burks W. A novel assessment of sustained unresponsiveness (SU) after long term sublingual immunotherapy (SLIT) in peanut allergic children results for a 4 year phase II clinical trial. Journal of Allergy and Clinical Immunology. February 2018 Volume 141, Issue 2, Supplement, Page AB200.

