

# Significance of Serum Specific IgE Food Panel Interpretation in Identifying Potential Food Allergies in Children; A retrospective cohort.

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## Background

- The prevalence of food allergy in children in the US is 5.6 million children under age 18.
- For the past decade, non-allergists have increasingly used serum specific IgE-mediated (SSIgE) food allergy tests.
- Diagnosis is established by a combination of the clinical history and allergen-specific testing.
- The interpretation of IgE sensitization tests can be challenging in the absence of a clear history of an allergic reaction.

## Objective

We sought to determine the most common allergens tested for and investigate the accuracy of using SSiGE food allergy testing in diagnosing primary food allergies.

## Methods

- This was a retrospective review of pediatric patients (n=647) seen in the allergy clinic who had positive SSiGE testing done by non-allergists between 2008 and 2018.
- Oral challenge was used as the gold standard to compute the 5 most common allergens.
- Kruskal-Wallis test was used to compare the median age of patients with true/false positives and negatives.
- Pairwise comparisons of true and false positives were performed.

# Serum specific IgE testing to diagnose food allergies

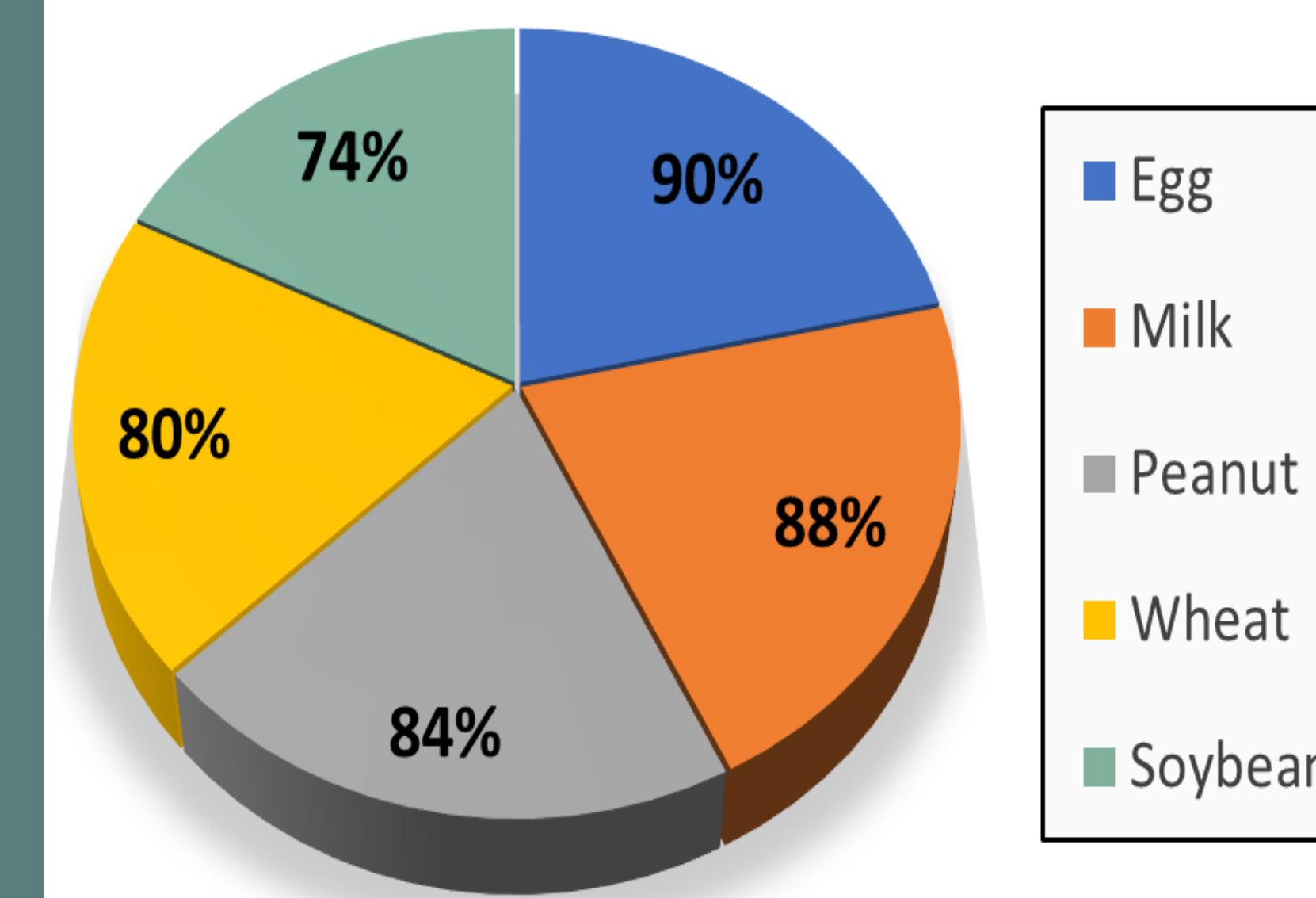
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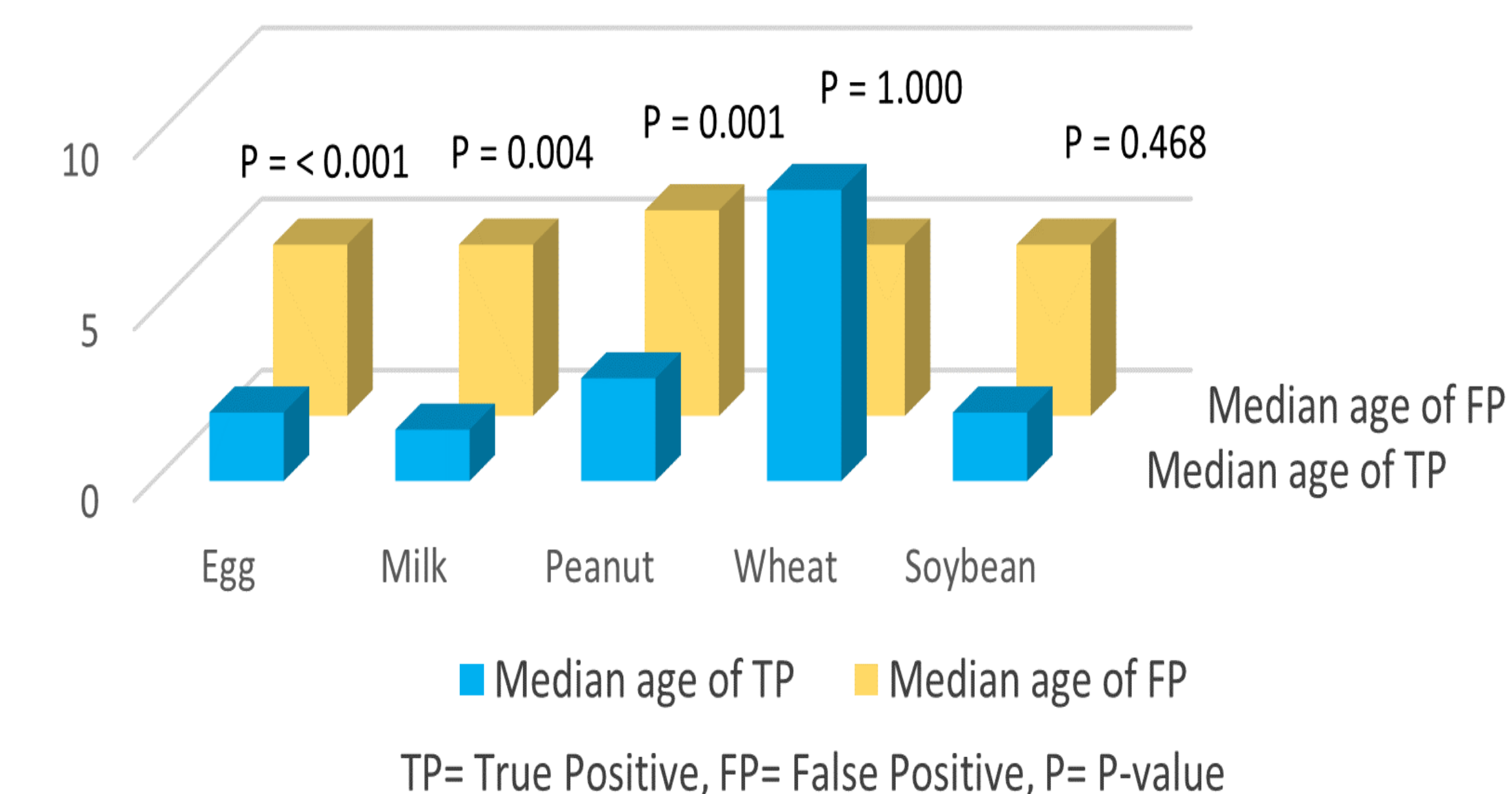
Scan the QR code to be directed to the full abstract, references, and authors information.

## Results

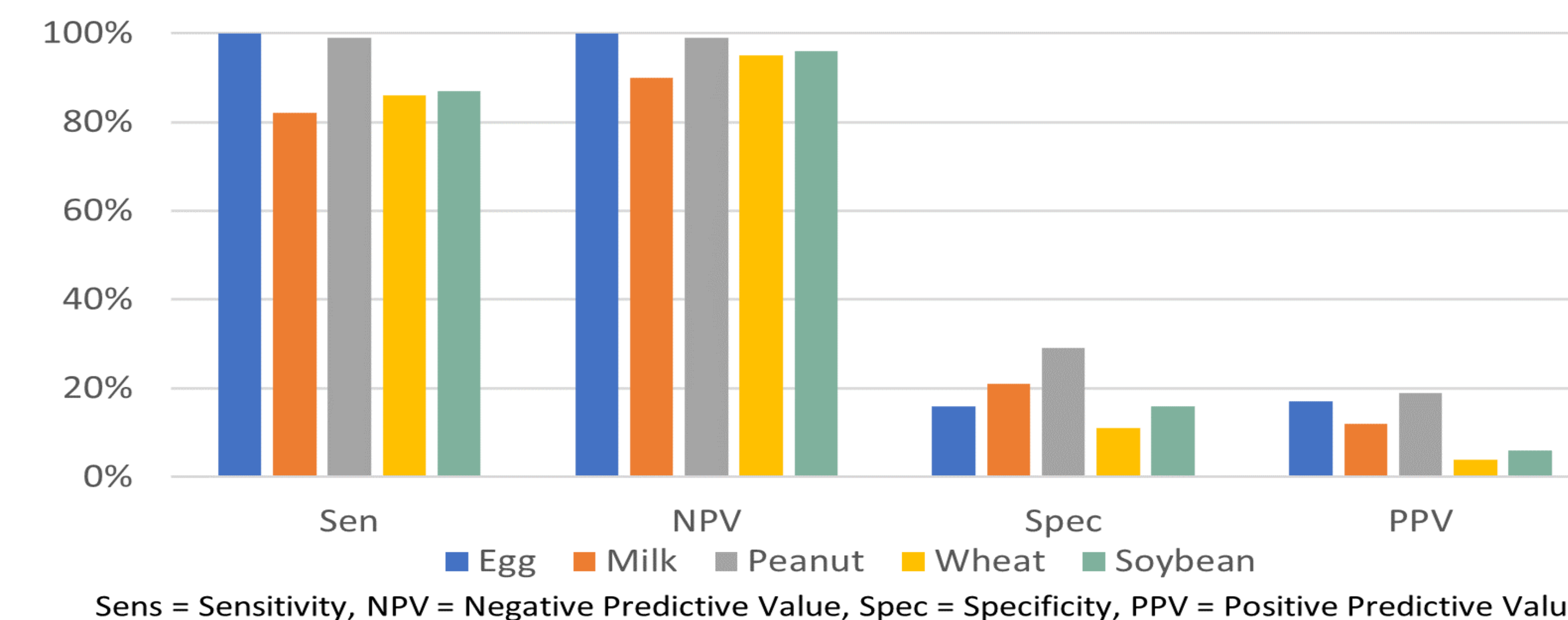
Most common allergens tested with SSiGE



Median ages of patients with true positives and false positives



Test characteristics for IgE testing of the 5 most common allergens



## Discussion and conclusion

- SSiGE food allergy testing, while sensitive, has poor specificity.
- In our sample, the PPV of all 5 allergens was less than 20%, meaning that 80% of children who tested positive for these allergens were not allergic.