

# AIT Bulletin

A BI-MONTHLY NEWSLETTER

ALK  
MEDICAL  
AFFAIRS



Actor portrayal.



## CLINICAL SPOTLIGHT

**Dr. Michael S. Blaiss,**  
FACAAI, FAAAAI, MD  
Roswell, GA

### Donating to help allergy sufferers

Caring for allergy sufferers who can't afford medical care is an important passion of mine. For the last six years, I have volunteered at Good Samaritan Health Center of Gwinnett, a non-profit 501(c)3 charitable entity located in Norcross, Georgia, to provide allergy care for the poor and uninsured in Gwinnett County. This county is the second largest in Georgia with a population of nearly one million; 14% are living below the poverty level and 26.5% of its working population is without health insurance. ALK has been a vital partner of mine in this endeavor and their allergy skin testing materials have allowed me to accurately test for specific allergies in my patient population. Being able to deliver allergy care to all who need it and improve their quality of life is a very rewarding experience.

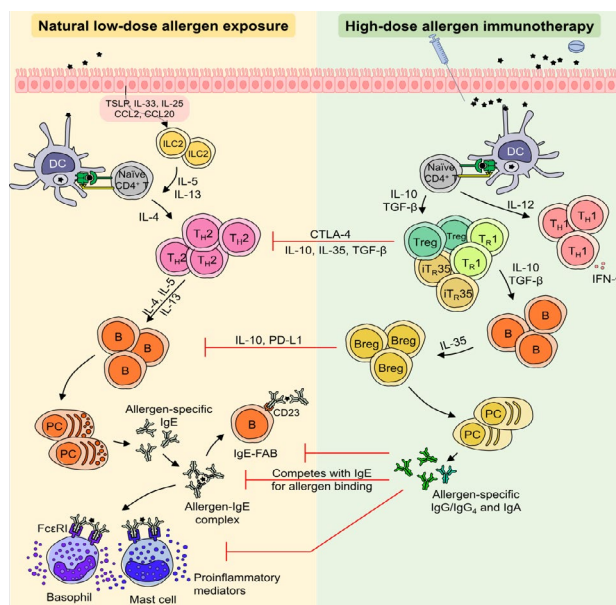
@wheezemd

## AIT FROM ALK

### Immunological Responses and Biomarkers for Allergen-Specific Immunotherapy Against Inhaled Allergens

Shamji M, Layhadi J, Sharif H, Penagos M, Durham S.

Long-term efficacy that occurs with allergen immunotherapy (AIT) of proven value is associated with decreases in IgE-dependent activation of mast cells and tissue eosinophilia. This suppression of type 2 immunity is accompanied by early induction of regulatory T cells, immune deviation in favor of T<sub>H</sub>1 responses and induction of local and systemic IgG, IgG<sub>4</sub> and IgA antibodies. These “protective” antibodies can inhibit allergen-IgE complex formation and consequent mast cell triggering and IgE-facilitated T<sub>H</sub>2-cell activation. Recent studies have highlighted the importance of innate responses mediated by type 2 dendritic cells and innate lymphoid cells in allergic inflammation. These cell types are under the regulation of cytokines such as thymic stromal lymphopoietin and IL-33 derived from the respiratory epithelium. Novel subsets of regulatory cells induced by immunotherapy include IL-35-producing regulatory T cells, regulatory B cells, a subset of T follicular regulatory cells and IL-10-producing group 2 innate lymphoid cells. These mechanisms point to biomarkers that require testing for their ability to predict clinical response to immunotherapy and to inform novel approaches for better efficacy, safety and long-term tolerance.



From Shamji et al. 2021: “Mechanism of immune tolerance induction following AIT”

Click to read full study : Shamji M et al. Immunological Responses and Biomarkers for Allergen-Specific Immunotherapy Against Inhaled Allergens. *J Allergy Clin Immunol Pract.* 2021;9(5): 1769-1778; doi: 10.1016/j.jaip.2021.03.029.



## DID YOU KNOW?

A recent study showed that **climate change is making allergies worse**. Recent data found that pollen has increased by over 21% in North America, **making pollen season 20 days longer** than it was in 1990.

Click to read full study : William R. L. Anderegg, John T. Abatzoglou, Leander D. L. Anderegg, Leonard Bielory, Patrick L. Kinney, Lewis Ziska. Anthropogenic climate change is worsening North American pollen seasons. *Proceedings of the National Academy of Sciences*. 2021; 118 (7) e2013284118; doi: 10.1073/pnas.2013284118.

## WHAT'S NEW IN RESEARCH?

### Basophil sensitivity reflects long-term clinical outcome of subcutaneous immunotherapy in grass pollen-allergic patients

Schmid J, Würtzen P, Siddhuraj P, Jogdand P, Petersen C, Dahl R, Erjefält J, Hoffmann H.

Recently published data sought to correlate basophil and antibody biomarkers of subcutaneous immunotherapy to clinical outcomes and cellular changes in target tissue. The study authors concluded that a decrease in basophil sensitivity after three weeks of subcutaneous allergen immunotherapy predicted the clinical outcome of this treatment.

Click to read full study : Schmid J, Würtzen P, Siddhuraj P, Jogdand P, Petersen C, Dahl R, Erjefält J, Hoffmann H. Basophil sensitivity reflects long-term clinical outcome of subcutaneous immunotherapy in grass pollen-allergic patients. *Allergy*. 2021;75(5):1528-538.

What gaps in research would you like to share with ALK? Let us know:

@US\_ALK #ALKMedAffairs

## ALLERGY NEWS AROUND THE GLOBE

### European Academy of Allergy & Clinical Immunology Hybrid Congress 2021

In July, the European Academy of Allergy & Clinical Immunology (EAACI) held their annual congress, focusing on "Harmonizing Research and Patient care in Allergy Asthma and Clinical Immunology." This year's theme focused on one of the overarching goals of EAACI - ensuring standardization in our field across the globe, thereby facilitating knowledge mobility and providing the best degree of care to our patients worldwide.



For more information on this year's EAACI Congress, view abstracts and review the scientific program, click [here](#).

To learn more about ALK's scientific contributions at EAACI, please reach out to [MedicalAffairs@alk.net](mailto:MedicalAffairs@alk.net)

## RECENT EVENT HIGHLIGHTS

### U.S. Events

Tweetorial with Integrity CE  
June 28, 2021

ALK Academy with Moises Calderon, MD, PhD  
June 28, 2021  
July 13, 2021

Webinar Wednesdays in North America  
June 23, 2021 - Yoshitaka Okamoto, MD (Japan)  
July 28, 2021 - Hal Nelson, MD (USA)

### Canada Events

Paediatric Allergy Medical Roundtable Discussion  
June 8 and 16, 2021

## UPCOMING ALK EVENTS



[CLICK HERE](#) for ALK Virtual Programs Calendar

\*Bookmark this page in your browser to stay up to date on new events being added!

### Worldwide Webinar Wednesdays in North America

**AUGUST:** Anne Ellis, MD (Canada)  
August 25, 2021 - 7:00pm EST - [REGISTER HERE](#)

**SEPTEMBER:** Stephen Durham, MD (London)  
September 15, 2021 - 6:30pm EST - [REGISTER HERE](#)

**OCTOBER:** Natalija Novak, MD (Germany)  
October 20, 2021 - 5:00pm EST - [REGISTER HERE](#)

ALK Academy with Moises Calderon  
August 30, 2021 - 7:30pm EST - [REGISTER HERE](#)  
September 8 and 22, 2021 - 7:30pm EST - [REGISTER HERE](#)

ALK Recognizes National Penicillin Allergy Day  
September 28, 2021

Do you have a suggestion for a future ALK Medical Affairs event? Let us know!

[MedicalAffairs@alk.net](mailto:MedicalAffairs@alk.net)