

ADVERTISEMENT FEATURE

Specific IgE blood testing and exposure reduction targeted at all sensitisations can reduce unscheduled care and medication costs in asthma

Dr Jason Cunningham PhD CSci FIBMS
European Marketing Manager
Thermo Fisher Scientific

allergy &
autoimmune disease
findthetruth.allergyai.com

Summary

In this article it is outlined how in patients with asthma, in addition to standard-of-care, evidence indicates that testing for sensitisation to common aeroallergens with specific IgE blood testing; and any other allergens indicated by the patient history; and providing exposure reduction advice based on those sensitisations can help:¹⁻⁴

- Reduce the risk of asthma exacerbations
- Reduce the risk of asthma exacerbations despite viral infection
- Reduce the medication burden

Help reduce the risk of asthma exacerbations

In a randomised control trial of 937 children with asthma, by Morgan *et al.*, published in the New England Journal of Medicine it was demonstrated that, compared to the control group, an intervention of education and remediation of exposure to all sensitised allergens and environmental tobacco smoke reduced:¹

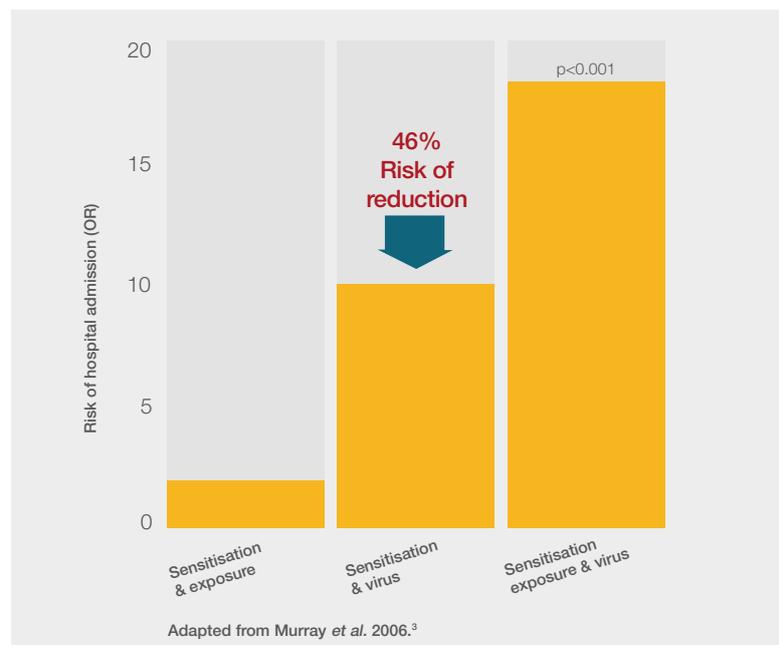
- The number of symptom days by 19.5% ($p < 0.001$) per 2-week period in 12 months
- The number of missed school days/ year by 20.7% ($p = 0.003$) (4.4 days/year)
- The number of unscheduled visits to an emergency room or asthma clinic per year by 13.6% ($p = 0.04$) (2.1 days/year)

In another randomised control trial of 234 children with asthma and house dust mite sensitisation who had a recent emergency hospital attendance with an asthma exacerbation Murray *et al.* demonstrated that; compared to the control group; an intervention of house dust mite exposure reduction in the form of mite impermeable bedding, reduced the risk of hospital admission by 45%.

At 12 months, significantly fewer children in the active group attended hospital with an exacerbation versus the placebo group (36/123 [29.3%] versus 49/118 [41.5%], $p = 0.047$) (NNT=8).²

Help reduce the risk of hospital admission for asthma despite viral infection

In a study by Murray *et al.*, published in Thorax it was demonstrated that patients who have allergic sensitisations, but are not exposed, and who have a viral infection are 46% less at risk of a hospital admission than patients with a viral infection who are sensitized and exposed.³



Help reduce the medication burden

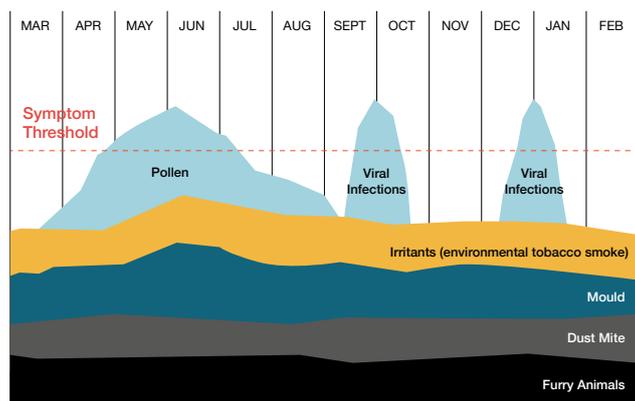
In a study, by Zethraeus *et al.*, it was demonstrated that initial specific IgE blood testing of children with respiratory or skin problems reduced medication use over 2 years:⁴

Medication	Reduction in use over 2 years (%)
Bronchodilators	70%
Corticosteroids	51%
Antihistamines	11%

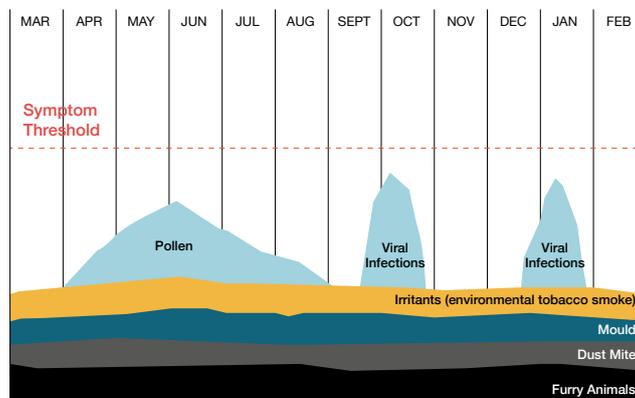
Control the controllable – why does allergen exposure reduction improve outcomes in asthma?

We know that allergies trigger asthma exacerbations in up to 90% of children and 60% of adults with asthma.^{5,6} Most patients with allergies have multiple allergic sensitivities (perennial and seasonal aeroallergens etc.) contributing to their allergen load;⁷ these allergen sensitisations add to the patient's allergen/trigger load eventually resulting in asthma exacerbations despite preventive medication – even from other, non-allergic, triggers.^{8,9} Reducing exposure to the 'controllable' triggers can help keep the patient under their threshold even when they are exposed to a non-controllable trigger like a viral infection.^{1,3}

Before exposure reduction



After exposure reduction



What is ImmunoCAP specific IgE blood testing?

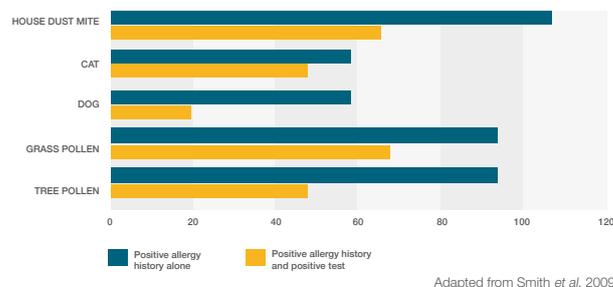
ImmunoCAP™ specific IgE blood test:

- Is the gold standard blood test, validated in over 6,000 clinical publications worldwide^{10,11}
- Is a licensed test, ran on industry leading systems in your local laboratory, which does not require additional specialised equipment, training or facilities to perform
- Is easy to request through laboratory ordering systems, requires just 1 ml of blood for up to 10 allergens

Why is history alone not enough?

In a study, by Smith *et al.*, it was demonstrated that the addition of allergen sensitisation testing to a structured history improves the accuracy of the allergy assessment. Helping ensure patients are targeting exposure reduction advice at allergens they need to avoid:¹²

Predictive validity of structure history only, and formal allergy assessment



How to test Aeroallergens

While you may be confident which allergen is pushing the patient over their symptom threshold it is important to test for sensitisation for the underlying aeroallergens which may be adding to their threshold.

1. Order specific IgE blood tests for the most common aeroallergens

House dust mite – Pollen – Cat – Dog – Moulds

2. Provide exposure reduction advice to all the sensitised aeroallergens

As the studies in this article demonstrate,¹⁻⁴ providing your patient with exposure reduction advice to the aeroallergens they are sensitised (sensitisation for ImmunoCAP™ specific blood test is any results ≥ 0.1 kU_A/L) to can help improve outcomes.

Download exposure reduction advice from:

findthetruth.allergyai.com

Food allergy

1. History

Conduct a food-allergy specific history.

You can download a free history template from

<https://allergyai.com/uk/allergy/resources/clinical-toolkit>

2. Confirm

Order specific IgE blood tests for the suspected allergens

3. Manage

Interpret the results in the context of this history. A result of ≥ 0.1 kU_A/L is indicative of sensitivity and results should always be read in conjunction with the clinical history. Consider referral to a dietitian or secondary care for additional support

References

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