### PEDIATRIC ALLERGY/ASTHMA

# Allergy progression and the atopic/ allergy march



Clinical studies have shown that allergic diseases occur in a time-based order from atopic dermatitis and food allergy in infancy into the gradual development of allergic asthma and allergic rhinitis in childhood.<sup>1</sup>

As an atopic child grows into adulthood, the progressive development of this increasingly debilitating allergic disease has been referred to as the atopic/allergy march.<sup>1</sup>



Courtesy: Thermo Fisher Scientific

# Allergies tend to progress and change over time<sup>2,3,4</sup>

Early intervention and avoiding allergic triggers may help improve the child's symptoms, delay and block the natural progression of the atopic/allergy march and reduce the chances of developing asthma in the future.<sup>3</sup>



### Accurate diagnosis of allergic triggers

Through a comprehensive allergy test portfolio, Labcorp can help you provide better care for your youngest patients. Labcorp's specific immunoglobulin E (IgE) testing can be useful in assessing the potential that an atopic disposition might play in fostering chronic sinusitis, dermatitis and potentially asthma, thereby allowing you to develop an optimal therapeutic approach at an early age.

## Specially designed allergy profile for young children

Labcorp offers the following allergy panel profile, which includes the top nine food groups that cause the majority of food allergy reactions <sup>5</sup>, and respiratory and food component reflex-specific IgE testing to help assess allergen sensitivity in young children:

Test Name	Test No.	Method	Specimen Requirements
Allergen Profile, IgE, Pediatric with Component Reflexes**	608035	Thermo Fisher ImmunoCAP® Specific IgE	4.0 mL serum (room temperature)
Food		Grass/Tree	Animal/Dust
Milk		Timothy Grass	Cat dander
Egg White		Cedar, Mountain	Dog dander
Fish: Codfish, Salmon, Tuna		Molds	Dermatohagoides pteronyssinus
Crustacean Shellfish: Scallop, Shrimp		Alternaria alternata	Mouse urine
Tree Nuts: Brazil Nut, Cashew Nut, Hazelnut (Filbert), Walnut		Candida albicans	Cockroach, German
Peanut (whole)			Other
Wheat: Wheat, ω 5-Gliadin (tri-19)			Immunoglobulin E, total
Soybean			
Sesame: Sesame Seed			

<sup>\*\*</sup>If Cat dander IgE  $\geq$ 0.35 kU/L, reflex tests Fel d 1, Fel d 2 and Fel d 4 IgE.. If Dog dander IgE  $\geq$ 0.35 kU/L, reflex tests Can f 1, Can f 2, Can f 3, Can f 5 IgE. If milk IgE  $\geq$ 0.35 kU/L, reflex tests  $\alpha$ -lactalbumin,  $\beta$ -lactoglobulin and casein IgE will be added. If egg white IgE  $\geq$ 0.35 kU/L, reflex tests ovalbumin and ovomucoid IgE. If IgE to sesame, walnut, hazelnut (filbert), cashew nut, brazil nut, and/or peanut (whole) is  $\geq$ 0.10 kU/L, reflex: Sesame: Ses I 1 IgE/ Brazil nut: Ber e 1 IgE / Cashew nut: Ana o 3 IgE / Hazelnut (filbert): Cor a 1, Cor a 8, Cor a 9 and Cor a 14 IgE / Peanut (whole): Ara h 1, Ara h 2, Ara h 3, Ara h 6, Ara h 8 and Ara h 9 IgE / Walnut: Jug r 1 and Jug r 3 IgE. If Wheat  $\geq$  0.10 kU/L, one or more of the following components may be tested: Gliadin, Tri a 14 (wheat nsLTP), PhI p 12 (Timothy grass profilin) and/or Cross-reactive Carbohydrate Determinant (CCD). If reflex testing is performed, additional charges/CPT codes may apply.

#### References

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- $2. \ Wickman \ M. \ When \ allergies \ complicate \ allergies. \ Allergy. \ 2005; 60 \ Suppl \ 79:14-18. \ doi: 10.1111/j.1398-9995.2005.00852.x$
- 3. Bantz SK, Zhu Z, Zheng T. The Atopic March: Progression from Atopic Dermatitis to Allergic Rhinitis and Asthma. J Clin Cell Immunol. 2014;5(2):202. doi:10.4172/2155-9899.1000202
- 4. Chantzi FM, Kafetzis DA, Bairamis T, et al. IgE sensitization, respiratory allergy symptoms, and heritability independently increase the risk of otitis media with effusion. Allergy. 2006;61(3):332-336. doi:10.1111/j.1398-9995.2006.00971.x
- 5. US Food and Drug Administration. Food allergies. Accessed January 2024. https://www.fda.gov/food/food-labeling-nutrition/food-allergies

Visit the online test menu at **Labcorp.com** for additional test options and full test information, including CPT codes and specimen collection instructions.



