

## ImmunoCAP™ Specific IgE blood test results: Interpretation

When you receive your patient's ImmunoCAP Specific IgE blood test results from the lab after ordering a regional respiratory profile, use the test results in conjunction with patient history, symptoms of why you tested, and physical exam to help interpret the results and decide on a patient management plan.


### Sample respiratory pathway


**STEP 1** Patients presenting with any of the following: nasal congestion, rhinorrhea, sneezing, itchy nose/eyes, coughing, wheezing, chest tightness, shortness of breath.

**STEP 2** Order an ImmunoCAP Specific IgE blood test respiratory profile as an aid in diagnosis of IgE-mediated diseases<sup>1</sup>.

**STEP 3** Use the steps shown here to determine next steps based on detected sensitizations. Typical results scenarios are shown on page 2.

#### Interpret Results

**<0.1 kU<sub>A</sub>/l**  
 Consider other causes

**≥0.1 kU<sub>A</sub>/l**  


- Categorize results ranked from highest to lowest specific IgE sensitizations
- Provide allergen avoidance plan to keep patient below symptom threshold
  - Consider reducing exposure to allergens with the highest specific IgE levels first
  - Focus on indoor allergens since these may be easier to control
- Prescribe appropriate medications, e.g. antihistamines<sup>2</sup>
- Follow up. If inadequate response, refer to specialist<sup>2</sup>

 Establish an allergen avoidance and medication plan with your patient.

### Regional profiles

Each region of the country has a different regional profile to account for different trees, weeds, and grasses. Perennial allergens (molds, dust mites, mouse urine, cockroach, dog and cat dander) are found year-round and are included on any regional profile. Indoor allergens indicated in bold.

#### D = Dust mite

**Dermatophagoides farinae**; **Dermatophagoides pteronyssinus**



#### E = Epidermal

**Cat and Dog Dander**; **Mouse Urine**



#### M = Mold

**Alternaria alternata**; **Aspergillus fumigatus**; **Cladosporium herbarum**; **Penicillium chrysogenum**



#### I = Insect

**Cockroach**



#### T = Trees

Alder, Grey; Bayberry/Sweet Gale; Birch, Common Silver; Cedar, Mountain; Cottonwood; Elm, American; Eucalyptus; Eucalyptus Tree; Maple/Box Elder; Maple Leaf; Mesquite Tree; Mimosa/Acacia; Mulberry, White; Olive Tree; Palm, Queen; Pecan, Hickory; Pine, White; Sycamore; Walnut; White Ash; White; Oak



#### W = Weeds

Mugwort; Nettle; Pigweed, Common; Ragweed, Short; Rough Marshelder; Russian Thistle; Sheep Sorrel; Wall Pellitory



#### G = Grasses

Bahia Grass, Bermuda Grass; Johnson Grass; Rye Grass, Perennial; Redtop, Bentgrass; Timothy Grass



## Result scenarios: Respiratory profiles

Specific IgE<sup>1</sup> **normal**  
Total IgE<sup>3</sup> **normal**



Birch, Common Silver	<0.10
Cedar, Mountain	<0.10
Elm, American	<0.10
Maple/Box Elder	<0.10
Oak, White	<0.10
Pecan, Hickory	<0.10
Nettle	<0.10
Pigweed, Common	<0.10
Ragweed, Short	<0.10
Sheep Sorrel	<0.10
Bahai Grass	<0.10
Bermuda Grass	<0.10
Alternaria alternata	<0.10
Aspergillus fumigatus	<0.10
Cladosporium herbarum	<0.10
Penicillium chrysogenum	<0.10
Cat Dander	<0.10
Cockroach, German	<0.10
D farinae	<0.10
D pteronyssinus	<0.10
Dog Dander	<0.10
Mouse Urine	<0.10

Total IgE/Immunoglobulin E 10

Patient management  
as if **non-allergic**

Specific IgE<sup>1</sup> **elevated**  
Total IgE<sup>3</sup> **normal**



Alternaria alternata	<0.10
Aspergillus fumigatus	<0.10
Bermuda Grass	<0.10
Birch	<0.10
<b>Cat Dander</b>	<b>4.01</b>
Cladosporium herbarum	<0.10
Cockroach	<0.10
<b>Common Ragweed (Short)</b>	<b>20.13</b>
Dermatophagoides farinae	<0.10
Dermatophagoides pteronyssinus	<0.10
Dog Dander	<0.10
Elm	<0.10
Maple	<0.10
Mountain Cedar	<0.10
Mouse Urine Proteins	<0.10
Mulberry	<0.10
<b>Oak</b>	<b>9.27</b>
Pecan/Hickory	<0.10
Penicillium notatum	<0.10
Rough Marsh Elder	<0.10
Rough Pigweed	<0.10
Timothy Grass	<0.10
Walnut	<0.10

Total IgE/Immunoglobulin E 20

Patient management  
as if **allergic**

~30% present this way\*; This is why it is not recommended to screen only with total IgE.<sup>4</sup>

\*Data on file

Specific IgE<sup>1</sup> **elevated**  
Total IgE<sup>3</sup> **elevated**



<b>Cedar, Mountain</b>	<b>0.12</b>
<b>Cottonwood</b>	<b>0.20</b>
Elm, American	<0.10
Mimosa/Acacia	<0.10
Oak, White	<0.10
Olive Tree	<0.10
<b>Mugwort</b>	<b>40.34</b>
Pigweed, Common	<0.10
Ragweed, Short	<0.10
Sheep Sorrel	<0.10
<b>Thistle, Russian</b>	<b>&gt;100</b>
Bermuda Grass	<0.10
Johnson Grass	<0.10
Rye Grass, Perennial	<0.10
Alternaria alternata	<0.10
<b>Aspergillus fumigatus</b>	<b>25.25</b>
<b>Cladosporium herbarum</b>	<b>21.85</b>
<b>Penicillium chrysogenum</b>	<b>35.15</b>
Cat Dander	<0.10
Cockroach, German	<0.10
D farinae	<0.10
D pteronyssinus	<0.10
<b>Dog Dander</b>	<b>11.25</b>
Mouse Urine	<0.10

Total IgE/Immunoglobulin E 210

Patient management  
as if **allergic**

Specific IgE<sup>1</sup> **normal**  
Total IgE<sup>3</sup> **elevated**



Alder, Grey	<0.10
Birch, Common Silver	<0.10
Cedar, Mountain	<0.10
Cottonwood	<0.10
Elm, American	<0.10
Maple/Box Elder	<0.10
Oak, White	<0.10
Mugwort	<0.10
Pigweed, Common	<0.10
Sheep Sorrel	<0.10
Thistle, Russian	<0.10
Timothy Grass	<0.10
Alternaria alternata	<0.10
Aspergillus fumigatus	<0.10
Cladosporium herbarum	<0.10
Penicillium chrysogenum	<0.10
Cat Dander	<0.10
Cockroach, German	<0.10
D farinae	<0.10
D pteronyssinus	<0.10
Dog Dander	<0.10
Mouse Urine	<0.10

Total IgE/Immunoglobulin E 380

Further patient **follow up**

Reconsider profile, geography, other exposures like furry/feathered animals, medications, or comorbid conditions.

ImmunoCAP Specific IgE blood test results are quantitative. Results **above 0.1 kU<sub>A</sub>/l** are indicative of an allergen-specific IgE sensitization.<sup>1</sup> Total IgE reference ranges are dependent on age. You must use your lab's reference range for Total IgE located on the results.

[allergyaidiagnostics.com](http://allergyaidiagnostics.com)

### References

1. Phadia™ ImmunoCAP™ Specific IgE 0-100 Directions for Use for the Phadia 250 Laboratory System. Published 2019-10-24.
2. Papadopoulos, et al. *Allergy*. 2015; 70; 474-494.
3. Phadia™ ImmunoCAP™ Total IgE Directions for Use. Published 2019-10-29.
4. Bernstein, L, et al. Allergy Diagnostic Testing: An Updated Practice Parameter. *Annals of Allergy, Asthma, and Immunology*. 2008. 100.S1-S148.