

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 diseases¹.

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_A/l
 Consider other causes

≥0.1 kU_A/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. antihistamines²
- Follow up. If inadequate response, refer to specialist²

 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 IgE¹ **normal**
Total IgE³ **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 IgE¹ **elevated**
Total IgE³ **normal**



Alternaria alternata	<0.10
Aspergillus fumigatus	<0.10
Bermuda Grass	<0.10
Birch	<0.10
Cat Dander	4.01
Cladosporium herbarum	<0.10
Cockroach	<0.10
Common Ragweed (Short)	20.13
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
Oak	9.27
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.⁴

*Data on file

Specific IgE¹ **elevated**
Total IgE³ **elevated**



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

Total IgE/Immunoglobulin E 210

Patient management
as if **allergic**

Specific IgE¹ **normal**
Total IgE³ **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_A/l** are indicative of an allergen-specific IgE sensitization.¹ 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

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.