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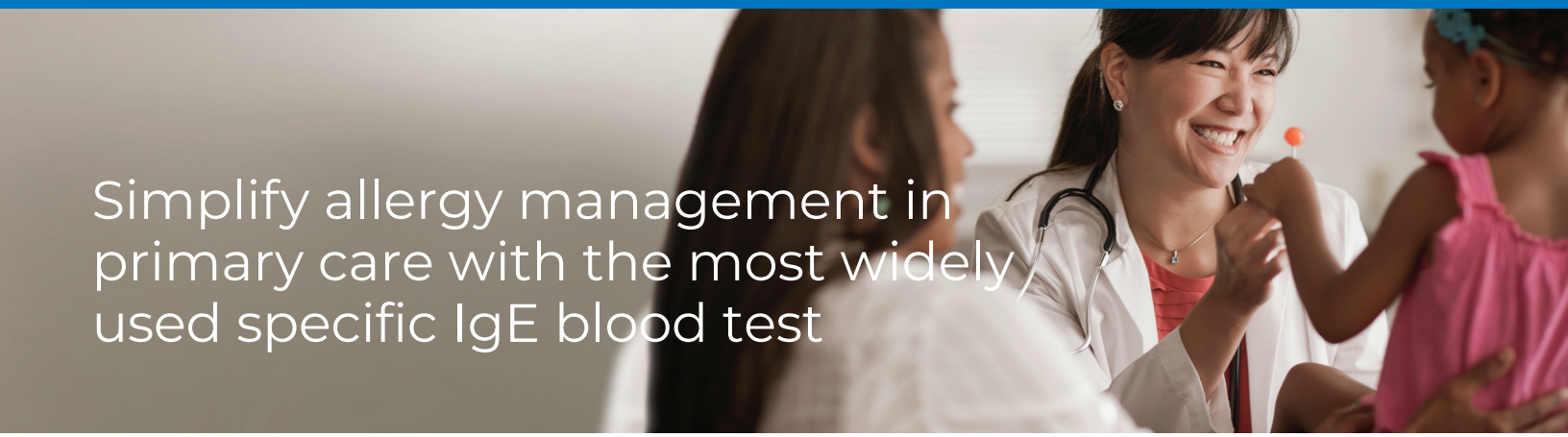

Simplify allergy management in primary care with the most widely used specific IgE blood test

Keeping your patients healthy is important to you. We can help.

A wide variety of patients present with congestion, itchy, watery eyes, coughing, wheezing, or other atopic symptoms, resulting in reduced quality of life and trial and error with multiple medications to get relief. Along with history and physical exam, Thermo Scientific™ ImmunoCAP™ Specific IgE blood testing, available at Corewell Health Reference Laboratory, is an aid in the diagnosis of IgE-mediated allergic disorders.[1]

Can identifying allergic triggers change patient management?

65% Nearly 65% of patients diagnosed with allergic rhinitis and prescribed antihistamines have symptoms that are not due to allergy.[2]

Save time and eliminate guesswork in prescribing medication with the help of ImmunoCAP Specific IgE blood testing.

ImmunoCAP Specific IgE blood testing is:

- Supported by more than 4,000 peer-reviewed publications*
- An FDA-cleared quantitative measure of specific IgE[1]
- Comparable to skin prick testing[8,9]

*data on file

Specific IgE blood testing can be considered for patients with a history of:

- asthma[10]
- recurrent or chronic rhinitis[11]
- seasonal or perennial allergy-like symptoms[3]
- recurrent otitis media[12]
- atopic dermatitis[13]

Easy

Can be performed irrespective to age, skin condition, antihistamine use, symptoms, or pregnancy status[3-5]

Reliable

Accurately identifies specific allergen sensitization in patients with confirmed allergy[6,7]

Precise

FDA-cleared quantitative detection of specific IgE antibodies, even at low levels[14]

Find out more at **allergyaidiagnostics.com**

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Ordering is Easy

Order ImmunoCAP Specific IgE blood testing from Corewell Health Reference Laboratory through your EMR system or via paper. Primary care providers and specialists can easily order this testing.

ADULT RESPIRATORY/ ENVIRONMENTAL ALLERGY PANEL

Epic Code: LAB1230548

- **Cat dander**
- **Dog dander**
- **Mouse epithelium/serum/urine**
- **Cockroach**
- **D. farina (dust mite)**
- **D. pteronyssinus (dust mite)**
- **Alternaria alternata**
- **Aspergillius fumigatus**
- **Cladosporium herbarum**
- **Penicillium chrysogenum**
- **Mugwort**
- **Ragweed (common/short)**
- **Timothy grass**
- **Birch**
- **Cottonwood/Poplar**
- **Elm**
- **Maple**
- **Oak**

CHILDHOOD RESPIRATORY/ ENVIRONMENTAL ALLERGY PANEL

Epic Code: LAB1230549

- **Cat dander**
- **Dog dander**
- **Mouse epithelium/serum/urine**
- **Cockroach**
- **D. farinae (dust mite)**
- **D. pteronyssinus (dust mite)**
- **Alternaria alternata**
- **Aspergillius fumigatus**
- **Ragweed (common/short)**
- **Timothy grass**
- **Birch**
- **Oak**

Individual Tests

Dust mites

D. farina [LAB2111486]
D. pteronyssinus [LAB2111487]

Epidermal

Cat dander [LAB2111470]
Dog dander [LAB2111484]
Mouse urine [LAB3044]

Molds

Alternaria alternata [LAB211451]
Aspergillus fumigatus [LAB701]
Cladosporium herbarum [LAB2111476]
Penicillium chrysogenum [LAB2111625]

Insects

Cockroach [LAB2111479]

Trees

Alder, grey [LAB2111659]
Birch, common silver [LAB2111661]
Cedar [LAB1230753]
Cottonwood/Poplar [LAB2111688]
Elm, American [LAB2111490]
Eucalyptus [LAB3560]
Maple [LAB2111611]
Mulberry [LAB3015]
Oak [LAB2111619]
Palm, queen [LAB1230751]
Pecan, hickory [LAB2111602]
Pine, white [LAB2111602]
Sycamore [LAB2111644]
Walnut [LAB2111653]
White ash [LAB2111455]

Weeds

Mugwort [LAB2111617]
Nettle [LAB3016]
Pigweed, common [LAB2111539]
Ragweed, short [LAB2111683]
Rough marshelder [LAB2111685]
Russian thistle [LAB2111645]
Sheep sorrel [LAB2111645]

Grasses

Bermuda grass [LAB2111460]
Johnson grass [LAB2111606]
Rye grass, perennial [LAB2111635]
Redtop, bentgrass [LAB2111634]
Timothy grass [LAB2111560]

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Allergy

Setting the standard

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

1 Step 1

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

2 Step 2

Order an ImmunoCAP Specific IgE blood test respiratory profile as an aid in diagnosis of IgE-mediated diseases.[1]

3 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

- Provide allergen avoidance plan to keep patient below symptom threshold[2]
  - –Consider reducing exposure to allergens with the highest specific IgE levels first
  - –Focus on indoor allergens since these may be easier to control[3]
- Prescribe appropriate medications, e.g. antihistamines[2]
- Follow up. If inadequate response, refer to specialist[2]

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.

D = Dust mites
Dermatophagoides farina; Dermatophagoides pteronyssinus

E = Epidermal
Cat and dog dander; mouse urine

M = Molds
Alternaria alternata; Aspergillus fumigatus; Cladosporium herbarum; Penicillium chrysogenum

I = Insects
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

*Measurement kU_A/l=kilo units of allergen per liter

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Respiratory profile result scenarios†

Specific IgE **normal** Total IgE **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
Common ragweed (short)	<0.10
Sheep sorrel	<0.10
Bahia 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	**10**

Consider patient management as if **non-allergic**

Specific IgE **elevated** Total IgE **normal**

Alternaria alternata	<0.10
Aspergillus fumigatus	<0.10
Bermuda grass	<0.10
Birch, common silver	<0.10
Cat dander	**4.01**
Cladosporium herbarum	<0.10
Cockroach, german	<0.10
Common ragweed (short)	**20.13**
D farinae	<0.10
D pteronyssinus	<0.10
Dog dander	<0.10
Elm, american	<0.10
Maple/box elder	<0.10
Cedar, mountain	<0.10
Mouse urine proteins	<0.10
Mulberry	<0.10
Oak, white	**9.27**
Pecan, hickory	<0.10
Penicillium chrysogenum	<0.10
Rough marsh elder	<0.10
Pigweed, common	<0.10
Timothy grass	<0.10
Walnut	<0.10
Total IgE	**20**

Consider patient management as if **allergic**

~30% present this way.[5] This is why it is not recommended to screen with Total IgE.[6]

Specific IgE **elevated** Total IgE **elevated**

Cedar, mountain	**0.12**
Cottonwood	**0.20**
Elm, american	<0.10
Oak, white	<0.10
Olive tree	<0.10
Mugwort	**40.34**
Pigweed, common	<0.10
Common ragweed (short)	<0.10
Sheep sorrel	<0.10
Thistle, russian	**>100**
Bermuda grass	<0.10
Bahia 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	**210**

Consider patient management as if **allergic**

Specific IgE **normal** Total IgE **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	**380**

Consider additional 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 reported in kU/l are dependent on age. Use your lab's reference range for Total IgE located on the results report.[4]

Levels of sIgE are relative to an individual patient. Some patients may have low levels of sIgE yet experience severe reactions. As in all diagnostic testing, any diagnosis or treatment plan must be made by the clinician based on test results, patient history, and knowledge of the patient.

†Official product names mentioned within this document: ImmunoCAP Allergen d1, House dust mite, ImmunoCAP Allergen d2, House dust mite, ImmunoCAP Allergen e1, Cat dander, ImmunoCAP Allergen e5, Dog dander, ImmunoCAP Allergen e72, Mouse urine proteins, ImmunoCAP Allergen g17, Bahia grass, ImmunoCAP Allergen g2, Bermuda grass, ImmunoCAP Allergen g5, Rye-grass, ImmunoCAP Allergen g6, Timothy, ImmunoCAP Allergen i6, Cockroach, German, ImmunoCAP Allergen m1, Penicillium chrysogenum, ImmunoCAP Allergen m2, Cladosporium herbarum, ImmunoCAP Allergen m3, Aspergillus fumigatus, ImmunoCAP Allergen m6, Alternaria alternata, ImmunoCAP Allergen t10, Walnut, ImmunoCAP Allergen t14, Cottonwood, ImmunoCAP Allergen t2, Grey alder, ImmunoCAP Allergen t212, Cedar, ImmunoCAP Allergen t22, Pecan, Hickory, ImmunoCAP Allergen t3, Common silver birch, ImmunoCAP Allergen t7, Oak, ImmunoCAP Allergen t70, Mulberry, ImmunoCAP Allergen t8, Elm, ImmunoCAP Allergen t1, Box-elder, ImmunoCAP Allergen t9, Olive, ImmunoCAP Allergen w1, Common ragweed, ImmunoCAP Allergen w11, Saltwort (prickly), Russian thistle, ImmunoCAP Allergen w14, Common pigweed, ImmunoCAP Allergen w16, Rough marshelder, ImmunoCAP Allergen w18, Sheep sorrel, ImmunoCAP Allergen w20, Nettle, ImmunoCAP Allergen w6, Mugwort, ImmunoCAP Total IgE

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Learn more at **thermofisher.com/ImmunoCAPsIgE**

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Reduce exposure to your allergic triggers

Indoor allergens

House dust mites[4]

- Keep house clean by vacuuming and reducing clutter
- Wash bedding weekly in hot water (130^{0}F / 60^{0}C)
- Encase mattresses, pillows, and box springs in allergen-proof coverings
- Remove from the bedroom or wash and thoroughly dry stuffed toys weekly
- Avoid using humidifier

Cockroaches[1,4,5]

- Place bait traps, or call a professional exterminator to eliminate cockroaches
- Clean up immediately after eating
- Wash dishes, vacuum, keep food and garbage in closed containers, and take out garbage regularly

Cockroaches[1,4,5] (continued)

- Don't store paper bags, newspapers, or cardboard boxes in your home
- Seal plumbing openings, cracks, and crevices
- Fix water leaks

Molds (indoor)[4]

- Clean moldy areas with fungicide or bleach
- Vent bathrooms and clothes dryers to the outside
- Use a dehumidifier or air-conditioner and clean regularly
- Fix water leaks
- Thoroughly dry clothes before storing

Rodents[1,4]

- Seal cracks and holes in home's exterior and interior

Rodents[1,4] (continued)

- Clean up immediately after eating and store trash in secure containers
- Store food in rodent-proof containers
- Fix water leaks
- Application of traps and/or low toxicity rodenticide out of reach of pets and children

Animal dander[4]

- Find pet a new home or keep outdoors
- Encase bedding and remove carpets
- Restrict furry pets from the bedroom and keep off furniture
- Use high efficiency particulate air (HEPA) filters in AC/furnace and vacuum cleaners
- Bathe pet regularly

Outdoor allergens[6]

Pollens

- Shower after working outside (wash hair, eyes, eyelashes)
- Remove clothes you've worn outside
- If high pollen counts are forecasted, start taking allergy medications before your symptoms start
- Stay indoors when pollen counts are high for pollens you are allergic to

Pollens (continued)

- Wear a microfiber mask when doing yardwork or consider hiring someone to do it
- Keep house and car windows closed and use an air conditioner
- Use HEPA filters for furnace and vacuum cleaners
- Do not hang laundry outside

Molds (outdoors)[4]

- Avoid mowing grass, handling mulch and compost, and raking leaves
- Avoid using fans that draw in outside air
- Use an air conditioner and keep windows and doors closed

If specific IgE sensitization is not detected, symptoms may be caused by non-allergic triggers[4,7]:

- ☐ Cigarette smoke
- ☐ Alcohol
- ☐ Paint/cleaning agents
- ☐ Air pollution
- ☐ Temperature change
- ☐ Perfume
- ☐ Infection
- ☐ Aerosol sprays

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Learn more at **thermofisher.com/respiratoryallergy**