



Now you can do more than *treat* their allergies.
You can **DECODE** them.

ImmunoCAP Specific IgE blood test gives you results on a panel of allergens tailored to your patients' specific region to optimize your diagnosis and treatment of allergic rhinitis (AR) this year.

Before you treat it, **ImmunoCAP** it.  **ImmunoCAP**[®]
Specific IgE blood test

Why you need to **decode** what they're saying



ALEX'S PARENTS REPORT:

- Runny nose
- Itchy, watery eyes
- Sneezing

5 missed school days



NATALIE REPORTS:

- Nasal congestion
- Cough

**Feels like I'm
"allergic to my own house"**



BRIAN REPORTS:

- Nasal congestion
- Sneezing

**Headache due to occasional
cold symptoms**

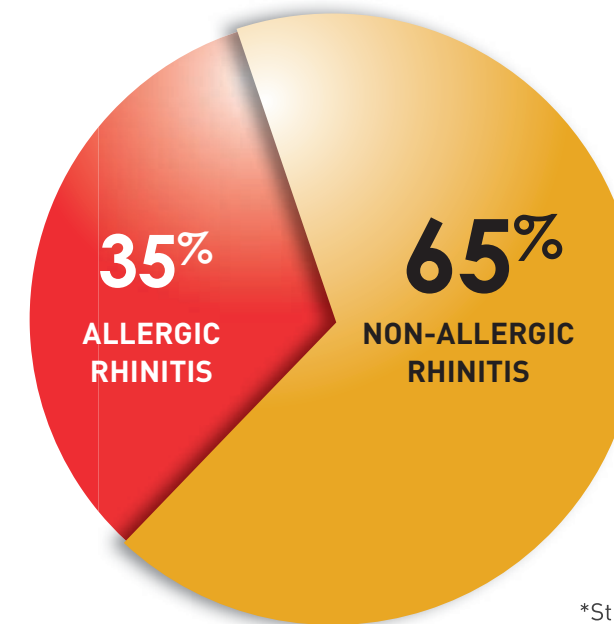
Not feeling up to exercising

The biggest symptom is the impact on their lives.

Allergic rhinitis is the **5th costliest** chronic condition in the US in overall costs.¹

Similar symptoms—different causes.²

Clinical history is not enough. With such a costly condition, ImmunoCAP can help you make sure they have the right medication.



Nearly 2/3 of patients prescribed antihistamines for their reported allergic rhinitis have symptoms that **are not** due to allergy*

*Study of 1-year managed care records among 4,643 patients who received 1 or more prescriptions for an oral antihistamine (loratadine, fexofenadine, or cetirizine).

According to the Asthma and Allergy Foundation of America,³
types of rhinitis include:

ALLERGIC RHINITIS	NON-ALLERGIC RHINITIS	INFECTIOUS RHINITIS
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Seasonal—Is a reaction to pollen from trees and grasses. Occurs mainly in the spring and fall, when pollens from trees, grasses, and weeds are airborne.

Perennial—Caused by sensitivities that are present throughout the year, such as dust mites, mold, pet dander, or cockroach residue.

Perennial/chronic in nature, can also follow exposure to irritants, eg: smoke, aerosol sprays, exhaust fumes, fragrances, paint fumes, and air pollution.⁴

Infectious rhinitis could be bacterial or viral. Usually short term but symptoms may be indistinguishable from those of other causes.

90% of allergy patients are actually multisensitized (sensitized to two or more allergens)⁵

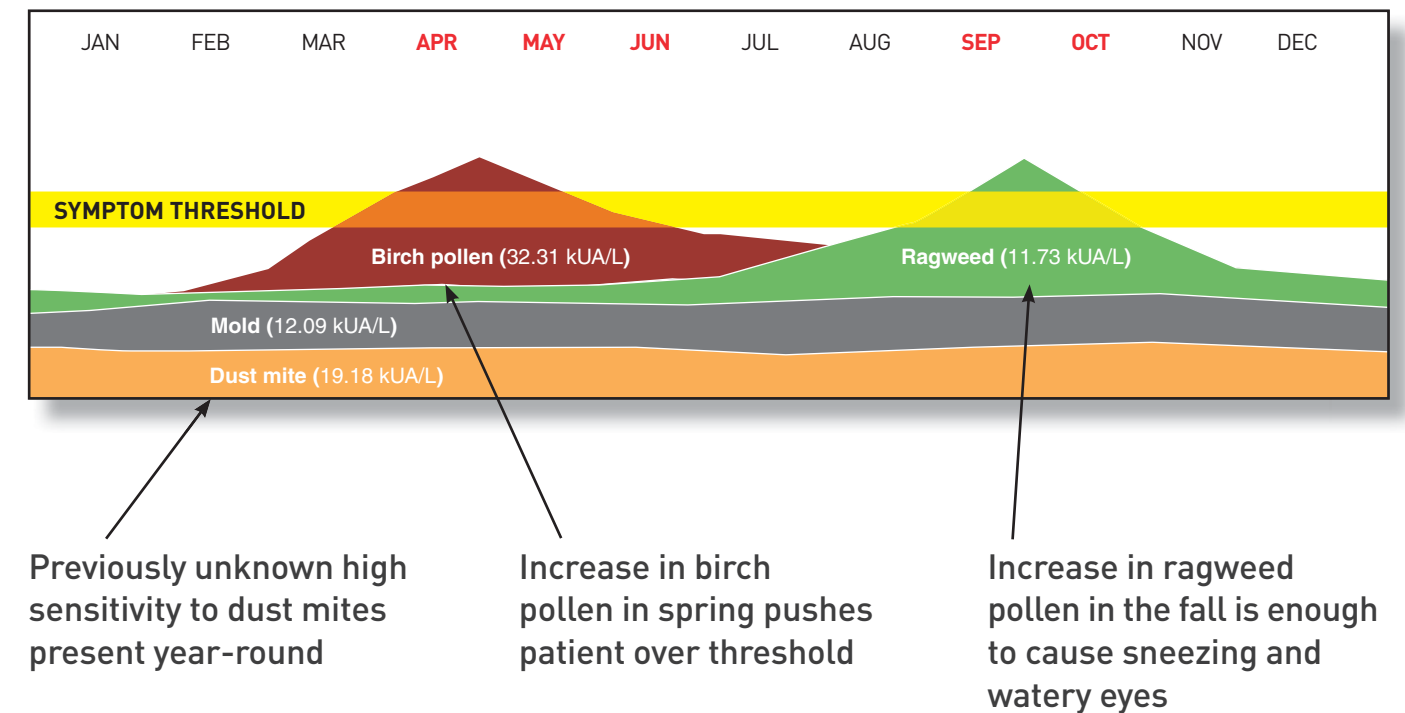


Now he knows exactly where his symptoms are coming from.

Brian's doctor recommended a multifaceted approach of medication and exposure reduction to manage his condition.

For most AR patients, the causes are cumulative.

The allergic symptom threshold is the level at which a patient's allergic sensitivities cause symptoms. A patient's threshold is often exceeded when spring allergens and perennial allergens add up to create a cumulative effect.



- Previous exposure to allergic triggers can lead to “priming,” which creates a higher likelihood of hyperresponsiveness upon repeated exposures⁶
- Managing patients' symptoms is about knowing all of their IgE sensitivities—even the ones that are hidden
- ImmunoCAP testing has been shown to decrease the expected cost of allergy treatment by **43%**⁷

Now you and your patients can manage the real causes associated with AR symptoms.



Clear results are easy to interpret and explain to patients.

Quantifiable levels of allergen antibodies (IgE) down to the kilounit (kUA/L).

Sample Test Results

LAB SERVICES				REPORT STATUS	FINAL
SPECIMEN INFORMATION			IgE CLASS	CONCENTRATION (kUA/L)	ORDERING PHYSICIAN
SPECIMEN:	0	<0.35		Below detectable limits	JONES, S.
REQUISITION:	I	0.35-0.69		Low	
COLLECTED:	10/30/12	0.70-3.49		Moderate	CLIENT INFORMATION 7200
REPORTED:	10/30/12	3.50-17.49		High	
AMENDED:	IV	17.50-49.99		Very High	
REPRINTED:	V	50.00-99.99		Very High	
	VI	=/>100		Very High	
					NEW YORK LABS. 123 MAIN ST. Suite 1100 NEW YORK, NY 12345
Test Name	IN Range	OUT Range	LV*	Reference Range	Loc
SPECIAL ALLERGY PNL-NY PULMONARY					
Maple Tree IgE	<0.35			0.00-0.35 kU/L	
Elm Tree IgE		0.94		0.70-3.49 kU/L	
Oak Tree IgE	<0.35			0.00-0.35 kU/L	
Ash Tree (White) IgE	<0.35			0.00-0.35 kU/L	
Birch Tree IgE	<0.35			0.00-0.35 kU/L	
Alternaria tenuis IgE	<0.35			0.00-0.35 kU/L	
Timothy Grass IgE	<0.35			0.00-0.35 kU/L	
Johnson Grass IgE		6.87		3.50-17.49 kU/L	
Bermuda Grass IgE		1.22		0.70-3.49 kU/L	
Rye Grass IgE		20.01		17.50-49.99 kU/L	
June/Kentucky Blue IgE	<0.35			0.00-0.35 kU/L	
Ragweed (common) IgE	<0.35	23.55		17.50-49.99 kU/L	
Orchard Grass IgE		1.23		0.00-0.35 kU/L	
Cockroach	<0.35			0.00-0.35 kU/L	
Dust mite		1.23		0.70-3.49 kU/L	

ImmunoCAP is the most widely used specific IgE test in the US among healthcare professionals, including specialists.^{8,9}

A recent *Journal of Allergy and Clinical Immunology* study supports ImmunoCAP as the standard in quantitative IgE testing and recommends against using different assays after initiating with ImmunoCAP.⁹ Accepted by most managed care plans nationwide.

- **CONVENIENT:** Results come back in a week or less, similar to a lipid panel test; simple blood draw; can be drawn in the office or at any lab
- **COMPREHENSIVE:** Reports sensitivities with a customized panel of aeroallergens tailored to your region
- **SENSITIVE:** Third-generation specific IgE blood test detects AR in up to 95% of patients¹⁰; significantly more sensitive than RAST

As in all diagnostic testing, a diagnosis should be made by the physician based on both the test results and the patient history.

Their allergies, finally **decoded**



alex

Non-allergic rhinitis
No allergies revealed

Alex had allergy-like symptoms. He was taking an antihistamine and an intranasal steroid (INS).

Alex's physician discontinued antihistamines and told his mom to stop using a chemical carpet freshener that was irritating his eyes and throat.

- Mom no longer using same carpet freshener
- Continues INS when needed
- Mom saves money by eliminating unnecessary antihistamine¹¹

AR-seasonal/perennial
Maple, birch pollen, dust mites

Now only taking antihistamines during allergy season.

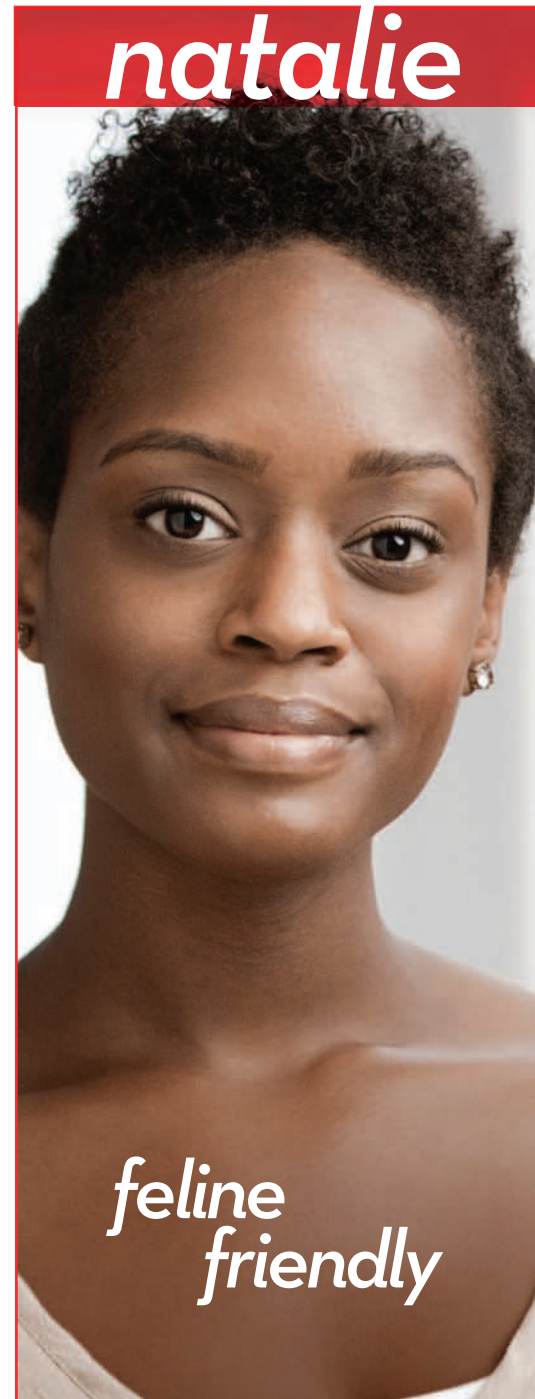
- Use of allergen-impermeable pillow case covers has substantially cut his exposure to dust mite triggers¹²

back on the bus



brian

exercising again



natalie

feline friendly

AR-perennial/seasonal
Cat dander, ragweed, mold

Natalie loves cats but **ImmunoCAP** revealed a 34.1 (very high) IgE sensitivity to mold and 3.6 (low) sensitivity to cat

- Dehumidifying home to reduce mold
- Keeping her cat, just not in the bedroom
- Taking antihistamine when necessary

In one study, patients showed an average of \$255 in savings per year on unnecessary antihistamines¹¹

Simple, easy steps to control allergies.

Trigger	<i>tip</i>
Dust mites	Pillow and mattress covers. Washing bedding in hot water (140°F). Vacuuming with HEPA filter and/or carpet removal.
Pet dander	Pet-free zones, frequent vacuuming, HEPA filters, fewer pets.
Mold	Environmental moisture control, including use of dehumidifiers, and avoidance.
Insects	Meticulous control of food debris, as well as use of pesticides or insecticides when necessary.
Pollen	Changing clothes and showering after being outdoors, keeping windows closed during high pollen counts.

decoding the allergy/asthma connection



AR-asthma
Oak, ragweed, cockroach

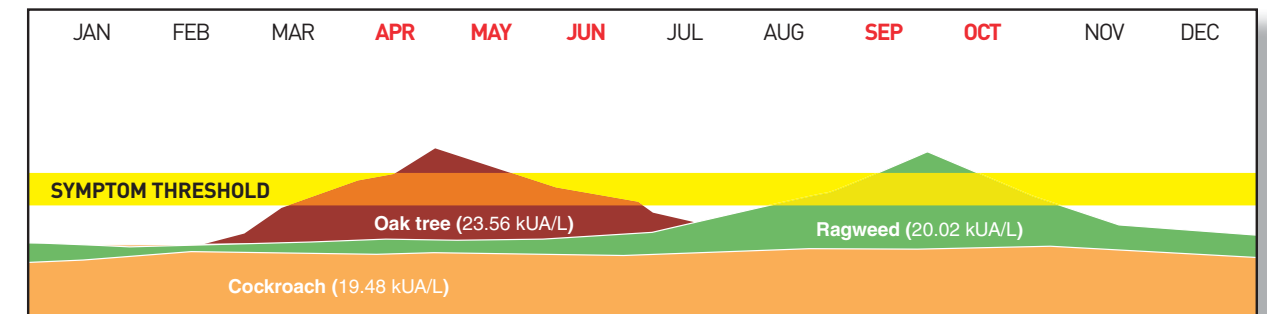
Sophie uses an ICS controller for her moderate, persistent asthma. Recently, swollen nasal passages and nasal congestion have caused concern.

Now:

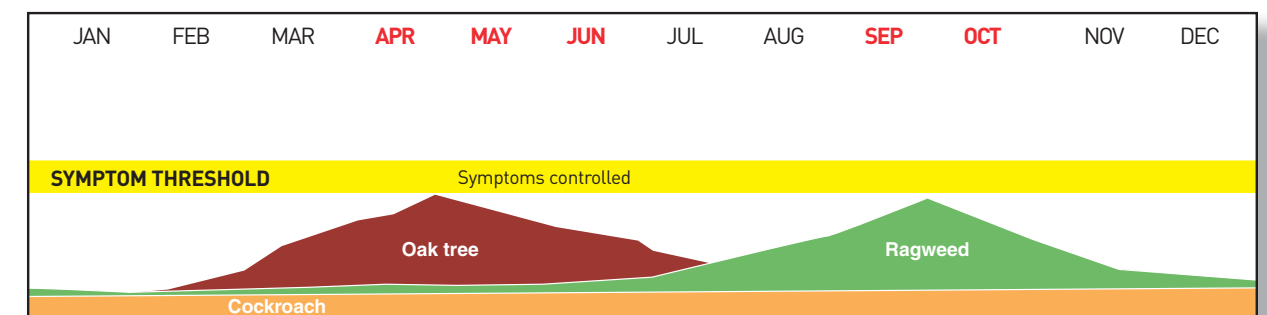
- Mom has an antihistamine on hand for when seasonal allergies hit
- A leukotriene receptor antagonist has helped both her asthma and allergic symptoms
- Exterminating twice a year whether or not pests are present

- **Up to 69% of children living in inner city areas with asthma are sensitized to cockroach**¹³
- **Current NIH guidelines recommend *in vitro* IgE testing as well as clinical history and physical exam for all patients with persistent asthma**¹⁴
- **90% of children and 60% of adults with asthma have allergic triggers**^{15,16}

Before ImmunoCAP, spring and fall were especially difficult. Sophie's asthma was exacerbated by her allergic symptoms.



After ImmunoCAP, Sophie is breathing easier year-round. New medication and precautionary measures have kept her under her allergic symptom threshold.



Better management starts with knowing. No two patients are exactly alike, but often their symptoms are similar. With rising incidences of asthma and allergy, it's more important than ever to decode your patients' symptoms and know the real cause behind their discomfort.

You can do more than *treat* their allergies.

Now you can **DECODE** them.

The key to keeping patients symptom-free is understanding your patients' allergic symptom threshold. With **ImmunoCAP**, you can effectively manage and treat, or refer your patients.

- Find out if patients' symptoms are allergic or non-allergic
- Manage and treat your patients' allergic symptom threshold
- Prevent unnecessary medications and unscheduled doctor visits
- Reduce costs associated with absenteeism and lost productivity at work or school



Before you treat it, **ImmunoCAP** it. Visit decodeallergies.com/physicians

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1. Tran NP, Vickery J, Blaiss MS. Management of Rhinitis: allergic and non-allergic. *Allergy Asthma Immunol Res.* 2011;3(3):148-156. 2. Szeinbach SL, Williams B, Muntendam P, et al. Identification of allergic disease among users of antihistamines. *J Manag Care Pharm.* 2004;10(3):234-238. 3. Asthma Allergy Foundation of America. Web site: accessed November 1, 2012. <http://www.aafa.org/display.cfm?id=9&sub=18&cont=239>. 4. American College of Allergy, Asthma & Immunology. Web site: accessed November 6, 2012. <http://www.acaai.org/allergist/allergies/types/rhinitis/Pages/default.aspx>. 5. Ciprandi G, Alesina R, Ariano R, et al. Characteristics of patients with allergic polysensitization; the polismail study. *Eur Ann Allergy Clin Immunol.* 40(3); 2008: 77-83. 6. Sin B, Togias A. Pathophysiology of allergic and nonallergic rhinitis. *Proc Am Thorac Soc.* 2011; 8(1):106-114. 7. Zethraeus N, Peterson CJ, Dozzi M, et al. Health care cost reduction resulting from primary care allergy testing in children in Italy. *Journal of Pediatrics.* 2010;36:1-7. 8. Cox L, William B, Sicherer S, et al. Pearls and pitfalls of allergy diagnostic testing: report from the American College of Allergy, Asthma and Immunology/American Academy of Allergy, Asthma and Immunology Specific IgE Test Task Force. *Ann Allergy Asthma Immunol.* 2008;101:580-592. 9. Wang J, Godbold JH, Sampson HA. Correlation of serum allergy (IgE) tests performed by different assay systems. *J Allergy Clin Immunol.* 2008;1219-1224. 10. Johansson SG. ImmunoCAP specific immunoglobulin E test: tool for research and allergy diagnosis. *Expert Rev Mol Diag.* 4(3). 2004:89-95. 11. Kwong KYC, Eghrari-Sabet JS, Mendoza GR, et al. The benefits of specific Immunoglobulin e testing in the primary care setting. *Am Manag Care.* 2011;17:S447-S459. 12. National Institutes of Health. Web site: accessed November 6, 2012: <http://www.nlm.nih.gov/medlineplus/ency/article/000814.htm>. 13. Le Bras M, Jones SM. Inner City Asthma Study: relationships among sensitivity, allergen exposure, and asthma morbidity. *Pediatrics.* 2006;118:S11-S12. 14. National Heart Lung and Blood Institute. National Asthma Education and Prevention Program. Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma. Full Report 2007. US Department of Health and Human Services. National Institutes of Health. National Heart Lung and Blood Institute. 15. Allen-Ramey F, Schoenwetter WF, Weiss TW, et al. Sensitization to common allergens in adults with asthma. *J Am Board Fam Pract.* 2005;18(5):434-439. 16. Host A, Halcken S. The role of allergy in childhood asthma. *Allergy.* 2000;55:600-608.

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