

## Allergy Testing - Blood

Date of Origin: 06/2003

Last Review Date: 09/23/2020

Effective Date: 10/01/2020

Dates Reviewed: 05/2004, 04/2005, 05/2006, 05/2007, 05/2008, 12/2009, 03/2011, 03/2012, 12/2012, 11/2013, 09/2014, 09/2015, 09/2016, 09/2017, 09/2018, 09/2019, 10/2019, 07/2020, 09/2020

Developed By: Medical Necessity Criteria Committee

### I. Description

The RAST (Radioallergosorbent test) is a laboratory test performed on blood to measure the levels of allergy antibody, or IgE, produced when blood is mixed with a series of allergens in a laboratory. IgE antibodies are present in the blood only if there is a true allergic reaction. The RAST is a method of demonstrating allergic reactions and should only be performed on patients who cannot undergo skin testing or when skin test results are uncertain.

The ALCAT (Antigen leukocyte cellular antibody testing) automated test measures whole blood leukocytes by a process that identifies allergens which cause an increase in leukocyte activity related to food and food additives. One blood sample is used to perform an assay for over 100 foods and substances. This test is of uncertain efficacy and is lacking evidence to support the clinical value.

### II. Criteria: CWQI HCS-0003A

- A. RAST, MAST, PRIST, RIST, FAST, VAST, ELISA, ImmunoCap (or other modifications of RAST) will be covered to plan limitations for clinically significant allergy symptoms when percutaneous testing of IgE-mediated allergies cannot be done for inhaled or food allergies due to **1 or more** of the following conditions:
  - a. Children age of 5 and under; or patients unable to cooperate with skin testing
  - b. Pregnant women
  - c. Direct skin testing not possible due to extensive dermatitis, dermographism, ichthyosis, generalized eczema or the necessary continued use of H-1 blockers (*antihistamines*), or in the rare patient with a persistent unexplained negative histamine control
  - d. Patients who have been receiving long-acting antihistamines, tricyclic antidepressants, beta-blockers or medications that may put them at undue risk if the medication(s) are discontinued.
  - e. As adjunctive laboratory tests for disease activity of allergic bronchopulmonary aspergillosis and certain parasitic diseases
  - f. Clinical history suggests an unusually greater risk of anaphylaxis from skin testing than usual (*e.g., when an unusual allergen is not available as a licensed skin test extract*)
  - g. Results of direct skin testing are inconclusive
  - h. Uncooperative patient with mental or physical impairments
  - i. To determine cross-reactivity between insect venom as an alternative to skin testing

- B. Eastern Oregon Coordinated Care Organization (EOCCO) considers total serum IgE testing medically necessary for the diagnosis or management of **1 or more** of the following:
- a. Asthma
  - b. Allergic bronchopulmonary aspergillosis
  - c. Allergic rhinitis
  - d. Atopic dermatitis
  - e. Eczema
  - f. Immune deficiency disease i.e. Wiskott-Aldrich syndrome
  - g. IgE myeloma
  - h. Pemphigoid
- C. EOCCO will **NOT** cover IgG RAST allergy testing as there is no evidence that IgG antibodies are responsible for delayed allergic symptoms or intolerance to foods (CPT 86001).
- D. EOCCO will **NOT** cover ALCAT automated food testing as it is considered investigational. There is a lack of evidence to support its clinical value.

### III. Information Submitted with the Prior Authorization Request:

1. History and physical from treating physician
2. Results of prior allergy testing

### IV. CPT or HCPC codes covered:

Codes	Description
86003	Allergen specific IgE; quantitative or semiquantitative, each allergen
86005	Allergen specific IgE; qualitative, multiallergen screen (dipstick, paddle or disk)
86008	Allergen specific IgE; quantitative or semiquantitative, recombinant or purified component, each
82785	Gammaglobulin (immunoglobulin); IgE
83516	Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; qualitative or semiquantitative, multiple step method

### V. CPT or HCPC codes NOT covered:

Codes	Description
86001	Allergen specific IgG quantitative or semiquantitative, each allergen

### VI. Annual Review History

Review Date	Revisions	Effective Date
12/2012	Annual Review: Added table with review date, revisions, and effective date.	01/01/2013
11/2013	Annual Review: No changes	11/2013
09/2014	Annual Review: No changes	09/2014
09/2015	Added ICD-9 and ICD-10 Codes, added Medicare Reference	09/10/2015
09/2016	Annual Review: Removed ICD-9 codes,	09/28/2016

09/2017	Annual Review: Added section II.B criteria for total IgE testing, updated to new template	09/27/2017
09/2018	Annual review: added section II.B. e-g	9/26/2018
09/2019	Annual Review: No changes	10/01/2019
10/2019	Update: added missing code 86008	
07/2020	Update: Moved cpt code 83516 from noncovered to covered table	07/27/2020
09/2020	Annual Review: No changes	10/01/2020

## VII. References

- American Academy of Allergy, Asthma and Immunology (AAAAI). Work group report: allergy diagnosis in clinical practice. Nov 2006. Accessed on September 27, 2017 at: <https://www.aaaai.org/conditions-and-treatments/asthma>
- Atkins D, Leung D. Diagnosis of allergic disease. Chapter 131 Nelson Textbook of Pediatrics, 17<sup>th</sup> edition, Elsevier 2004.
- Bernstein, IL, Li, JT, Bernstein, DI, et al. Allergy diagnostic testing: an updated practice parameter. Ann Allergy Asthma Immunol. 2008 Mar;100(3 Suppl 3): S1-148. PMID: 18431959 accessed March 26, 2012 at: <http://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Practice%20and%20Parameters/allergydiagnostictesting.pdf>
- Blaiss M. Best practice of medicine-allergic reactions. Patient guide. March 2002.
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- Emanuel IA. In vitro testing for allergy diagnosis. Otolaryngol Clin North Am. 2003 Oct;36(5):879-893.
- Guidance for Industry and FDA. Issued August 22, 2001; US Food and Drug Administration.
- Li JT, Allergy testing. American Family Physician. August 15, 2002.
- Omenaas E1, Bakke P, Elsayed S, Hanoa R, Gulsvik A., Total and specific serum IgE levels in adults: relationship to sex, age and environmental factors. Clin Exp Allergy. 1994 Jun;24(6):530-9.
- Ownby DR. Allergy testing: in vivo versus in vitro. Pediatr Clin North Am. 1988 Oct; 35(5):995-1009.
- Radioallergosorbent Test (RAST) Methods for Allergen-Specific Immunoglobulin E (IgE) 510(k)s; Final
- National Institutes of Health (NIH)/National Heart, Lung, and Blood Institute (NHLBI). National Asthma Education and Prevention Program expert panel report 3: guidelines for the diagnosis and management of asthma. 2007 Jul. Accessed on February 22, 2011 at: <http://www.nhlbi.nih.gov/guidelines/asthma/>
- Reisman RE. Allergy to stinging insects. In: Grammer LC, Greenberger PA, editors. Patterson's allergic diseases, 7th ed. Lippincott, Williams & Wilkins; 2009.
- Physician Advisors

## Appendix 1 – Applicable Diagnosis Codes:

Codes	Description
D82	Immunodeficiency associated with other major defects
D82.0	Wiskott-Aldrich syndrome
D82.4	Hyperimmunoglobulin E [IgE] syndrome
J30.0	Vasomotor rhinitis
J30.1	Allergic rhinitis due to pollen
J30.2	Other seasonal allergic rhinitis
J30.5	Allergic rhinitis due to food
J30.81	Allergic rhinitis due to animal (cat) (dog) hair and dander
J30.89	Other allergic rhinitis

K52.2	Allergic and dietetic gastroenteritis and colitis
L12	Pemphigoid
L12.0	Bullous pemphigoid
L12.8	Other pemphigoid
L12.9	Pemphigoid, unspecified
L20	Atopic dermatitis
L20.0	Besnier's prurigo
L20.81	Atopic neurodermatitis
L20.82	Flexural eczema
L20.84	Intrinsic (allergic) eczema
L20.89	Other atopic dermatitis
L20.9	Atopic dermatitis, unspecified
L22	Diaper dermatitis
L23.0	Allergic contact dermatitis due to metals
L23.81	Allergic contact dermatitis due to animal (cat) (dog) dander
L24.0	Irritant contact dermatitis due to detergents
L24.1	Irritant contact dermatitis due to oils and greases
L24.2	Irritant contact dermatitis due to solvents
L24.81	Irritant contact dermatitis due to metals
L25.0	Unspecified contact dermatitis due to cosmetics
L25.1	Unspecified contact dermatitis due to drugs in contact with skin
L25.2	Unspecified contact dermatitis due to dyes
L25.3	Unspecified contact dermatitis due to other chemical products
L25.4	Unspecified contact dermatitis due to food in contact with skin
L25.5	Unspecified contact dermatitis due to plants, except food
L25.8	Unspecified contact dermatitis due to other agents
L25.9	Unspecified contact dermatitis, unspecified cause
L27.2	Dermatitis due to ingested food
L30.3	Infective dermatitis
L30.8	Other specified dermatitis
L30.9	Dermatitis, unspecified
L50.0	Allergic urticaria
L50.6	Contact urticaria
L50.8	Other urticaria
L50.9	Urticaria, unspecified
L58.9	Radiodermatitis, unspecified
T36.0X1A	Poisoning by penicillins, accidental (unintentional), initial encounter
T36.0X2A	Poisoning by penicillins, intentional self-harm, initial encounter
T36.0X3A	Poisoning by penicillins, assault, initial encounter
T36.0X4A	Poisoning by penicillins, undetermined, initial encounter
T36.1X1A	Poisoning by cephalosporins and other beta-lactam antibiotics, accidental (unintentional), initial encounter
T36.1X2A	Poisoning by cephalosporins and other beta-lactam antibiotics, intentional self-harm, initial encounter
T36.1X3A	Poisoning by cephalosporins and other beta-lactam antibiotics, assault, initial encounter
T36.1X4A	Poisoning by cephalosporins and other beta-lactam antibiotics, undetermined, initial encounter

T50.995A	Adverse effect of other drugs, medicaments and biological substances, initial encounter
T78.2XXA	Anaphylactic shock, unspecified, initial encounter
T78.3XXA	Angioneurotic edema, initial encounter
T78.40XA	Allergy, unspecified, initial encounter
Z91.010	Allergy to peanuts
Z91.011	Allergy to milk products
Z91.012	Allergy to eggs
Z91.013	Allergy to seafood
Z91.018	Allergy to other foods
Z91.038	Other insect allergy status

## Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

Jurisdiction(s): 5, 8	NCD/LCD Document (s):
National Coverage Determination (NCD) for Food Allergy Testing and Treatment (110.11)	
<a href="https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=266&amp;ncdver=1&amp;DocID=110.11&amp;kq=true&amp;kq=true&amp;bc=gAAAABAAAAAAAA%3d%3d&amp;">https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=266&amp;ncdver=1&amp;DocID=110.11&amp;kq=true&amp;kq=true&amp;bc=gAAAABAAAAAAAA%3d%3d&amp;</a>	

NCD/LCD Document (s):

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC