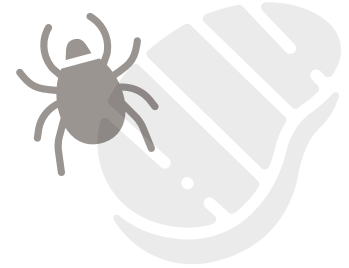


Discover the connection







ImmunoCAP™ Alpha-Gal Interpretation Guide

Test results should be interpreted in conjunction with patient history, symptoms and physical exam to assist in the formulation of a diagnosis and management plan.









Step 1:	Patients present with some or all of the following: urticaria, GI symptoms, anaphylaxis, angioedema ^{5,6}
Step 2:	Reaction time is unclear or delayed reaction suspected
Step 3:	Mammalian (red) meat or red meat byproducts consumption suspected
Step 4:	Order ImmunoCAP alpha-Gal profile (beef + lamb + pork + alpha-Gal) and ImmunoCAP Total IgE **
Step 5:	Consider the results interpretation shown here to determine next steps based on detected sensitizations (see page two for management consideration)

Consider tryptase testing with severe reaction: measure baseline tryptase to assess for potential of severe reactions and possible mastocytosis^{3,4}



<p>Test Result^{1,2}</p> <p> </p> <p>α-Gal Red Meat</p>	<p>If clinical symptoms are present, consider IgE mediated mammalian (red) meat allergy to both alpha-Gal (α-Gal) and standard protein-mediated allergy</p>
<p>Test Result^{1,2}</p> <p> </p> <p>α-Gal Red Meat</p>	<p>If clinical symptoms are present, consider standard protein mediated meat allergy due to primary sensitization to one or more red meat allergens (beef, lamb, pork)</p>
<p>Test Result^{1,2}</p> <p> </p> <p>α-Gal Red Meat</p>	<p>If there are no clinical symptoms and no detection of standard protein-mediated or alpha-Gal sensitizations, consider other clinical factors or findings</p>

** Measure to assess ratio of total to specific IgE
Some experts recommend: If antibodies to alpha-Gal are greater than or equal to 2 kUA/L or more than 2% of total IgE, this makes the diagnosis very likely⁷

Management Considerations¹⁻³

<p>Test Result</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  α-Gal </div> <div style="text-align: center;">  Red Meat </div> </div>	<ul style="list-style-type: none"> • Avoidance of all mammalian (red) meats • Possible need to avoid milk, gelatin containing food and certain medications • Consider prescribing epinephrine auto injector
<p>Test Result</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  α-Gal </div> <div style="text-align: center;">  Red Meat </div> </div>	<ul style="list-style-type: none"> • Avoidance of specific sensitized mammalian meat • Consider prescribing epinephrine auto injector • May need to consider testing cross reactive proteins (e.g. milk, pork-cat syndrome)³
<p>Test Result</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  α-Gal </div> <div style="text-align: center;">  Red Meat </div> </div>	<ul style="list-style-type: none"> • Consider other clinical factors or findings • Oral food challenge (OFC) with a specialist may be recommended. High likelihood that patient may pass OFC

Risk of reactions in the alpha-Gal syndrome¹

 Higher risk  Lower risk	Food	Medications/Biologic Therapies
	Beef, pork, lamb, innards	Cetuximab
	Dairy	Gelatin plasma expanders
	Gelatin-containing foods	Anti-venom (e.g. CroFab)
		Bovine/porcine heart valves
		Gelatin-containing vaccines (e.g. Zostavax, MMR)
		Pancreatic enzyme replacement (e.g. pancrelipase)
		Heparin
		Gelcaps

Adapted from Platts-Mills Diagnosis and management of patients with alpha-Gal Syndrome JACI IP 2020. Journal of Allergy and Clinical Immunology: In Practice. 2020;8(1).

Find out more at allergyaidiagnostics.com

1. Platts-Mills Diagnosis and management of patients with alpha-Gal Syndrome JACI IP 2020. Journal of Allergy and Clinical Immunology: In Practice. 2020;8(1). 2. Jackson WL. Mammalian meat allergy following a tick bite: a case report. Oxf Med Case Reports. 2018 Feb 21;2018(2):omx098. doi:10.1093/omcr/omx098. PMID: 29492269; PMCID: PMC5822700 3. Matricardi PM, et al EAACI Molecular Allergy User's Guide. Pediatr Allergy Immunol 2016; 27: (suppl23): p117/118 2016 4. Carter M, Ruiz-Esteves K, Workman L, Lieberman P, Platts-Mills T, Metcalfe D. Identification of alpha-gal sensitivity in patients with a diagnosis of idiopathic anaphylaxis. Allergy. 2017;73(5):1131-1134. 5. Alpha-gal Allergy [Internet]. Centers for Disease Control and Prevention, Centers for Disease Control and Prevention; 2019. Retrieved June 2020. <https://www.cdc.gov/ticks/alpha-gal/index.html> 6. Kennedy JL, Stallings AP, Platts-Mills TA, Oliveira WM, Workman L, James HR, et al. Galactose-alpha-1,3-galactose and delayed anaphylaxis, angioedema, and urticaria in children. Pediatrics. 2013 May;131(5):e1545-52.