

Make a precise assessment

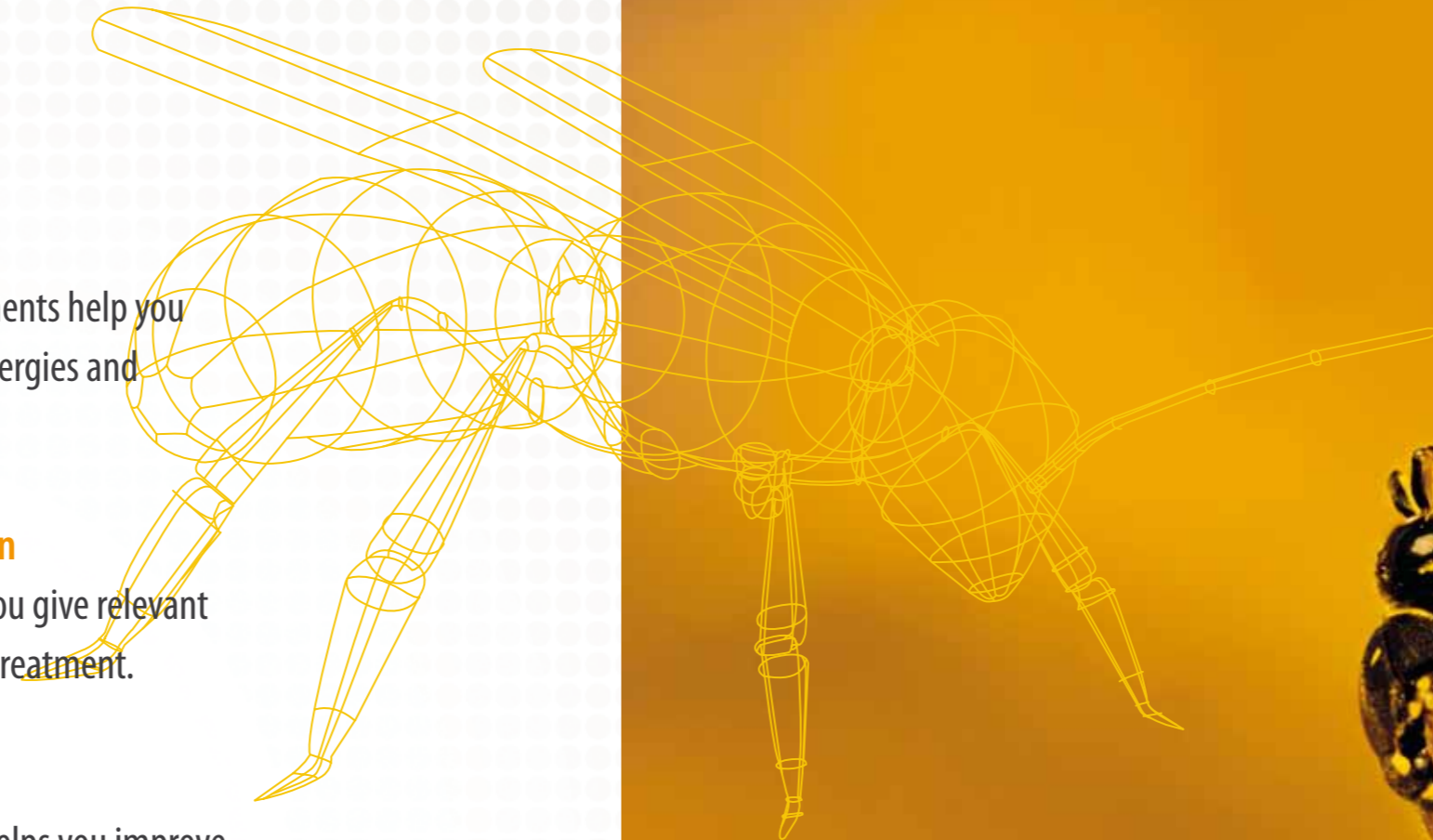
ImmunoCAP® Allergen components help you differentiate between “true” allergies and cross-reactivity.

Make a substantiated decision

A better differentiation helps you give relevant advice and define the optimal treatment.

Make a difference

More informed management helps you improve the patient’s well-being and quality of life.



References: 1. Biló B et al & EAACI Interest Group on Insect Venom Hypersensitivity. *Diagnosis of Hymenoptera venom allergy. Allergy* 2005;60: 1339-1349. 2. Bonifazi F et al & EAACI Interest Group on Insect Venom Hypersensitivity. *Prevention and treatment of hymenoptera venom allergy: guidelines for clinical practice. Allergy* 2005;60: 1459-1470. 3. Müller U. et al, Hymenoptera venom allergy: analysis of double positivity to honey bee and Vespula venom by estimation of IgE antibodies to species-specific major allergens Api m 1 and Ves v 5. *Allergy* 2009;64:543-548. 4. Mittermann I et al. Recombinant allergen-based IgE testing to distinguish bee and wasp allergy. *J Allergy Clin Immunol* 2010;125:1300-1307. 5. Hofman SC et al. Added value of IgE detection to rApi m 1 and rVes v 5 in patients with Hymenoptera venom allergy. *J Allergy Clin Immunol* 2011;1: 265-267. 6. Seismann H et al. Recombinant Phospholipase A1 (Ves v 1) from yellow jacket venom for improved diagnosis of Hymenoptera venom hypersensitivity. *Clin Mol Allergy* 2010; 8:7. 7. Jin C et al. Reassessing the role of hyaluronidase in yellow jacket venom allergy. *J Allergy Clin Immunol* 2011;125:184-190. 8. Caruso B. Evaluation of the IgE cross-reactions among vespid venoms. A possible approach for the choice of immunotherapy. *Allergy* 2007; 62: 561–564. 9. Rueff F et al. Predictors of severe systemic anaphylactic reactions in patients with Hymenoptera venom allergy: Importance of baseline serum tryptase – a study of the EAACI Interest group on Insect venom Hypersensitivity. *J Allergy Clin Immunol* 2009;124:1047-1054. 10. Guerti K et al. Wasp Venom-Specific IgE: Towards a New Decision Threshold? *J Investig Allergol Clin Immunol* 2008;18(4):316-323. 11. Goldberg R et al. Timing of venom skin tests and IgE determinations after insect sting anaphylaxis. *J Allergy Clin Immunol* 1997; 100: 182-184.

52-5108-79 935-2100 1105 heart.se

PRECISE RESULTS FOR SAFE AND BETTER DECISIONS

Fill the diagnostic gap in bee and wasp venom allergy



For more information visit our website
www.phadia.com



Take diagnosis and management of bee and wasp allergic patients to a whole new level

Resolve double positivity with CCD-free recombinant components

- Many bee and wasp (hymenoptera) allergic patients have positive tests for both venoms (double positivity) but clinical reaction only to one of the insects. In most cases this is due to specific IgE to Cross-reactive Carbohydrate Determinants (CCDs).^{1,2}
- CCD-free recombinant components can help differentiate if double positive venom extract tests are due to:
 - true co-sensitization to bee and wasp allergens¹⁻⁴
 - CCD-dependent cross-reactivity between venoms¹⁻⁴

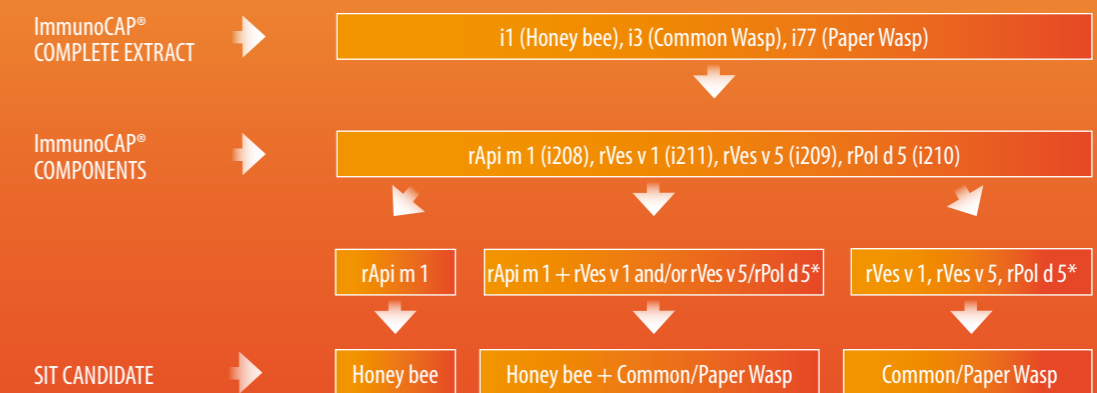
Differentiate bee and wasp allergy

- Test with complete natural venom extracts for highly efficient and sensitive detection of bee and wasp venom sensitization (regardless of component recognition profile).^{1,2}
- Test with rApi m 1, rVes v 1, rVes v 5/rPol d 5 to discriminate between bee and wasp venom sensitization in cases of double-positivity to the complete venom extracts.^{1,3-7}
- Marker for honey bee: rApi m 1^{1,3-5}
- Markers for wasps: *Vespula*: rVes v 1^{6,7}, rVes v 5^{1,3-7} *Polistes*: rPol d 5^{1,8}
- Marker for cross-reactivity between several venom allergen components: CCD^{1,2}

Improve patient management

- Indications for SIT are based on documented true sensitization to the respective offending insect.²
- Selection of correct venom(s) for SIT treatment should be based on identification and inclusion of patients sensitized to true venom allergens. Recombinant venom components provide this information and exclude CCD cross-reactivity.²
- Detailed risk assessment and appropriate treatment of venom allergic patients improves their quality of life.^{1,2}
- Baseline tryptase should be determined in all venom allergic patients before start of SIT, since patients with elevated tryptase levels are at a higher risk of severe reactions.^{1,2,9}

Both complete extracts and recombinant components are needed for a precise patient assessment



RECOMMENDED TESTS:

ImmunoCAP® Tryptase
Measure tryptase baseline levels before SIT to assess risk for severe reactions

MUXF3 CCD o214 (from Bromelain)
– Pure CCD containing only the MUXF3 carbohydrate epitope
– Cross-reactivity marker for CCDs

*rPol d 5: Common especially in the Mediterranean areas.



Did you know that?

- CCDs with the same structure are present on several venom allergens both in bee (e.g. Api m 1; Phospholipase A2 and Api m 2; hyaluronidase) and wasp (Ves v 2; hyaluronidase). IgE antibodies to CCDs therefore cause double test positivity to bee and wasp venom extracts but rarely have clinical relevance.^{1,2}
- Cross-reactivity:
 - strong within Vespidae venoms (different wasps, including paper wasps).¹⁻³
 - very limited between bee and wasp protein parts.¹⁻⁷
- Cross-reactivity between bee and wasp hyaluronidases (Api m 2 and Ves v 2) is mainly due to CCD.⁷
- There is no cross-reactivity between recombinant (CCD-free) Phospholipase A2 (rApi m 1) in honey-bee and recombinant Phospholipase A1 (rVes v 1) in wasp.¹⁻³
- Venom allergic patients can get severe reactions even with very low venom sIgE levels (between 0.1 and 0.35 kU_A/l).¹⁰
- Blood samples for testing should be taken at the time of reaction, there is no need to wait. If the test result is negative and an IgE-mediated reaction is still strongly suspected, draw a new sample and repeat the test at 5 to 6 weeks after reaction, since venom-specific IgE may increase also after a sting.¹¹