#1560 - Limited clinical utility of a panel of routine honeybee venom components

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Introduction
Previous reports suggest the usefulness of rApi m 5 and rApi m 10 IgE testing for diagnosis of honeybee venom allergy. We sought to evaluate the diagnostic utility of this testing in a routine clinical laboratory setting.

Objectives
In this prospective multi-centre study, we included 88 patients with established honeybee venom (HBV) allergy. Diagnosis of HBV allergy was based on history, skin test results, and allergen-specific IgE levels to HBV. IgE reactivity to rApi m 1, rApi m 5 and rApi m 10 was analysed by ImmunoCAP (CAP) and to rApi m 1 with Immulite (LITE) immunoassays. We also included 41 healthy control subjects.

Results
The diagnostic sensitivity of rApi m 1, rApi m 5 and rApi m 10 CAP panel was 84.1% and this was lower than rApi m 1 LITE alone, which showed the diagnostic sensitivity of 87.5%. The diagnostic sensitivity of rApi m 1 alone was only 71.6% (P=0.009). Overall, 14 patients that tested negative for rApi 1 with CAP were positive with LITE rApi m 1, but none of the patients that tested negative with LITE rApi m 1 were positive with CAP rApi m 1. The specificity of rApi m 1, rApi m 5 and rApi m 10 CAP 97.6%, 100% and 97.6%, respectively, and the specificity of rApi m 1 LITE was 95.1%.

Conclusions
The clinical utility of the commercially available panel of HBV allergen components is limited, due to low diagnostic sensitivity.