

Endogenous allergenicity – clinical aspects

Philippe Eigenmann, M.D.
Geneva University Children's Hospital



UNIVERSITÉ DE GENÈVE



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10 min. later



**IgE-mediated
Food allergy**



2 hours later





Chronic symptoms



Food Allergy

IgE- mediated

-Immediate type reactions
-Anaphylaxis

Eosinophilic diseases of the GI tract

-Eosinophilic esophagitis
-Proctocolitis

Food protein-induced enterocolitis

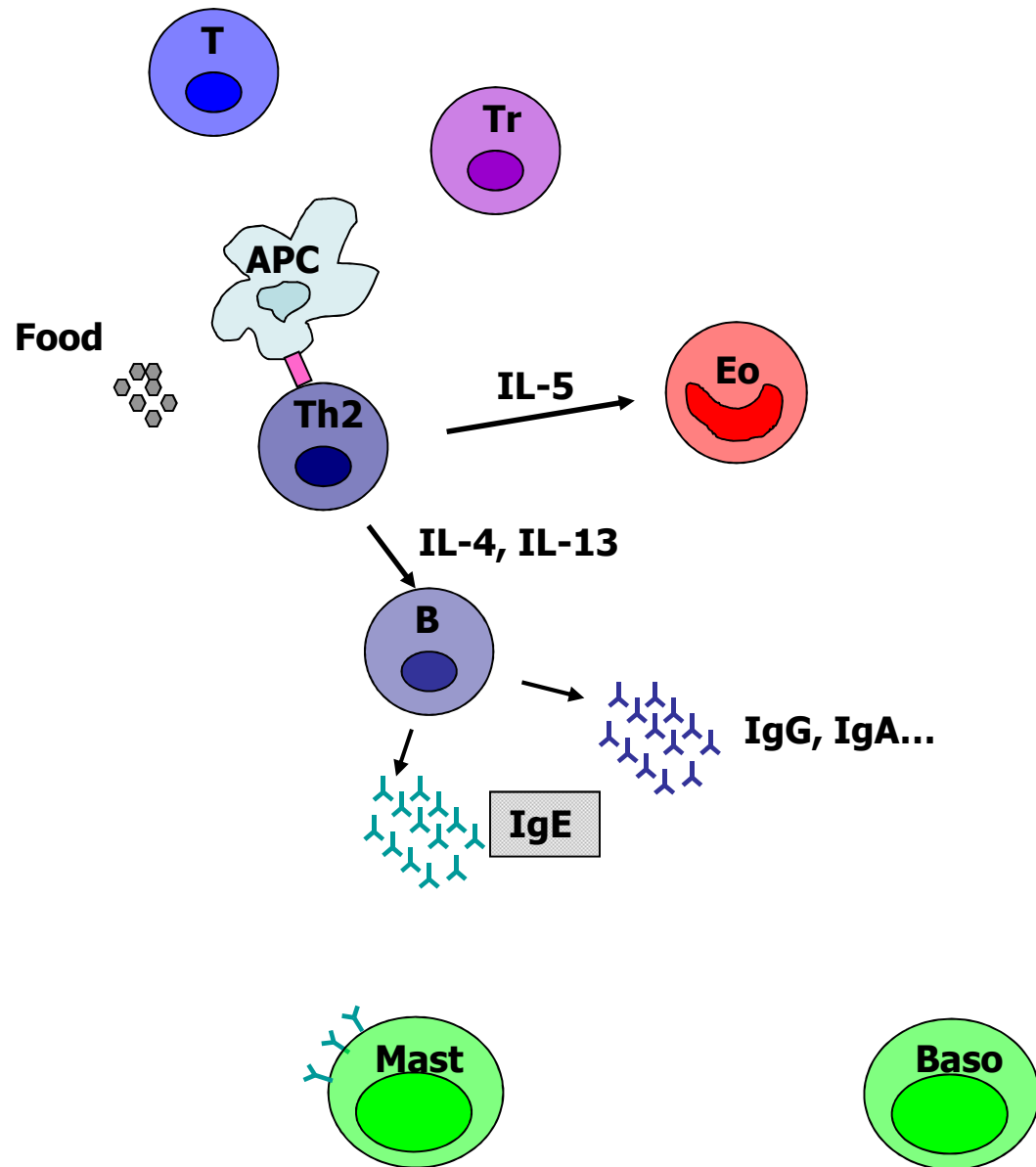
Non IgE-mediated

Gastrointestinal food allergy

Celiac disease

Enteropathies

Intolerances



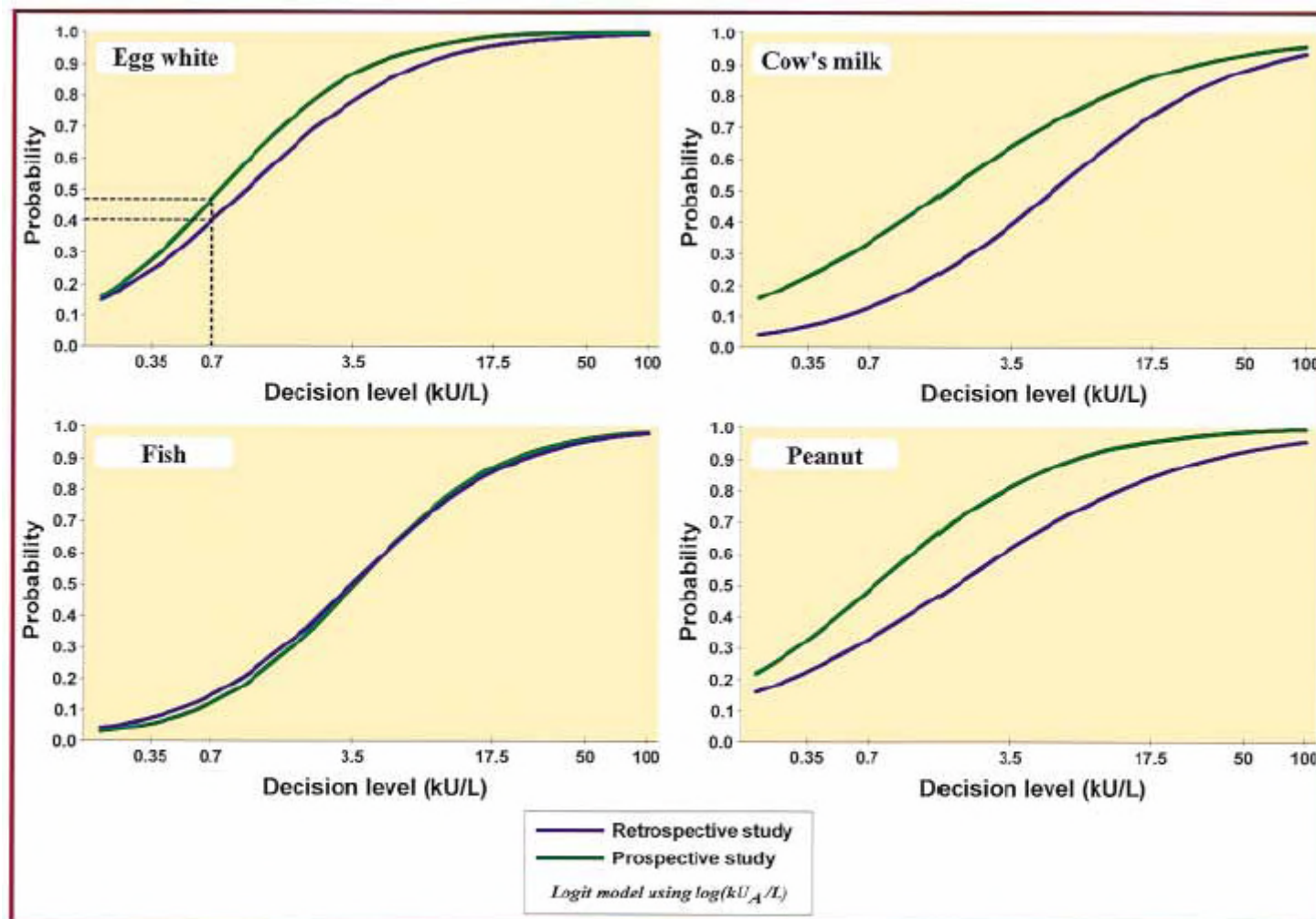
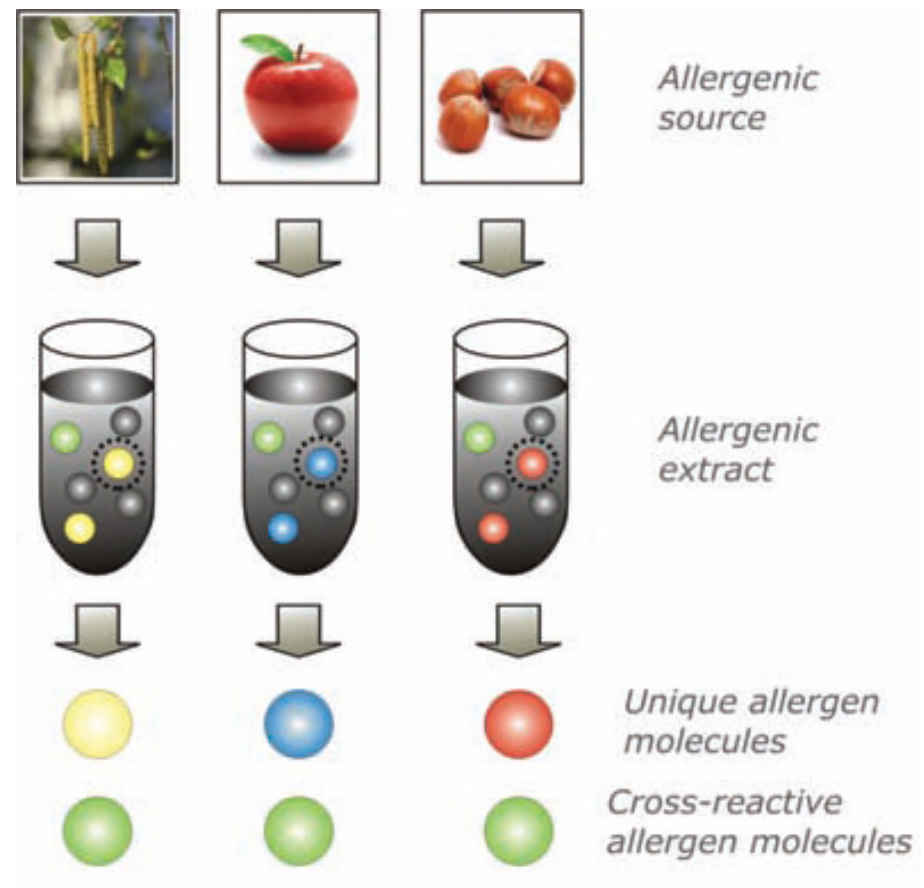


FIG 1. Probability of reacting to a food at a given IgE value.

Component-resolved diagnosis, or molecular testing

Component testing

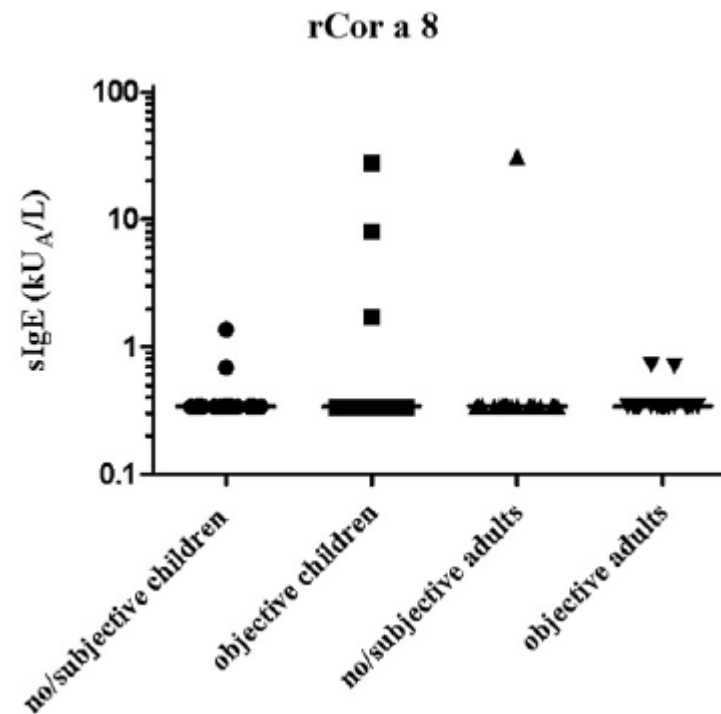
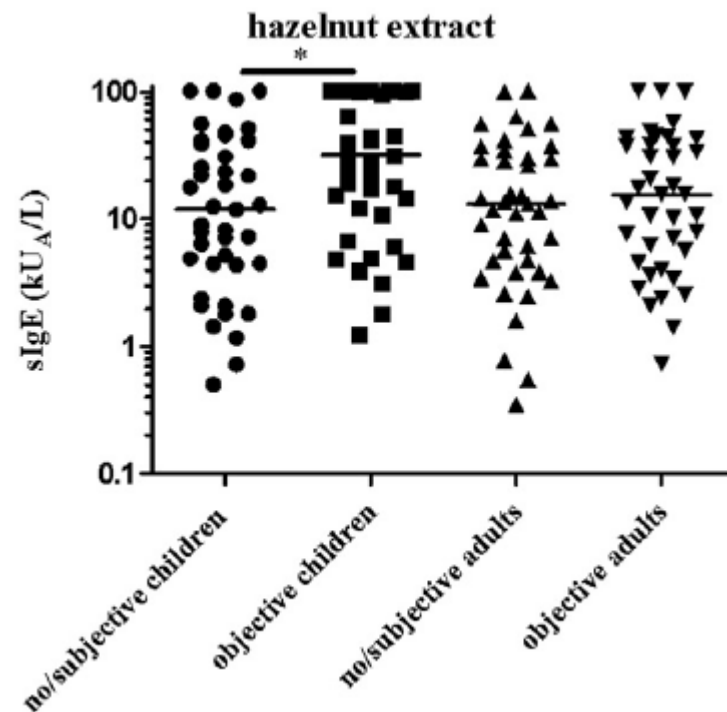
What is it?

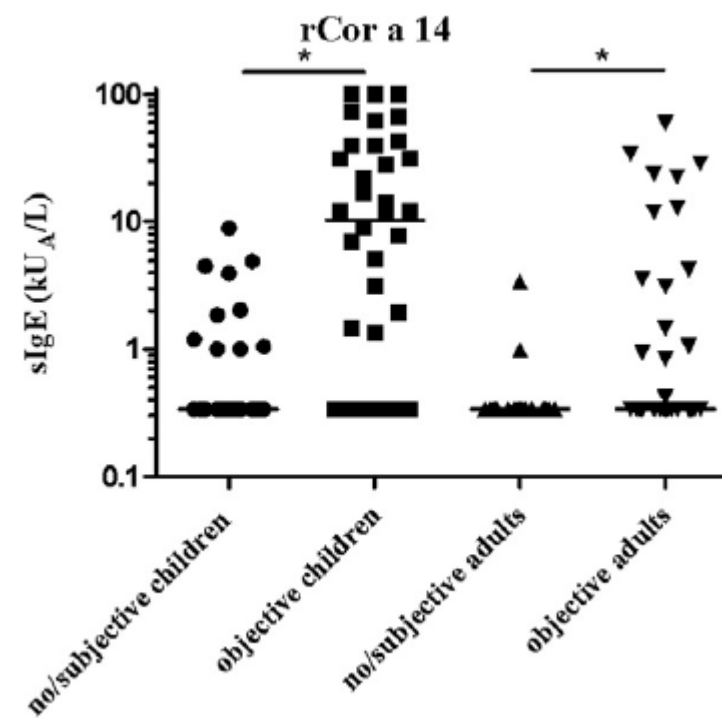
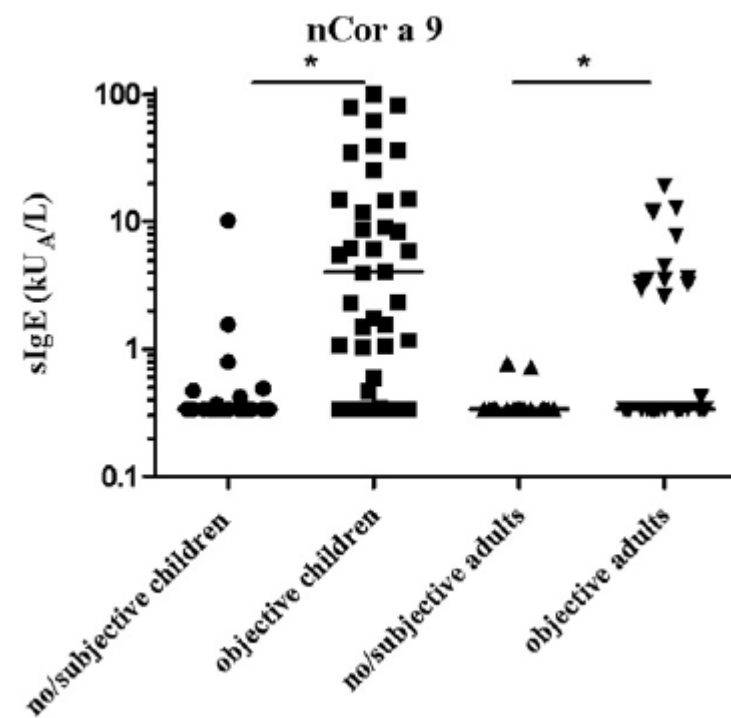


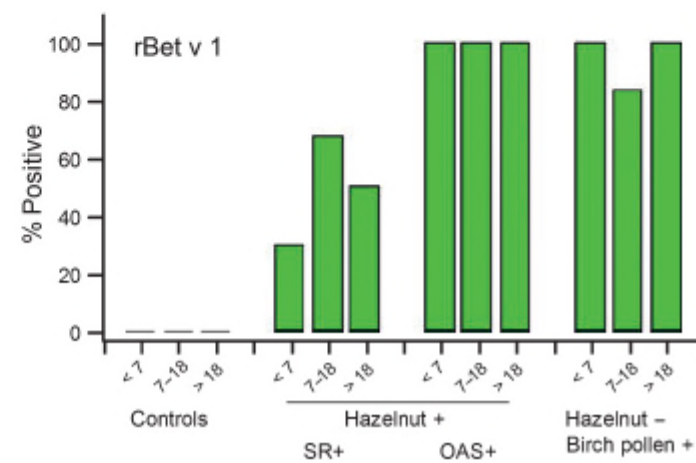
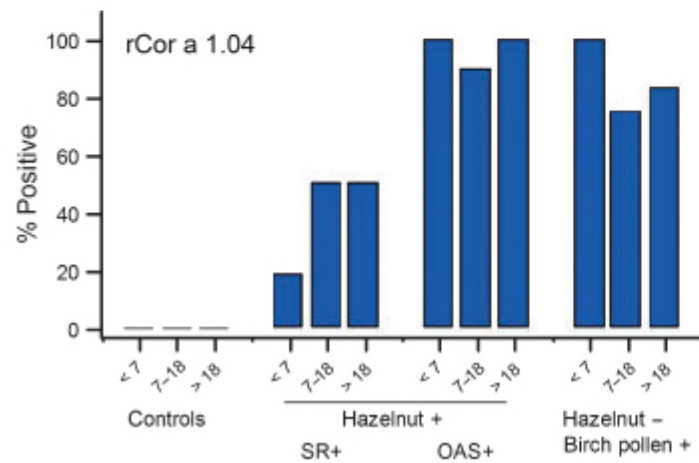
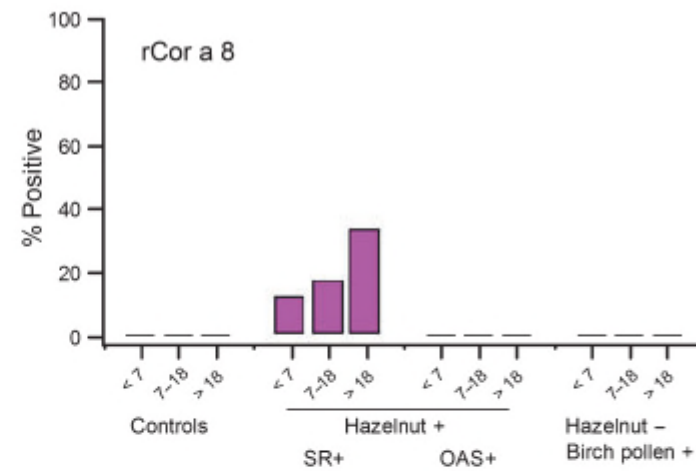
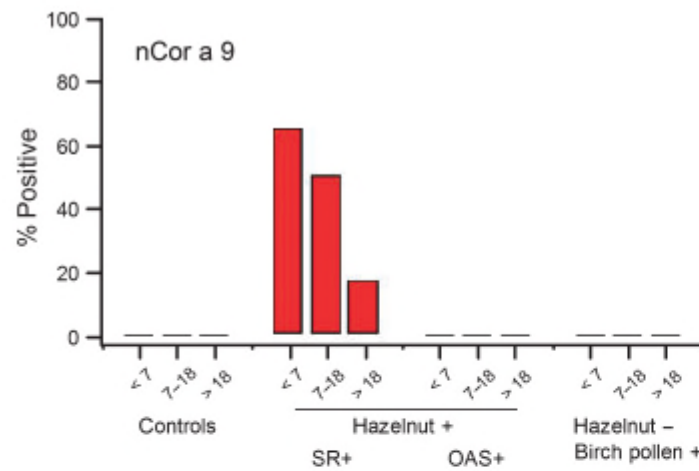


Sensitization to Cor a 9 and Cor a 14 is highly specific for a hazelnut allergy with objective symptoms in Dutch children and adults

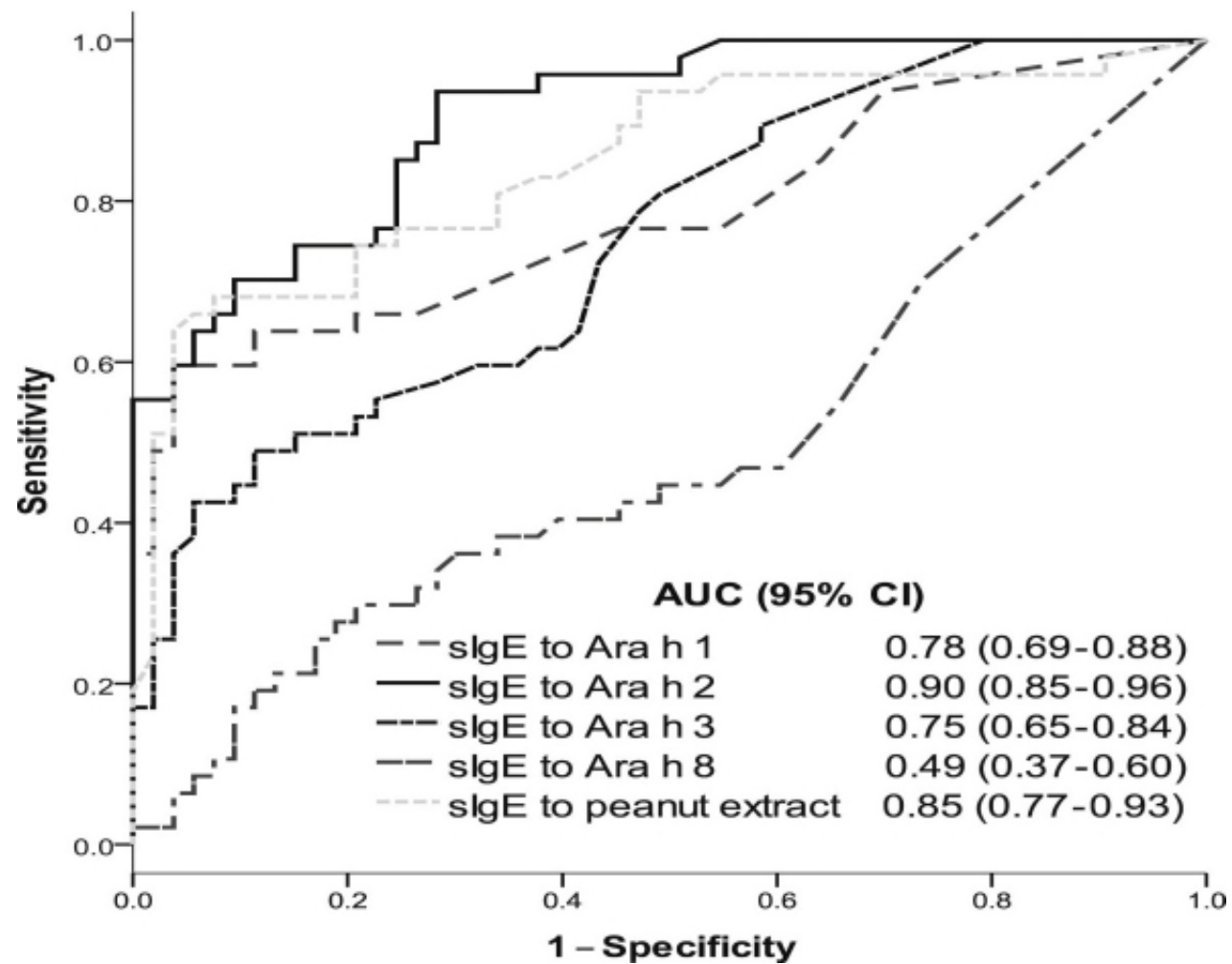
Laury J. N. Masthoff, MD,^a Lars Mattsson, PhD,^{b*} Laurian Zuidmeer-Jongejan, PhD,^{c*} Jonas Lidholm, PhD,^b Kerstin Andersson, PhD,^b Jaap H. Akkerdaas, PhD,^c Serge A. Versteeg, BSc,^c Cristiano Garino, PhD,^d Yolanda Meijer, MD,^{e,f} Petra Kentie, NP,^{e,f} Astrid Versluis, MSc,^a Constance F. den Hartog Jager, BSc,^a Carla A. F. M. Bruijnzeel-Koomen, MD,^a André C. Knulst, MD,^a Ronald van Ree, PhD,^{c,g} Els van Hoffen, PhD,^{a,†} and Suzanne G. M. A. Pasmans, MD^{a,f} *Utrecht and Amsterdam, The Netherlands, Uppsala, Sweden, and Novara, Italy*
(*J Allergy Clin Immunol* 2013;132:393-9.)











Basophil activation test discriminates between allergy and tolerance in peanut-sensitized children

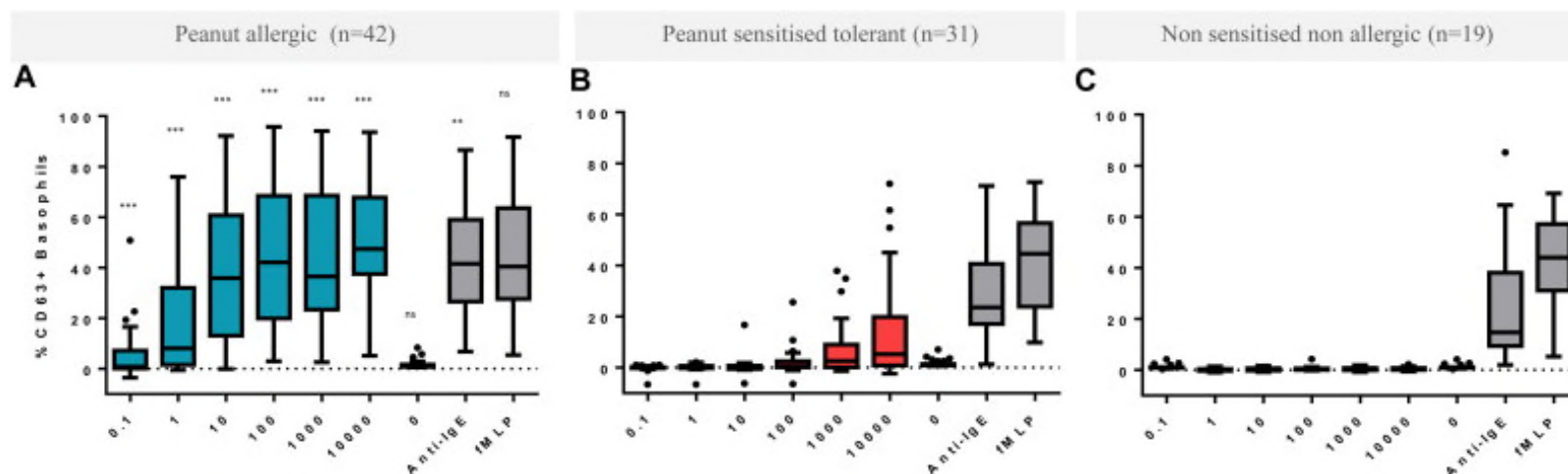


Fig 1 BAT to peanut in PA (n = 42, A), PS (n = 31, B), and NA (n = 19, C) children. The P value refers to the comparison of the median %CD63 + basophils at selected doses between PA and PS patients: *** P < .001, ** P < .01, and ns,



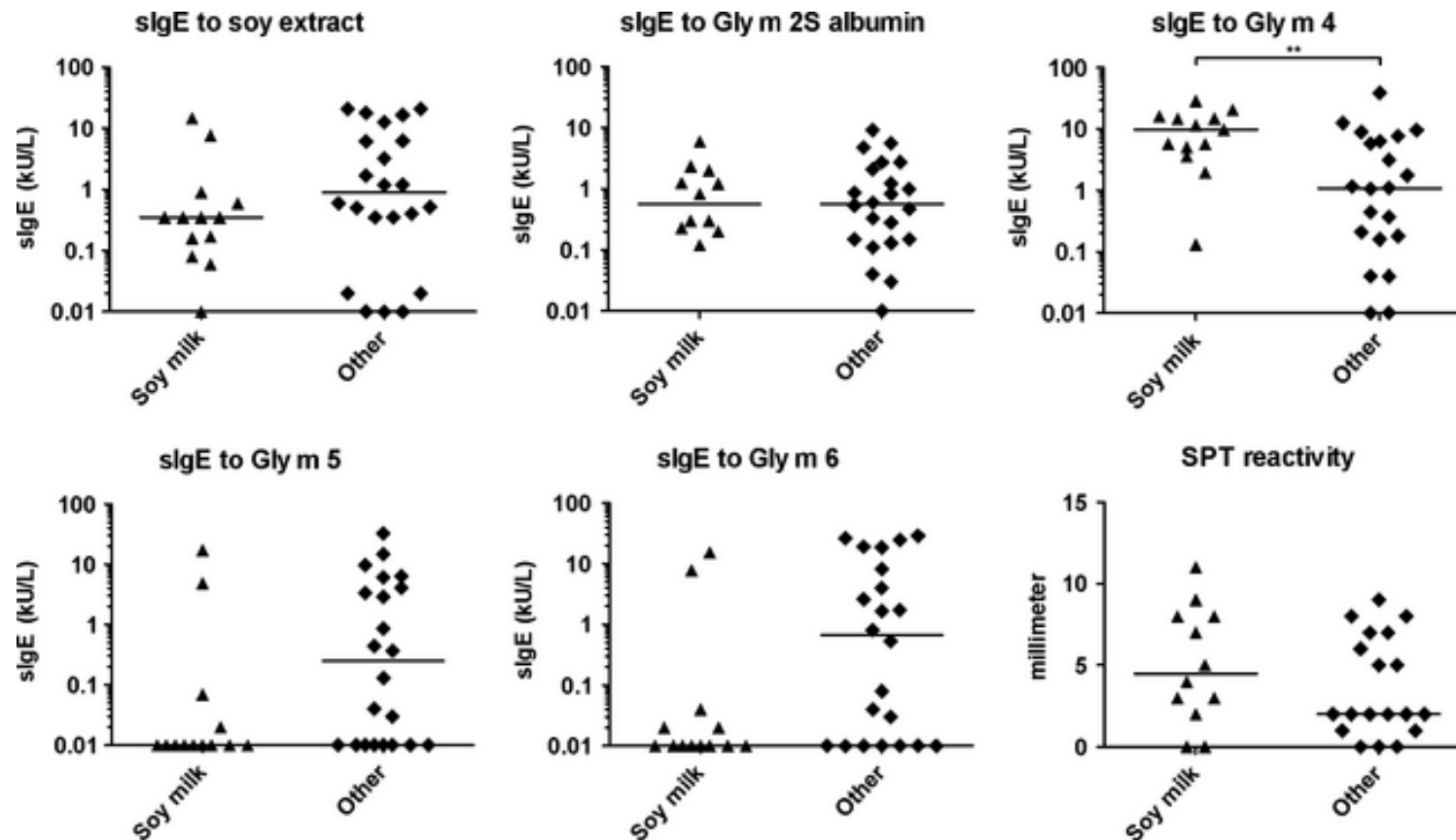
- Celina, 6 years old
- Several allergies (rhinitis and conjunctivitis to birch pollens, fish allergy)
- Itching in the mouth, hives in the face, mild conjunctivitis after drinking soy milk
- IgE to soy: 63.3 kU/L
- IgE to bet v1: 87.7 kU/L
- IgE to gly m4: 63.3 kU/L
- Positive OFC with urticaria, and cough

Components in soy allergy diagnostics: Gly m 2S albumin has the best diagnostic value in adults

R. J. B. Klemans¹, E. F. Knol^{1,2}, A. Michelsen-Huisman¹, S. G. M. A. Pasmans^{1,3,4}, W. de Kruijf-Broekman², C. A. F. M. Bruijnzeel-Koomen¹, E. van Hoffen^{1,5} & A. C. Knulst¹

Diagnostic test	AUC (95% CI)
Gly m 2S albumin	0.79 (0.62–0.96)
Gly m 4	0.54 (0.32–0.77)
Gly m 5	0.74 (0.54–0.94)
Gly m 6	0.77 (0.58–0.96)
Soy extract	0.77 (0.57–0.97)
SPT (<i>n</i> = 40)	0.76 (0.57–0.96)

Components in soy allergy diagnostics: Gly m 4 has the best diagnostic value for soy milk allergy



Other: patients with allergic symptoms to other soy products than soy milk as well, ** P -value < 0.001

▪ **Key messages**

- **The majority of reaction to foods are non-allergic adverse reactions.**
- **The exact immunologic mechanism in non-IgE-mediated food allergy is unknown.**
- **In IgE-mediated food allergy, major allergens responsible for clinical reactions are most often known.**
- **Component-resolved diagnosis is a helpful tool to identify the allergic risk for an individual patient.**

Thank you for your attention

