Major and Minor Allergens of pollen

**Major Allergens**
- Grass pollen
  - Phl p 1, p 5
- Birch pollen
  - Bet v 1
- Ash pollen
  - Fra e 1, Ole e 1
- Mugwort
  - Art v 1
- Ambrosia
  - Amb a 1

**Minor Allergens**
- Bet v 2, Phl p 4, Ole e 3
- Art v 4
- Amb a 3

**Panallergens**
- Profilins
- Procalcins

**Matchi Underp SIT Overp SIT**

Success in allergenspecific SIT

**Group I**
- Major +/ Minor+
- 41 Pts

**Group II**
- Major +/ Minor-
- 36 Pts

**Group III**
- Major -/ Minor+
- 23 Pts

**Group IV**
- Major -/ Minor-
- 13 Pts

Excellent Response to SIT
- Poor Response

**Component resolved diagnosis in pollinosis: sensitization to major pollen allergens does reflect success in allergenspecific SIT.**

A retrospective study in 134 pts.

**Under**


definition of diagnosis:

**Group I**
- Major +/ Minor+
- 41 Pts

**Group II**
- Major +/ Minor-
- 36 Pts

**Group III**
- Major -/ Minor+
- 23 Pts

**Group IV**
- Major -/ Minor-
- 13 Pts

Baenniger V et al Submitted

**Group I**
- Major +/ Minor+
- 41 Pts

**Group II**
- Major +/ Minor-
- 36 Pts

**Group III**
- Major -/ Minor+
- 23 Pts

**Group IV**
- Major -/ Minor-
- 13 Pts

**Excellent Response to SIT**
- Poor Response

**VAS Patients sensitized to Major allergens of birch (Group I/II) rate SIT success good to excellent**

**Viessman R Schmid-Grendelmeier P**

**Component resolved diagnosis in pollinosis: sensitization to major pollen allergens does reflect success in allergenspecific SIT.**

A retrospective study in 134 pts.
Improve diagnosis of food allergy

Peanut -> specific IgE to Ara h 2

81 children (7 to 14 y)
- 29 peanut allergic
- 52 peanut tolerant

Nicolaou N et al, JACI, 2011

100 children (4 to 8.5 y)
- 47 peanut allergic
- 53 peanut tolerant

Klemans RJ et al, JACI, 2012

Identify different phenotypes

DBPCFC: 108 children (1 to 11 y) with a suspicion of egg allergy
- Group A: reacting to baked egg (n=38)
- Group B: reacting to raw egg (n=29)
- Group C: tolerating both (n=41)

Patients reacting to baked egg
- higher level of specific IgE to ovomucoid

Cut-off:
- specific IgE to ovomucoid: 10.8 kUA/L

Ando H et al, JACI, 2008

Severity and persistence of food allergy

- Polysensitization (Ara h 1, 2 and 3)
  -> more severe reaction
  Astier C et al, JACI, 2006

- Specific IgE to casein and ovomucoid
  -> more severe reaction, persistence of allergy
  Jarvinen KH et al, Allergy, 2007
  Sichler SH et al, Clin Exp Allergy, 1999
  Garcia-Ara MC et al, Clin Exp Allergy, 2004
  Boyano-Martinez T et al, JACI, 2009
  Bernhards-Broadbent J et al, JACI, 1994

Cross reactivity

Potential to cause symptoms or severe reactions

Oral allergy syndrome (OAS)