
What difference does ImmunoCAP® ISAC testing make?

- Sheds light on the real patient sensitization profile
- Clarifies the extended poly-sensitization
- Gives information regarding the potential severity of food related reactions
- Supports improved dietary advise

Could testing with ImmunoCAP® ISAC at an early stage have changed this patient's daily life?

- Yes, it could have reduced unnecessary food avoidance



52-5108-89/02 930-2100 1109 heart.se



www.thermoscientific.com/phadia



A MULTI-SENSITIZED PATIENT

Giulio, 34 years old, Southern Europe

Previous diagnosis (age 22 years):

- Asthma and rhino-conjunctivitis during pollen season
- Oral Allergy Syndrome (OAS) associated with intake of peach, apple and kiwi

Previous test results:

Positive SPT tests, confirmed by ImmunoCAP® sIgE to:

- Latex 4.4 kU/l
- Olive tree 3.4 kU/l
- Bermuda Grass 3.2 kU/l
- Rye Grass 4.3 kU/l
- Ragweed 30.1 kU/l
- Peach 6.2 kU/l
- Apple 1.6 kU/l
- Kiwi 0.8 kU/l
- Hazelnut 3.1 kU/l

Doctor's diagnosis: Allergy to latex, olive tree, different grasses, different foods

Treatment: 3 years of SIT with grass pollen
 Avoidance of several OAS-provoking foods
 Suggested antihistamines during pollen season
 Recommendations to avoid latex

Status before ImmunoCAP® ISAC: The patient was quite frustrated by the alimentary restrictions, the extended number of OAS-provoking fruits, and most importantly the potential risk of having a severe food reaction, which significantly impacted his quality of life

Actual symptoms (age 34 years):

- Asthma and Rhino-conjunctivitis during pollen season and OAS to some foods

ImmunoCAP® ISAC positive results:

Summary of positive IgE results

| Mainly species-specific aeroallergen components | | | | | |
|---|-----------|--------------------------------|-----|-------|--|
| Tree pollen | | | | | |
| Ragweed | nAmb a 1 | Pectate lyase | 27 | ISU-E | |
| Cross-reactive components | | | | | |
| Lipid transfer protein (nsLTP) | | | | | |
| Peanut | rAra h 9 | Lipid transfer protein (nsLTP) | 3.2 | ISU-E | |
| Hazelnut | rCor a 8 | Lipid transfer protein (nsLTP) | 4 | ISU-E | |
| Walnut | nJug r 3 | Lipid transfer protein (nsLTP) | 2.7 | ISU-E | |
| Peach | rPru p 3 | Lipid transfer protein (nsLTP) | 5.7 | ISU-E | |
| Olive pollen | nOle e 7 | Lipid transfer protein (nsLTP) | 2.9 | ISU-E | |
| Plane tree | rPla a 3 | Lipid transfer protein (nsLTP) | 5.5 | ISU-E | |
| Profilin | | | | | |
| Birch | rBet v 2 | Profilin | 1.3 | ISU-E | |
| Latex | rHev b 8 | Profilin | 2.6 | ISU-E | |
| Annual mercury | rMer a 1 | Profilin | 4.1 | ISU-E | |
| Timothy grass | rPhl p 12 | Profilin | 2.5 | ISU-E | |

ImmunoCAP® ISAC interpretation:

The profile of sensitization was characterized by two major allergen groups; Lipid Transfer Proteins (LTP) and profilins, in addition to the major allergen Amb a 1 in Ragweed

- Genuine ragweed sensitization is likely responsible for the airway symptoms
- LTP-containing food is probably responsible for the OAS to peach, apple and kiwi. In the Mediterranean countries sensitization to food-LTPs are associated with a risk of systemic reactions in addition to OAS
- Clear-cut positivity to several profilins accounted for the extended pattern of positive results observed with SPT to pollen, foods from plant origin and latex. The risk of clinical reactions to profilin is low
- Major allergens from grass, latex and olive tree are undetectable

Doctor's diagnosis: Ragweed allergy and food allergy

Treatment: Specific SIT for ragweed
 Avoidance for LTP-containing fruits and nuts
 Asthma medications under short periods

Status after ImmunoCAP® ISAC: Failure of previous SIT therapy was due to wrong SIT prescription (grass)
 Further investigation is needed to find out exactly which LTP-containing foods the patient is reacting to
 No need to avoid latex