

## SUPPLEMENTARY MATERIAL

**Table S1.** Cofactors' distribution for allergen profiles. AECI: Angiotensin converting enzyme inhibitor; PPI: protein pump inhibitor; NSAID: Non steroid anti-inflammatory drug; ARA II: angiotensin II receptor antagonists. G7S: Globulin 7S; G11S: Globulin 11S; GRP: Gibberellin-regulated protein

Allergen profile and Cofactors distribution	Number of cases	Cases with any positive cofactor (%)	Cofactor description (number of cases)
2S Albumin	1	0	0
2S Albumin and LTP	1	0	0
2S Albumin and G11S	2	50%	Exercise (1)
2S Albumin, G7S and G11S	1	0	0
Ves v 5 and Pol d 5	1	100%	AECI (1)
Ves v 1 and Ves v 5	2	100%	PPI (2)
Api m 1, Api m 2, Api m 3, Api m 5, Api m 10	1	0	0
Galactose- $\alpha$ -1,3-galactose	4	100%	Exercise (2) NSAID (1); ARA II (2); Betablockers (1) Alcohol (1)
Bromelain	1	0	0
Caseine	2	50%	AECI (1)
Gliadine	1	100%	Exercise (1) Alcohol (1)
GRP (Peamaclein)	1	0	0
LTP	27	51.85%	Exercise (9) NSAID (3) Alcohol (4)
LTP and G7S	1	100%	Exercise (1)
LTP and Thaumatin (TLP)	1	100%	NSAID (1)
Ovalbumin	1	0	0
Ovomucoid	1	100%	Drug (1)
Parvalbumin	1	0	0
PR10	1	100%	NSAID (1)
Sarcoplasmic Calcium-binding Protein	1	100%	ARA II (1)
Tropomyosin	2	0	0
CRD unavailable at inclusion*	9	66.7%	Exercise (3) Benzodiazepine (1); NSAID (2); Betablockers (1); PPI (2); tiroxine (1)

			Alcohol (1)
Available performed CRD tests negative and inconclusive+	7	71.4%	Exercise (2) NSAID (3), ACEI (1), ARA II (1), Diuretic (1), PPI (1)
Negative CRD determinations for a known biological source^	15	42.9%	Exercise (4) NSAID (4); betablockers (1)
Not performed despite allergen availability	5	20%	NSAID: 1 case
Drug Allergy cases	26	80.8%	Stress (8) Other drugs (21) ACEI (2); NSAID (8); ARA II (2); Betablockers (5); Diuretics (3); Calcium antagonists (3); PPI (6); Statins (2)

\*CRD unavailable at patient's inclusion in IAR (hymenoptera, Boletus, pea).

+Available performed test are negative (idiopathic, kiwi fruit, pistacchio);

^Shrimp, grain and banana anaphylaxis with negative determinations for current available allergens

**Table S2.** Cases are Split per elicitor groups as included in IAR. NSAID: Non-steroid antiinflammatory drug. Severity scales: CJS: Clinical Judgment Scale (1-10) Median (P25-P75); RMS: Ring Messmer scale. MW: Man Whitney test; Chi2: Chi Square test; CRD: Component determinations and number of performed tests; neg: negative result; pos: positive result. Date: year of inclusion in IAR (number of cases).

		ELICITOR GROUP						
		<b>DRUGS</b> 26 (22.4%)	<b>FOODS</b> 72 (62.1%)	<b>HYMENOPTERA</b> 9 (7.8%)	<b>IDIOPATHIC</b> 4 (3.4%)	<b>OTHERS</b> 3 (2.6%)	<b>DIFFERENT ELICITOR GROUPS</b> 2 (1.7%)	Comparisons
<b>AGE</b>	MEDIAN (P25-75)	59.9 (52-70)	29 (12.2-44-75)	58 (46.5-66-5)	52 (32.2-62)	46 (14-52)	68.5 (68-69)	0.0001 (MW)
<b>GENDER</b>	Female Male	57.7% 42.3%	55.6% 44.4%	33.3% 66.7%	50% 50%	66.7% 33.3%	- 100%	
<b>ELICITORS</b>	Number of cases	Betalactams: 10 (38.4%) NSAID: 6 (23.1%) Contrast Media: 4 (15.3%) Quinolone: 4 (15.3%) Local anesthetic: 1 (3.8%) Sugammadex: 1 (3.8%)	Nuts/ Tree nuts: 16 (22.2%) Fruits: 14 (19.4%) Vegetables: 4 (5.5%) Grains: 3 (4.1%) Animal foods 20 (27.7%) Legumes 8 (11.1%) Seeds 1 (1.38%) Simultaneous food groups intake 6 (8.33%)	Honey bee: 2 (22.2%) Polistes: 5 (55.6%) Vespula: 2 (22.2%)		Royal Jelly: 1 (33.3%) Anisakis simplex: 2 (66.6%)	Tick bite and pork meat: 1 (50%) Tick bite and peach: 1 (50%)	
<b>COFACTORS</b>	Number of cases (% of cases with any cofactor)	Drugs: 21 Stress likely: 8 Menstruation: 1  80.8%	Drugs: 18 Exercise: 19 Alcohol: 10 Menstruation: 1  48.6%	Drugs 6 Exercise 2 Alcohol 1  89%	Drugs : 3 Exercise: 1 Alcohol: 1  75%	Absent 100%  0%	Drugs: 2 Exercise: 1 Alcohol: 2  100%	0.003 (Chi2)
<b>SEVERITY</b>	CJS Md (P25-P75)  RMS (I,II,III,IV)	8 (7-8.5)  II: 34.6% III: 61.5% IV: 3.8%	7 (7-8)  II: 56.9% III: 43.1%	8.5 (7.5-8.75)  III: 100%	7.75 (6.75-8)  II: 50% III: 50%	7.5 (7.5-)  III: 100%	7  II: 100%	0.014 (MW)  0.001 (Chi2)
<b>CRD</b>	SPT  Uniplex  Multiplex  Not performed	7 (26.9%) (neg 6; pos 1)  0  0  19 (73.1%)	69 (95.8%) (neg 32; pos 37)  56 (77.7%) (neg 15; pos 41)  18 (25%) (neg 4; pos 14)  3 (4.2%)	0  4 (44.4%)  4 (44.4%) (neg 4; pos 0)  5 (63.6%)	4 (100%) (neg 4; pos 0)  1 (25%) (neg 1; pos 0)  2 (50%) (neg 2; pos 0)  0	1 (33.3%) (neg 1; pos 0)  1 (33%); (neg 1; pos 0)  0  2 (66.7%)	1 (50%) (neg 1; pos 0)  2 (100%) (neg 1; pos 1)  1 (50%) (neg 0; pos 1)  0	

<b>DATE (YEAR) OF ALLERGY ASSESSMENT</b>		2013 (10) 2014 (2) 2015 (2) 2016 (2) 2017 (3) 2018 (1) 2019 (1) 2021 (4)	2012 (2) 2013 (15) 2014 (8) 2015 (6) 2016 (6) 2017 (11) 2018 (5) 2019 (6) 2020 (1) 2021 (10)	2013 (1) 2014 (2) 2015 (2) 2016 (1) 2019 (2) 2021 (1)	2013 (1) 2016 (1) 2019 (2)	2012 (1) 2013 (1) 2016 (1)	2014 (1) 2019 (1)	
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**Table S3.** Anaphylaxis elicitors.

ELICITOR GROUP	FOOD GROUP	SPECIFIC CULPRIT
<b>DRUGS (26)</b>	-	Betalactams (10) NSAID (6) Contrast Media (4) Quinolone (4) Local anesthetic (1) Sugammadex (1)
<b>FOODS (72)</b>	<b>FRUITS (14)</b>	Cherry (2) Kiwi (2) Apple (3) Saturn peach (1) Pineapple (1) Banana (2) Grape (2) Nectarine (1)
	<b>NUTS/TREE NUTS (16)</b>	Pistachio (2) Walnut (4) Hazelnut (3) Mixed nuts (6) Pine nut (1)
	<b>VEGETABLES (4)</b>	Lettuce (1) Gazpacho (1) Vegetable mixture (1) Boletus edulis (1)
	<b>GRAINS (3)</b>	Grain (1) Corn (1) Gliadin containing grain (1)
	<b>ANIMAL FOODS (20)</b>	Snail (1) Pig meat (2) Cow milk (1) Lamb cheese (1) Shrimp (9) Cephalopod (3) Egg (2) John dory fish (1)
	<b>LEGUMES (8)</b>	Peanut (2) Peanut (2) Lentil (2) Soy (1) Pea (1)
	<b>SEEDS (1)</b>	Mustard (1)
	<b>SIMULTANEOUS DIFFERENT FOOD GROUPS' INTAKE (6)</b>	Egg and bakery (1) Nuts, peanut and apple (1) Nuts and other foods (2) Apple and lettuce (1) Pizza, beer and marihuana (1)
<b>SIMULTANEOUS EXPOSURE TO DIFFERENT ELICITOR GROUPS (2)</b>		Tick-bite and pig meat intake (1) Tick-bite and peach intake (1)
<b>IDIOPHATIC (4)</b>	-	-
<b>HYMENOPTERA (9)</b>	-	Polistes dominula (5) Vespula (2) Honey bee (2)
<b>OTHERS (3)</b>	-	Royal jelly (1) Anisakis simplex (2)

NSAID: Non steroid antiinflammatory drug.