

**SUPPLEMENTARY MATERIAL**

Supplementary Table 1: Combinations of allergens recognized by patients with Cypress+Olive double sensitization

Cup s 1	Ole e 1	Ole e 2	Ole e 3	Ole e 7	NtD-Ole e 9	CtD-Ole e 9	Ole e 11	Ole e 12	N	%
+	+	-	-	-	-	-	-	-	21	27.3
-	+	-	-	-	-	-	-	-	17	22.1
+	-	-	-	-	-	-	-	-	9	11.7
-	-	-	-	-	-	-	-	-	7	9.1
+	+	-	-	-	-	+	-	-	4	5.2
+	-	-	-	-	-	-	+	-	3	3.9
+	+	-	-	-	-	-	+	-	3	3.9
-	+	-	-	-	-	-	+	-	2	2.6
+	+	-	-	-	-	+	+	-	2	2.6
-	+	-	+	-	-	-	-	-	1	1.3
+	+	-	-	-	-	-	-	+	1	1.3
-	-	-	-	-	-	-	+	-	1	1.3
+	+	+	-	-	-	-	+	-	1	1.3
-	+	-	-	-	-	-	+	+	1	1.3
+	+	-	-	-	-	-	+	+	1	1.3
-	+	-	-	-	+	+	-	-	1	1.3
-	+	-	-	-	+	-	-	-	1	1.3
+	+	-	+	-	+	+	+	-	1	1.3
<b>Total</b>									<b>77</b>	<b>100</b>

Supplementary Table 2: Results of IgE quantification by Indirect ELISA to extracts of cypress, olive and individual allergens.

		<b>C+O group N= 77</b>	<b>C group N= 21</b>	<b>O group N= 15</b>	<b>P value</b>
<b>Olive extract</b>	Median (IQR)	0.34 (0.06 - 0.64)	0.04 (0.03 - 0.21)	0.01 (0 - 0.04)	.002
	Positive ( $\geq 0.10$ OD)	54 (70.1%)	1 (4.8%)	4 (26.7%)	<.001
<b>Cypress extract</b>	Median (IQR)	0.06 (0.02 - 0.15)	0.11 (0.06 - 0.17)	0.09 (0.06 - 0.12)	.186
	Positive ( $\geq 0.10$ OD)	33 (42.9%)	12 (57.1%)	7 (46.7%)	.507
<b>Ole e 1</b>	Median (IQR)	0.45 (0.1 - 1.25)	0 (0 - 0.01)	0.03 (0.03 - 0.19)	<.001
	Positive ( $\geq 0.10$ OD)	57 (74%)	0	5 (33.3%)	<.001
<b>Ole e 2</b>	Median (IQR)	0 (0 - 0.01)	0.01 (0 - 0.02)	0.01 (0 - 0.03)	.21
	Positive ( $\geq 0.10$ OD)	1 (1.3%)	1 (4.8%)	0	.538
<b>Ole e 3</b>	Median (IQR)	0 (0 - 0.02)	0 (0 - 0.01)	0 (0 - 0.01)	.828
	Positive ( $\geq 0.10$ OD)	2 (2.6%)	0	0	1
<b>Ole e 7</b>	Positive ( $\geq 0.10$ OD)	0	0	0	
<b>NtD-Ole e 9</b>	Median (IQR)	0 (0 - 0.01)	0.01 (0 - 0.04)	0.04 (0.01 - 0.08)	<.001
	Positive ( $\geq 0.10$ OD)	3 (3.9%)	0	3 (20%)	.045
<b>CtD-Ole e 9</b>	Median (IQR)	0.03 (0 - 0.05)	0.05 (0.02 - 0.1)	0.05 (0.02 - 0.08)	.016
	Positive ( $\geq 0.10$ OD)	8 (10.4%)	5 (23.8%)	2 (13.3%)	.251
<b>Ole e 9</b>	Positive ( $\geq 0.10$ OD)	9 (11.7%)	5 (23.8%)	5 (33.3%)	.06
<b>Ole e 11</b>	Median (IQR)	0.03 (0 - 0.08)	0.05 (0.03 - 0.1)	0.05 (0.02 - 0.07)	.055
	Positive ( $\geq 0.10$ OD)	15 (19.5%)	5 (23.8%)	2 (13.3%)	.767
<b>Ole e 12</b>	Median (IQR)	0.02 (0 - 0.04)	0.01 (0 - 0.03)	0.02 (0.01 - 0.03)	.781
	Positive ( $\geq 0.10$ OD)	3 (3.9%)	0	2 (13.3%)	.173
<b>Ole e</b>	Positive ( $\geq 0.10$ OD)	61 (79.2%)	9 (60%)	9 (42.9%)	.004
<b>Minor Ole e</b>	Positive ( $\geq 0.10$ OD)	23 (29.9%)	9 (42.9%)	6 (40%)	.425
<b>Cup s 1</b>	Median (IQR)	0.17 (0.05 - 0.39)	0.26 (0.17 - 0.85)	0.02 (0 - 0.03)	<.001
	Positive ( $\geq 0.10$ OD)	46 (59.7%)	19 (90.5%)	1 (6.7%)	<.001
<b>Bromelain</b>	Median (IQR)	0 (0 - 0)	0 (0 - 0)	0 (0 - 0)	.235
	Positive ( $\geq 0.10$ OD)	6 (7.8%)	4 (19%)	3 (20%)	.145

C+O, Cypress+Olive; C, Cypress; O, Olive;interquartile range (Q1-Q3);Minor Ole e, any minor olive allergen ; Ole e, any olive allergen ; Ole e 9, NtD-Ole e 9 and/or CtD-Ole e 9 positive value; OD,Optical Density

Supplementary Table 3: Sensitization profile to minor olive allergens in the four subgroups of Cypress+Olive allergic patients depending on positive or negative response to Cup s 1 and Ole e 1

Ole e allergen	G1 Cup s 1+/Ole e1 + N= 34	G2 Cup s 1+/Ole e1 - N=12	G3 Cup s 1-/Ole e1 + N= 23	G4 Cup s 1-/Ole e1 - N= 8
<b>NtD-Ole e 9</b>	1 (2.9%)		2 (8.7%)	
<b>CtD-Ole e 9</b>	7 (20.6%)		1 (4.3%)	
<b>Ole e 9</b>	7 (20.6%)		2 (8.7%)	
<b>Ole e 11</b>	8 (23.5%)	3 (25%)	3 (13%)	1 (12.5%)
<b>Ole e12</b>	2 (5.9%)		1 (4.3%)	
<b>Ole e 2</b>	1 (2.9%)			
<b>Ole e 3</b>	1 (2.9%)		1 (4.3%)	
<b>Minor Ole e</b>	13 (38.2%)	3 (25%)	6 (26.1%)	1 (12.5%)

Minor Ole e, any minor olive allergen; Ole e 9, NtD-Ole e 9 and/or CtD-Ole e 9 positive value.