

**SUPPLEMENTARY MATERIAL****Table S-I. Frequency of allergy to other nuts in patients allergic to walnut**

| <b>Nut</b>            | <b>allergics/ valids (%) *</b> |
|-----------------------|--------------------------------|
| <b>Hazelnut</b>       | 16/33 (48.48)                  |
| <b>Peanut</b>         | 12/35 (34.29)                  |
| <b>Almond</b>         | 13/42 (30.95)                  |
| <b>Chestnut</b>       | 4/17 (23.53)                   |
| <b>Pistachio</b>      | 7/32 (21.88)                   |
| <b>Cashew nut</b>     | 5/27 (18.52)                   |
| <b>Sunflower seed</b> | 5/37 (13.51)                   |

\* To calculate the percentage of other nut allergic patients, only were included those who undoubtedly ingested the nut after the reaction to walnut.

**Table S-II. Frequency of sensitization to walnut allergens**

| Allergen                              | Sensitized (%) | sIgE levels (kU <sub>A</sub> /L) |       |
|---------------------------------------|----------------|----------------------------------|-------|
|                                       |                | Median                           | IQR   |
| <b>Jug r 1</b>                        | 15 (29.4)      | 37.7                             | 41.28 |
| <b>Jug r 2</b>                        | 11 (21.6)      | 9.83                             | 37.06 |
| <b>Jug r 3</b>                        | 22 (43.1)      | 1.62                             | 5.41  |
| <b>Jug r 4</b>                        | 12 (23.5)      | 6.62                             | 28.18 |
| <b>Jug r 6</b>                        | 7 (13.7)       | 20.4                             | 36.02 |
| <b>Panallergens</b>                   |                |                                  |       |
| <b>Phl p 12 (Jug r 5<sup>*</sup>)</b> | 11 (21.6)      | 3.35                             | 6.22  |
| <b>Bet v 1 (Jug r 7<sup>#</sup>)</b>  | 5 (9.8)        | 1.52                             | 12.58 |
| <b>Pru p 3<sup>§</sup></b>            | 33 (64.7)      | 2.33                             | 4.95  |
| <b>Total IgE</b>                      |                | 109                              | 182   |

\* Of the 11 patients sensitized to Phl p 12, 3 were not sensitized to homologs of LTP, PR-10 or SSPs.

# Of the 5 patients sensitized to Bet v 1, all of them were sensitized to LTP homologues.

§ Of the 33 patients sensitized to Pru p 3, 10 were not sensitized to Jug r 3. None of them were sensitized to SSPs.

**Table S-III. Frequency of sensitization to different LTP-1**

| <b>Allergen</b>   | <b>patients (%)</b> | <b>LTP sensitization</b> |
|-------------------|---------------------|--------------------------|
| <b>Mal d 3</b>    | 34 (66.7)           | 100 %                    |
| <b>Pru p 3</b>    | 33 (64.7)           | 97.1 %                   |
| <b>Fra a 1 +3</b> | 31 (60.78)          | 91.2 %                   |
| <b>Pla a 3</b>    | 26 (51)             | 76.5 %                   |
| <b>Jug r 3</b>    | 22 (43.1)           | 64.7 %                   |
| <b>Zea m 14</b>   | 22 (43.1)           | 64.7 %                   |
| <b>Ara h 9</b>    | 20 (39.2)           | 58.8 %                   |
| <b>Cor a 8</b>    | 19 (37.2)           | 55.9 %                   |
| <b>Act d 10</b>   | 17 (33.3)           | 50 %                     |
| <b>Art v 3</b>    | 14 (27.5)           | 41.2 %                   |
| <b>Api g 2</b>    | 13 (25,5)           | 38.2 %                   |
| <b>Can s 3</b>    | 8 (15,7)            | 23.5 %                   |
| <b>Sola l 6</b>   | 4 (7,8)             | 20.6 %                   |
| <b>Tri a 14</b>   | 1 (2.0)             | 3 %                      |

Table S-IV. Characteristics of walnut allergy in SSP-G and LTP-G patients

| Characteristic                            | LTP-G <sup>s</sup> | SSP-G <sup>s</sup> | <i>p</i> value |
|---|--------------------|--------------------|----------------|
| <b>Patients</b>                           | 31 (60.78)         | 15 (29.41)         |                |
| <b>Age (y) mean ± SD</b>                  | 33 ± 10            | 15 ± 8             | <0.001         |
| <b>Female sex</b>                         | 15 (48.78)         | 6 (40)             | 0.592          |
| <b>Food allergy (allergies/ valids) *</b> |                    |                    |                |
| <b>Hazelnut</b>                           | 11/19 (57.90)      | 3/10 (30)          | 0.153          |
| <b>Peanut</b>                             | 7/22 (31.81)       | 3/9 (33.33)        | 0.935          |
| <b>Almond</b>                             | 8/26 (30.77)       | 3/11 (27.27)       | 0.832          |
| <b>Chestnut</b>                           | 3/10 (30)          | 1/6 (16.67)        | 0.551          |
| <b>Pistachio</b>                          | 5/22 (22.73)       | 2/8 (25)           | 0.896          |
| <b>Cashew nut</b>                         | 2/16 (12.5)        | 3/8 (37.5)         | 0.155          |
| <b>Sunflower seed</b>                     | 5/22 (22.73)       | 0/11 (0)           | 0.086          |
| <b>Peach</b>                              | 22/30 (73.33)      | 3/15 (20)          | 0.001          |
| <b>Apple</b>                              | 13/31 (41.93)      | 0/14 (0)           | 0.004          |
| <b>Pear</b>                               | 10/29 (34.48)      | 0/15 (0)           | 0.010          |
| <b>Plum</b>                               | 11/24 (45.83)      | 0/11 (0)           | 0.007          |
| <b>Kiwi</b>                               | 9/23 (39.13)       | 1/13 (7.69)        | 0.043          |
| <b>Banana</b>                             | 12/30 (40)         | 1/15 (6.66)        | 0.020          |
| <b>First food causing symptoms</b>        |                    |                    |                |
| <b>Nuts</b>                               | 18 (58.06)         | 14 (93.33)         | 0.015          |
| <b>Fruits</b>                             | 11 (35.48)         | 1 (6.67)           | 0.037          |
| <b>Other vegetables</b>                   | 2 (6.45)           | 0 (0)              | 0.314          |
| <b>Minimum amount of walnut ingested</b>  |                    |                    |                |
| <b>Hidden allergen</b>                    | 10 (32.25)         | 10 (66.66)         | 0.039          |
| <b>One walnut</b>                         | 6 (19.35)          | 4 (26.66)          |                |
| <b>2-5 walnuts</b>                        | 7 (22.58)          | 1 (6.66)           |                |
| <b>≥5 walnuts</b>                         | 8 (25.80)          | 0 (0)              |                |
| <b>Symptoms</b>                           |                    |                    |                |
| <b>OAS</b>                                | 26 (83.87)         | 9 (60)             | 0.075          |
| <b>Urticaria/Oedema</b>                   | 10 (32.25)         | 10 (66.66)         | 0.027          |
| <b>Nausea</b>                             | 3 (9.67)           | 5 (33.33)          | 0.047          |
| <b>Vomiting</b>                           | 2 (6.45)           | 6 (40)             | 0.005          |
| <b>Diarrhea</b>                           | 3 (9.67)           | 2 (13.33)          | 0.709          |
| <b>Asthma</b>                             | 7 (22.58)          | 7 (46.66)          | 0.096          |
| <b>Anaphylaxis</b>                        | 16 (51.61)         | 10 (66.66)         | 0.334          |
| <b>Anaphylactic shock</b>                 | 1 (3.22)           | 2 (13.33)          | 0.193          |
| <b>Cofactor</b>                           | 7 (22.58)          | 0 (0)              | 0.046          |
| <b>Treatment</b>                          |                    |                    |                |
| <b>Antihistamines</b>                     | 21 (67.74)         | 12 (80)            | 0.387          |
| <b>Corticosteroids</b>                    | 12 (38.70)         | 8 (53.33)          | 0.348          |
| <b>Adrenaline</b>                         | 4 (12.90)          | 5 (33.33)          | 0.102          |

All measurements are in n (%) unless otherwise specified. \$ One patient sensitized to Jug r 1 and Jug r 3 simultaneously was excluded. \* To calculate the percentage of other nut allergic patients, only were included those who undoubtedly ingested the nut after the reaction to walnut.