**Table S1. Characteristics of the study population**

|  |  |
| --- | --- |
| **Characteristic** | No. of patients (%) |
| **Demographics** (n = 87) |  |
| Sex |  |
| Women | 41 (47.1) |
| Men | 46 (52.9) |
| **Respiratory profile** (n = 87) | |
| Disease |  |
| Allergic asthma | 12 (13.8) |
| Allergic rhinitis | 36 (41.4) |
| Allergic asthma and rhinitis | 39 (44.8) |
| Classification |  |
| Persistent | 60 (69.0) |
| Intermittent | 27 (31.0) |
| Severity |  |
| Mild | 45 (51.7) |
| Moderate | 34 (39.1) |
| Severe | 8 (9.2) |
| **Allergy profile** (n = 87) |  |
| Sensitization to cat and dog allergens | |
| Cat only | 18 (20.7) |
| Dog only | 3 (3.4) |
| Mixed | 66 (75.9) |
| Sensitization to mites and pollen (n = 87) | |
| Mites only | 30 (34.5) |
| Pollen only | 13 (14.9) |
| Mixed | 39 (44.8) |
| None | 5 (5.7) |
| Contact with cats and/or dogs (n = 84) | |
| Cats | 14 (16.7) |
| Dogs | 24 (28.6) |
| Cats and dogs | 7 (8.3) |
| No contact | 39 (46.4) |
| Received cat and/or dog AIT (n = 87) | |
| Yes | 29a (33.3) |
| No | 58 (66.7) |
| a Comprising 26 patients receiving AIT for mixed cat/dog allergy, 2 for cat allergy and 1 for dog allergy.  *AIT*, allergen-specific immunotherapy. | |

**Table S2. Percentage table of cat allergens**

|  | ***Prick cat*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Positive* | | *Negative* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 68 | 97.14 | 10 | 58.82 | 78 | 89.66 |
| *Positive* |
| *Negative* | 2 | 2.86 | 7 | 41.18 | 9 | 10.34 |
| *Total* | 70 | 100.00 | 17 | 100.00 | 87 | 100.00 |
| ***Fel d 2*** | 15 | 21.43 | 5 | 29.41 | 20 | 22.99 |
| *Positive* |
| *Negative* | 55 | 78.57 | 12 | 70.59 | 67 | 77.01 |
| *Total* | 70 | 100.00 | 17 | 100.00 | 87 | 100.00 |
| ***Fel d 4*** | 25 | 35.71 | 10 | 58.82 | 35 | 40.23 |
| *Positive* |
| *Negative* | 45 | 64.29 | 7 | 41.18 | 52 | 59.77 |
| *Total* | 70 | 100.00 | 17 | 100.00 | 87 | 100.00 |
| ***Fel d 7*** | 19 | 27.14 | 9 | 52.94 | 28 | 32.18 |
| *Positive* |
| *Negative* | 51 | 72.86 | 8 | 47.06 | 59 | 67.82 |
| *Total* | 70 | 100.00 | 17 | 100.00 | 87 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 0.00009 | \* |
| Fel d 2 | Fisher | 0.52600 | - |
| Fel d 4 | Fisher | 0.10169 | - |
| Fel d 7 | Fisher | 0.07956 | - |

**Table S3. Percentage table of dog allergens**

|  | ***Prick dog*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Positive* | | *Negative* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 29 | 56.86 | 13 | 36.11 | 42 | 48.28 |
| *Positive* |
| *Negative* | 22 | 43.14 | 23 | 63.89 | 45 | 51.72 |
| *Total* | 51 | 100.00 | 36 | 100.00 | 87 | 100.00 |
| ***Can f 2*** | 17 | 33.33 | 10 | 27.78 | 27 | 31.03 |
| *Positive* |
| *Negative* | 34 | 66.67 | 26 | 72.22 | 60 | 68.97 |
| *Total* | 51 | 100.00 | 36 | 100.00 | 87 | 100.00 |
| ***Can f 3*** | 13 | 25.49 | 7 | 19.44 | 20 | 22.99 |
| *Positive* |
| *Negative* | 38 | 74.51 | 29 | 80.56 | 67 | 77.01 |
| *Total* | 51 | 100.00 | 36 | 100.00 | 87 | 100.00 |
| ***Can f 4*** | 22 | 43.14 | 9 | 25.00 | 31 | 35.63 |
| *Positive* |
| *Negative* | 29 | 56.86 | 27 | 75.00 | 56 | 64.37 |
| *Total* | 51 | 100.00 | 36 | 100.00 | 87 | 100.00 |
| ***Can f 5*** | 32 | 62.75 | 16 | 44.44 | 48 | 55.17 |
| *Positive* |
| *Negative* | 19 | 37.25 | 20 | 55.56 | 39 | 44.83 |
| *Total* | 51 | 100.00 | 36 | 100.00 | 87 | 100.00 |
| ***Can f 6*** | 15 | 29.41 | 7 | 19.44 | 22 | 25.29 |
| *Positive* |
| *Negative* | 36 | 70.59 | 29 | 80.56 | 65 | 74.71 |
| *Total* | 51 | 100.00 | 36 | 100.00 | 87 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.08119 | - |
| Can f 2 | Fisher | 0.64314 | - |
| Can f 3 | Fisher | 0.60902 | - |
| Can f 4 | Fisher | 0.11203 | - |
| Can f 5 | Fisher | 0.12565 | - |
| Can f 6 | Fisher | 0.32742 | - |

**Table S4. Sensitization profile vs respiratory profile: percentage table of cat allergens**

|  | ***Respiratory disease*** | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Only asthma* | | *Only rhinitis* | | *Mixed* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 10 | 83.33 | 32 | 88.89 | 36 | 92.31 | 78 | 89.66 |
| *Positive* |
| *Negative* | 2 | 16.67 | 4 | 11.11 | 3 | 7.69 | 9 | 10.34 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Fel d 2*** | 3 | 25.00 | 7 | 19.44 | 10 | 25.64 | 20 | 22.99 |
| *Positive* |
| *Negative* | 9 | 75.00 | 29 | 80.56 | 29 | 74.36 | 67 | 77.01 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Fel d 4*** | 3 | 25.00 | 13 | 36.11 | 19 | 48.72 | 35 | 40.23 |
| *Positive* |
| *Negative* | 9 | 75.00 | 23 | 63.89 | 20 | 51.28 | 52 | 59.77 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Fel d 7*** | 5 | 41.67 | 10 | 27.78 | 13 | 33.33 | 28 | 32.18 |
| *Positive* |
| *Negative* | 7 | 58.33 | 26 | 72.22 | 26 | 66.67 | 59 | 67.82 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 0.63940 | - |
| Fel d 2 | Fisher | 0.78120 | - |
| Fel d 4 | Fisher | 0.29630 | - |
| Fel d 7 | Fisher | 0.64170 | - |

**Table S5. Sensitization profile vs clasification of respiratoy disease: percentage table of dog allergens**

|  | ***Respiratory disease*** | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Only astma* | | *Only rhinitis* | | *Mixed* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 7 | 58.33 | 16 | 44.44 | 19 | 48.72 | 42 | 48.28 |
| *Positive* |
| *Negative* | 5 | 41.67 | 20 | 55.56 | 20 | 51.28 | 45 | 51.72 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Can f 2*** | 5 | 41.67 | 10 | 27.78 | 12 | 30.77 | 27 | 31.03 |
| *Positive* |
| *Negative* | 7 | 58.33 | 26 | 72.22 | 27 | 69.23 | 60 | 68.97 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Can f 3*** | 2 | 16.67 | 6 | 16.67 | 12 | 30.77 | 20 | 22.99 |
| *Positive* |
| *Negative* | 10 | 83.33 | 30 | 83.33 | 27 | 69.23 | 67 | 77.01 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Can f 4*** | 7 | 58.33 | 11 | 30.56 | 13 | 33.33 | 31 | 35.63 |
| *Positive* |
| *Negative* | 5 | 41.67 | 25 | 69.44 | 26 | 66.67 | 56 | 64.37 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Can f 5*** | 3 | 25.00 | 23 | 63.89 | 22 | 56.41 | 48 | 55.17 |
| *Positive* |
| *Negative* | 9 | 75.00 | 13 | 36.11 | 17 | 43.59 | 39 | 44.83 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |
| ***Can f 6*** | 1 | 8.33 | 7 | 19.44 | 14 | 35.90 | 22 | 25.29 |
| *Positive* |
| *Negative* | 11 | 91.67 | 29 | 80.56 | 25 | 64.10 | 65 | 74.71 |
| *Total* | 12 | 100.00 | 36 | 100.00 | 39 | 100.00 | 87 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.70250 | - |
| Can f 2 | Fisher | 0.66170 | - |
| Can f 3 | Fisher | 0.34400 | - |
| Can f 4 | Fisher | 0.22960 | - |
| Can f 5 | Fisher | 0.06560 | - |
| Can f 6 | Fisher | 0.10320 | - |

**Table S6. Sensitization profile vs classification of respiratory disease: percentage table of cat allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 53 | 88.33 | 25 | 92.59 | 78 | 89.66 |
| *Positive* |
| *Negative* | 7 | 11.67 | 2 | 7.41 | 9 | 10.34 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Fel d 2*** | 14 | 23.33 | 6 | 22.22 | 20 | 22.99 |
| *Positive* |
| *Negative* | 46 | 76.67 | 21 | 77.78 | 67 | 77.01 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Fel d 4*** | 25 | 41.67 | 10 | 37.04 | 35 | 40.23 |
| *Positive* |
| *Negative* | 35 | 58.33 | 17 | 62.96 | 52 | 59.77 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Fel d 7*** | 19 | 31.67 | 9 | 33.33 | 28 | 32.18 |
| *Positive* |
| *Negative* | 41 | 68.33 | 18 | 66.67 | 59 | 67.82 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 0.71450 | - |
| Fel d 2 | Fisher | 1.00000 | - |
| Fel d 4 | Fisher | 0.81413 | - |
| Fel d 7 | Fisher | 1.00000 | - |

**Table S7. Sensitization profile vs classification of respiratory disease: percentage table of dog allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 28 | 46.67 | 14 | 51.85 | 42 | 48.28 |
| *Positive* |
| *Negative* | 32 | 53.33 | 13 | 48.15 | 45 | 51.72 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Can f 2*** | 16 | 26.67 | 11 | 40.74 | 27 | 31.03 |
| *Positive* |
| *Negative* | 44 | 73.33 | 16 | 59.26 | 60 | 68.97 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Can f 3*** | 15 | 25.00 | 5 | 18.52 | 20 | 22.99 |
| *Positive* |
| *Negative* | 45 | 75.00 | 22 | 81.48 | 67 | 77.01 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Can f 4*** | 22 | 36.67 | 9 | 33.33 | 31 | 35.63 |
| *Positive* |
| *Negative* | 38 | 63.33 | 18 | 66.67 | 56 | 64.37 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Can f 5*** | 31 | 51.67 | 17 | 62.96 | 48 | 55.17 |
| *Positive* |
| *Negative* | 29 | 48.33 | 10 | 37.04 | 39 | 44.83 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |
| ***Can f 6*** | 15 | 25.00 | 7 | 25.93 | 22 | 25.29 |
| *Positive* |
| *Negative* | 45 | 75.00 | 20 | 74.07 | 65 | 74.71 |
| *Total* | 60 | 100.00 | 27 | 100.00 | 87 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.81695 | - |
| Can f 2 | Fisher | 0.21644 | - |
| Can f 3 | Fisher | 0.59069 | - |
| Can f 4 | Fisher | 0.81316 | - |
| Can f 5 | Fisher | 0.36024 | - |
| Can f 6 | Fisher | 1.00000 | - |

**Table S8. Sensitization profile vs asthma profile: percentage table of cat allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 9 | 90.00 | 1 | 50.00 | 10 | 83.33 |
| *Positive* |
| *Negative* | 1 | 10.00 | 1 | 50.00 | 2 | 16.67 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Fel d 2*** | 2 | 20.00 | 1 | 50.00 | 3 | 25.00 |
| *Positive* |
| *Negative* | 8 | 80.00 | 1 | 50.00 | 9 | 75.00 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Fel d 4*** | 3 | 30.00 | . | 0.00 | 3 | 25.00 |
| *Positive* |
| *Negative* | 7 | 70.00 | 2 | 100.00 | 9 | 75.00 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Fel d 7*** | 4 | 40.00 | 1 | 50.00 | 5 | 41.67 |
| *Positive* |
| *Negative* | 6 | 60.00 | 1 | 50.00 | 7 | 58.33 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 0.31818 | - |
| Fel d 2 | Fisher | 0.45455 | - |
| Fel d 4 | Fisher | 1.00000 | - |
| Fel d 7 | Fisher | 1.00000 | - |

**Table S9. Sensitization profile vs asthma profile: percentage table of dog allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 5 | 50.00 | 2 | 100.00 | 7 | 58.33 |
| *Positive* |
| *Negative* | 5 | 50.00 | . | 0.00 | 5 | 41.67 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Can f 2*** | 4 | 40.00 | 1 | 50.00 | 5 | 41.67 |
| *Positive* |
| *Negative* | 6 | 60.00 | 1 | 50.00 | 7 | 58.33 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Can f 3*** | 1 | 10.00 | 1 | 50.00 | 2 | 16.67 |
| *Positive* |
| *Negative* | 9 | 90.00 | 1 | 50.00 | 10 | 83.33 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Can f 4*** | 7 | 70.00 | . | 0.00 | 7 | 58.33 |
| *Positive* |
| *Negative* | 3 | 30.00 | 2 | 100.00 | 5 | 41.67 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Can f 5*** | 1 | 10.00 | 2 | 100.00 | 3 | 25.00 |
| *Positive* |
| *Negative* | 9 | 90.00 | . | 0.00 | 9 | 75.00 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |
| ***Can f 6*** | 1 | 10.00 | . | 0.00 | 1 | 8.33 |
| *Positive* |
| *Negative* | 9 | 90.00 | 2 | 100.00 | 11 | 91.67 |
| *Total* | 10 | 100.00 | 2 | 100.00 | 12 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.46970 | - |
| Can f 2 | Fisher | 1.00000 | - |
| Can f 3 | Fisher | 0.31818 | - |
| Can f 4 | Fisher | 0.15152 | - |
| Can f 5 | Fisher | 0.04545 | \* |
| Can f 6 | Fisher | 1.00000 | - |

**Table S10. Sensitization profile vs allergic rhinitis profile: percentage table of cat allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 16 | 84.21 | 16 | 94.12 | 32 | 88.89 |
| *Positive* |
| *Negative* | 3 | 15.79 | 1 | 5.88 | 4 | 11.11 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Fel d 2*** | 3 | 15.79 | 4 | 23.53 | 7 | 19.44 |
| *Positive* |
| *Negative* | 16 | 84.21 | 13 | 76.47 | 29 | 80.56 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Fel d 4*** | 6 | 31.58 | 7 | 41.18 | 13 | 36.11 |
| *Positive* |
| *Negative* | 13 | 68.42 | 10 | 58.82 | 23 | 63.89 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Fel d 7*** | 4 | 21.05 | 6 | 35.29 | 10 | 27.78 |
| *Positive* |
| *Negative* | 15 | 78.95 | 11 | 64.71 | 26 | 72.22 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 0.60519 | - |
| Fel d 2 | Fisher | 0.68426 | - |
| Fel d 4 | Fisher | 0.73013 | - |
| Fel d 7 | Fisher | 0.46288 | - |

**Table S11. Sensitization profile vs allergic rhinitis profile: percentage table of dog allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 7 | 36.84 | 9 | 52.94 | 16 | 44.44 |
| *Positive* |
| *Negative* | 12 | 63.16 | 8 | 47.06 | 20 | 55.56 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Can f 2*** | 4 | 21.05 | 6 | 35.29 | 10 | 27.78 |
| *Positive* |
| *Negative* | 15 | 78.95 | 11 | 64.71 | 26 | 72.22 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Can f 3*** | 3 | 15.79 | 3 | 17.65 | 6 | 16.67 |
| *Positive* |
| *Negative* | 16 | 84.21 | 14 | 82.35 | 30 | 83.33 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Can f 4*** | 5 | 26.32 | 6 | 35.29 | 11 | 30.56 |
| *Positive* |
| *Negative* | 14 | 73.68 | 11 | 64.71 | 25 | 69.44 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Can f 5*** | 12 | 63.16 | 11 | 64.71 | 23 | 63.89 |
| *Positive* |
| *Negative* | 7 | 36.84 | 6 | 35.29 | 13 | 36.11 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |
| ***Can f 6*** | 3 | 15.79 | 4 | 23.53 | 7 | 19.44 |
| *Positive* |
| *Negative* | 16 | 84.21 | 13 | 76.47 | 29 | 80.56 |
| *Total* | 19 | 100.00 | 17 | 100.00 | 36 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.50273 | - |
| Can f 2 | Fisher | 0.46288 | - |
| Can f 3 | Fisher | 1.00000 | - |
| Can f 4 | Fisher | 0.72055 | - |
| Can f 5 | Fisher | 1.00000 | - |
| Can f 6 | Fisher | 0.68426 | - |

**Table S12. Sensitization profile vs mixed profile: percentage table of cat allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 28 | 90.32 | 8 | 100.00 | 36 | 92.31 |
| *Positive* |
| *Negative* | 3 | 9.68 | . | 0.00 | 3 | 7.69 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Fel d 2*** | 9 | 29.03 | 1 | 12.50 | 10 | 25.64 |
| *Positive* |
| *Negative* | 22 | 70.97 | 7 | 87.50 | 29 | 74.36 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Fel d 4*** | 16 | 51.61 | 3 | 37.50 | 19 | 48.72 |
| *Positive* |
| *Negative* | 15 | 48.39 | 5 | 62.50 | 20 | 51.28 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Fel d 7*** | 11 | 35.48 | 2 | 25.00 | 13 | 33.33 |
| *Positive* |
| *Negative* | 20 | 64.52 | 6 | 75.00 | 26 | 66.67 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 1.00000 | - |
| Fel d 2 | Fisher | 0.65256 | - |
| Fel d 4 | Fisher | 0.69476 | - |
| Fel d 7 | Fisher | 0.69421 | - |

**Table S13. Sensitization profile vs mixed profile: percentage table of dog allergens**

|  | ***Classification*** | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- |
| *Persistent* | | *Intermittent* | |
| *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 16 | 51.61 | 3 | 37.50 | 19 | 48.72 |
| *Positive* |
| *Negative* | 15 | 48.39 | 5 | 62.50 | 20 | 51.28 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Can f 2*** | 8 | 25.81 | 4 | 50.00 | 12 | 30.77 |
| *Positive* |
| *Negative* | 23 | 74.19 | 4 | 50.00 | 27 | 69.23 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Can f 3*** | 11 | 35.48 | 1 | 12.50 | 12 | 30.77 |
| *Positive* |
| *Negative* | 20 | 64.52 | 7 | 87.50 | 27 | 69.23 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Can f 4*** | 10 | 32.26 | 3 | 37.50 | 13 | 33.33 |
| *Positive* |
| *Negative* | 21 | 67.74 | 5 | 62.50 | 26 | 66.67 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Can f 5*** | 18 | 58.06 | 4 | 50.00 | 22 | 56.41 |
| *Positive* |
| *Negative* | 13 | 41.94 | 4 | 50.00 | 17 | 43.59 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |
| ***Can f 6*** | 11 | 35.48 | 3 | 37.50 | 14 | 35.90 |
| *Positive* |
| *Negative* | 20 | 64.52 | 5 | 62.50 | 25 | 64.10 |
| *Total* | 31 | 100.00 | 8 | 100.00 | 39 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.69476 | - |
| Can f 2 | Fisher | 0.22057 | - |
| Can f 3 | Fisher | 0.39377 | - |
| Can f 4 | Fisher | 1.00000 | - |
| Can f 5 | Fisher | 0.70894 | - |
| Can f 6 | Fisher | 1.00000 | - |

**Table S14. Sensitization profile vs asthma profile: percentage table of cat allergens**

|  | ***Severity*** | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Mild* | | *Moderate* | | *Severe* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 8 | 80.00 | 1 | 100.00 | 1 | 100.00 | 10 | 83.33 |
| *Positive* |
| *Negative* | 2 | 20.00 | . | 0.00 | . | 0.00 | 2 | 16.67 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Fel d 2*** | 3 | 30.00 | . | 0.00 | . | 0.00 | 3 | 25.00 |
| *Positive* |
| *Negative* | 7 | 70.00 | 1 | 100.00 | 1 | 100.00 | 9 | 75.00 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Fel d 4*** | 2 | 20.00 | . | 0.00 | 1 | 100.00 | 3 | 25.00 |
| *Positive* |
| *Negative* | 8 | 80.00 | 1 | 100.00 | . | 0.00 | 9 | 75.00 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Fel d 7*** | 4 | 40.00 | . | 0.00 | 1 | 100.00 | 5 | 41.67 |
| *Positive* |
| *Negative* | 6 | 60.00 | 1 | 100.00 | . | 0.00 | 7 | 58.33 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 1.00000 | - |
| Fel d 2 | Fisher | 1.00000 | - |
| Fel d 4 | Fisher | 0.46450 | - |
| Fel d 7 | Fisher | 0.68050 | - |

**Table S15. Sensitization profile vs asthma profile: percentage table of dog allergens**

|  | ***Severity*** | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Mild* | | *Moderate* | | *Severe* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 6 | 60.00 | . | 0.00 | 1 | 100.00 | 7 | 58.33 |
| *Positive* |
| *Negative* | 4 | 40.00 | 1 | 100.00 | . | 0.00 | 5 | 41.67 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Can f 2*** | 5 | 50.00 | . | 0.00 | . | 0.00 | 5 | 41.67 |
| *Positive* |
| *Negative* | 5 | 50.00 | 1 | 100.00 | 1 | 100.00 | 7 | 58.33 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Can f 3*** | 2 | 20.00 | . | 0.00 | . | 0.00 | 2 | 16.67 |
| *Positive* |
| *Negative* | 8 | 80.00 | 1 | 100.00 | 1 | 100.00 | 10 | 83.33 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Can f 4*** | 6 | 60.00 | 1 | 100.00 | . | 0.00 | 7 | 58.33 |
| *Positive* |
| *Negative* | 4 | 40.00 | . | 0.00 | 1 | 100.00 | 5 | 41.67 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Can f 5*** | 3 | 30.00 | . | 0.00 | . | 0.00 | 3 | 25.00 |
| *Positive* |
| *Negative* | 7 | 70.00 | 1 | 100.00 | 1 | 100.00 | 9 | 75.00 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |
| ***Can f 6*** | 1 | 10.00 | . | 0.00 | . | 0.00 | 1 | 8.33 |
| *Positive* |
| *Negative* | 9 | 90.00 | 1 | 100.00 | 1 | 100.00 | 11 | 91.67 |
| *Total* | 10 | 100.00 | 1 | 100.00 | 1 | 100.00 | 12 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.67230 | - |
| Can f 2 | Fisher | 1.00000 | - |
| Can f 3 | Fisher | 1.00000 | - |
| Can f 4 | Fisher | 0.68500 | - |
| Can f 5 | Fisher | 1.00000 | - |
| Can f 6 | Fisher | 1.00000 | - |

**Table S16. Sensitization profile vs allergic rhinitis profile: percentage table of cat allergens**

|  | ***Severity*** | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Mild* | | *Moderate* | | *Severe* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 20 | 90.91 | 8 | 80.00 | 4 | 100.00 | 32 | 88.89 |
| *Positive* |
| *Negative* | 2 | 9.09 | 2 | 20.00 | . | 0.00 | 4 | 11.11 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Fel d 2*** | 4 | 18.18 | 2 | 20.00 | 1 | 25.00 | 7 | 19.44 |
| *Positive* |
| *Negative* | 18 | 81.82 | 8 | 80.00 | 3 | 75.00 | 29 | 80.56 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Fel d 4*** | 8 | 36.36 | 3 | 30.00 | 2 | 50.00 | 13 | 36.11 |
| *Positive* |
| *Negative* | 14 | 63.64 | 7 | 70.00 | 2 | 50.00 | 23 | 63.89 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Fel d 7*** | 8 | 36.36 | 1 | 10.00 | 1 | 25.00 | 10 | 27.78 |
| *Positive* |
| *Negative* | 14 | 63.64 | 9 | 90.00 | 3 | 75.00 | 26 | 72.22 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 0.73800 | - |
| Fel d 2 | Fisher | 1.00000 | - |
| Fel d 4 | Fisher | 0.77580 | - |
| Fel d 7 | Fisher | 0.30000 | - |

**Table S17. Sensitization profile vs allergic rhinitis profile: percentage table of dog allergens**

|  | ***Severity*** | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Mild* | | *Moderate* | | *Severe* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 11 | 50.00 | 2 | 20.00 | 3 | 75.00 | 16 | 44.44 |
| *Positive* |
| *Negative* | 11 | 50.00 | 8 | 80.00 | 1 | 25.00 | 20 | 55.56 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Can f 2*** | 7 | 31.82 | 2 | 20.00 | 1 | 25.00 | 10 | 27.78 |
| *Positive* |
| *Negative* | 15 | 68.18 | 8 | 80.00 | 3 | 75.00 | 26 | 72.22 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Can f 3*** | 3 | 13.64 | 2 | 20.00 | 1 | 25.00 | 6 | 16.67 |
| *Positive* |
| *Negative* | 19 | 86.36 | 8 | 80.00 | 3 | 75.00 | 30 | 83.33 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Can f 4*** | 7 | 31.82 | 2 | 20.00 | 2 | 50.00 | 11 | 30.56 |
| *Positive* |
| *Negative* | 15 | 68.18 | 8 | 80.00 | 2 | 50.00 | 25 | 69.44 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Can f 5*** | 15 | 68.18 | 5 | 50.00 | 3 | 75.00 | 23 | 63.89 |
| *Positive* |
| *Negative* | 7 | 31.82 | 5 | 50.00 | 1 | 25.00 | 13 | 36.11 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |
| ***Can f 6*** | 4 | 18.18 | 1 | 10.00 | 2 | 50.00 | 7 | 19.44 |
| *Positive* |
| *Negative* | 18 | 81.82 | 9 | 90.00 | 2 | 50.00 | 29 | 80.56 |
| *Total* | 22 | 100.00 | 10 | 100.00 | 4 | 100.00 | 36 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.11830 | - |
| Can f 2 | Fisher | 0.85660 | - |
| Can f 3 | Fisher | 0.68340 | - |
| Can f 4 | Fisher | 0.57480 | - |
| Can f 5 | Fisher | 0.58980 | - |
| Can f 6 | Fisher | 0.29650 | - |

**Table S18. Contact with animals vs allergic profile: percentage table**

**of cat allergens**

|  | ***Contact with Animals*** | | | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Cat* | | *Dog* | | *Cat+dog* | | *No contact* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Fel d 1*** | 14 | 100.00 | 18 | 75.00 | 7 | 100.00 | 36 | 92.31 | 75 | 89.29 |
| *Positive* |
| *Negative* | . | 0.00 | 6 | 25.00 | . | 0.00 | 3 | 7.69 | 9 | 10.71 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Fel d 2*** | 2 | 14.29 | 7 | 29.17 | 3 | 42.86 | 8 | 20.51 | 20 | 23.81 |
| *Positive* |
| *Negative* | 12 | 85.71 | 17 | 70.83 | 4 | 57.14 | 31 | 79.49 | 64 | 76.19 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Fel d 4*** | 8 | 57.14 | 11 | 45.83 | 5 | 71.43 | 11 | 28.21 | 35 | 41.67 |
| *Positive* |
| *Negative* | 6 | 42.86 | 13 | 54.17 | 2 | 28.57 | 28 | 71.79 | 49 | 58.33 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Fel d 7*** | 6 | 42.86 | 9 | 37.50 | 3 | 42.86 | 9 | 23.08 | 27 | 32.14 |
| *Positive* |
| *Negative* | 8 | 57.14 | 15 | 62.50 | 4 | 57.14 | 30 | 76.92 | 57 | 67.86 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Fel d 1 | Fisher | 0.07580 | - |
| Fel d 2 | Fisher | 0.44060 | - |
| Fel d 4 | Fisher | 0.07330 | - |
| Fel d 7 | Fisher | 0.36900 | - |

**Table S19. Contact with animals vs allergic profile: percentage table of dog allergens**

|  | ***Contact with animals*** | | | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Cat* | | *Dog* | | *Cat+dog* | | *No contact* | |
| *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* | *N* | *%* |
| ***Can f 1*** | 6 | 42.86 | 15 | 62.50 | 5 | 71.43 | 14 | 35.90 | 40 | 47.62 |
| *Positive* |
| *Negative* | 8 | 57.14 | 9 | 37.50 | 2 | 28.57 | 25 | 64.10 | 44 | 52.38 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Can f 2*** | 4 | 28.57 | 8 | 33.33 | 2 | 28.57 | 12 | 30.77 | 26 | 30.95 |
| *Positive* |
| *Negative* | 10 | 71.43 | 16 | 66.67 | 5 | 71.43 | 27 | 69.23 | 58 | 69.05 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Can f 3*** | 1 | 7.14 | 7 | 29.17 | 3 | 42.86 | 8 | 20.51 | 19 | 22.62 |
| *Positive* |
| *Negative* | 13 | 92.86 | 17 | 70.83 | 4 | 57.14 | 31 | 79.49 | 65 | 77.38 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Can f 4*** | 5 | 35.71 | 12 | 50.00 | 2 | 28.57 | 11 | 28.21 | 30 | 35.71 |
| *Positive* |
| *Negative* | 9 | 64.29 | 12 | 50.00 | 5 | 71.43 | 28 | 71.79 | 54 | 64.29 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Can f 5*** | 5 | 35.71 | 16 | 66.67 | 6 | 85.71 | 19 | 48.72 | 46 | 54.76 |
| *Positive* |
| *Negative* | 9 | 64.29 | 8 | 33.33 | 1 | 14.29 | 20 | 51.28 | 38 | 45.24 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |
| ***Can f 6*** | 5 | 35.71 | 9 | 37.50 | 4 | 57.14 | 4 | 10.26 | 22 | 26.19 |
| *Positive* |
| *Negative* | 9 | 64.29 | 15 | 62.50 | 3 | 42.86 | 35 | 89.74 | 62 | 73.81 |
| *Total* | 14 | 100.00 | 24 | 100.00 | 7 | 100.00 | 39 | 100.00 | 84 | 100.00 |

| *Variable* | *Test* | *P value* | *Significance* |
| --- | --- | --- | --- |
| Can f 1 | Fisher | 0.11020 | - |
| Can f 2 | Fisher | 1.00000 | - |
| Can f 3 | Fisher | 0.22030 | - |
| Can f 4 | Fisher | 0.36890 | - |
| Can f 5 | Fisher | 0.09330 | - |
| Can f 6 | Fisher | 0.00870 | \* |

**Table S20. Sensitization profile vs immunotherapy**

|  | ***Sensitization profile*** | | | | | | | | | *Total* | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Cat sensitization* | | | *Dog sensitization* | | | *Mixed sensitization* | | |
| *N* | *%* | | *N* | *%* | | *N* | *%* | | *N* | *%* |
| ***Pet IT*** | 2 | 11.8 | | 1 | 33.3 | | 26 | 38.8 | | 29 | 33.3 |
| *Yes* |
| *No* | 15 | 88.28 | | 2 | 66.7 | | 41 | 61.2 | | 58 | 66.7 |
| *Total* | 17 | 100.0 | | 3 | 100.0 | | 67 | 100.0 | | 87 | 100.0 |
| *Variable* | | | *Test* | | | *P Value* | | | *Significance* | | |
| Pet IT | | | Fisher | | | 0.08590 | | | - | | |