**SUPPLEMENTAL MATERIAL**

**S-Appendix 1**. The recommended dose of SM-AIT and DM-AIT

The recommended dose of standardized Der p extracts for SM-AIT is 100 standardized quality units per milliliter (SQ-U/mL) (No. 1 vial), 1000 SQ-U/mL (No. 2 vial), 10000 SQ-U/mL (No. 3 vial), and 100000 SQ-U/mL (No. 4 vial). In the SM-AIT group, patients received injections weekly at a volume of 0.2, 0.4, and 0.8 mL in the No. 1 to 3 vials and 0.1, 0.2, 0.4, 0.6, 0.8, 1.0 mL in the No. 4 vial, reaching the maintenance dose, which was given at a volume of 1.0 mL every 5 weeks. The recommended dose of standardized Der p and Der f (50/50) extracts for DM-AIT is 50 treatment units per milliliter (TU/mL) (No. 1 vial), 500 TU/mL (No. 2 vial), and 5000 TU/mL (No. 3 vial). In the DM-AIT group, patients received injections weekly at a volume of 0.1, 0.2, 0.4, 0.6 and 0.8 mL in the No. 1 to 2 vials and 0.1, 0.2, 0.4, 0.6, 0.8, and 1.0 mL in the No. 3 vial reaching the maintenance dose, Then, the maintenance dose was given at a volume of 0.5 mL, 0.75ml (on a 2-week basis), 1.0 mL,1.0 mL and 1.0 mL (on a 5-week basis) according to the manufacturer’s instructions.

Table S1 Sensitized to other aeroallergens in baseline

|  |  |  |  |
| --- | --- | --- | --- |
| SPT | SM-AIT (n=19) | DM-AIT (n=38) | P |
| Cockroaches, No. (%) | 6 (31.58) | 13 (34.21) | 0.84 |
| Grass pollens, No. (%) | 1 (5.26) | 3 (7.89) | 0.71 |
| Animal allergens, No. (%) | 6 (31.57) | 6 (15.79) | 0.17 |

SPT, Skin Prick Test; Grass pollens, including birch, platanus hispanica and timothy grass; Animal allergens, including cat hair, dog hair. There was no food allergic in the two groups.