Supplementary Material

Questionnaire used in the present survey

Q1. Which of the following do you think are required for the implementation of specific immunotherapy (SIT)?
   1. Primary hospital
   2. Standardized diagnostic process
   3. Professionally trained staff
   4. Valid emergency rescue system
   5. Patient education and management program
   6. Standardized agents for SIT

Q2. What do you feel are the suitable diseases for treatment with SIT?
   1. Allergic rhinitis (AR)
   2. Allergic asthma
   3. Bee venom allergy
   4. Atopic dermatitis
   5. Food Allergies
   6. Urticaria

Q3. What do you think about the current status of SIT in allergic disease treatment?
   1. It is suitable for those severe or difficult patients, in whom use of medications is unsatisfactory, either because of lack of efficacy or because of unacceptable side effects.
   2. SIT has shown to be able to prevent the progression of allergic diseases, so that initiation of SIT as early as possible is recommended.
   3. SIT can avoid the adverse effects of medications.
   4. SIT is capable of inducing modifications in the immunological pattern of allergic patients; it should be started as early as possible.
   5. It is unsafe and uncontrollable (not recommended).

Q4. How do you diagnose allergic diseases? Please check most frequently used tools.
   1. Medical history
   2. Investigation of specific IgE antibodies in vivo (skin tests) or in vitro
   3. Confirmation of the correlation between allergy history and the results of IgE antibody tests
   4. Exclusion of other stimulating factors (even with a positive result in allergen detection tests)

Q5. Which of the following diseases have you treated with SIT before?
   1. AR
   2. Allergic asthma
   3. Bee venom allergy
   4. Atopic dermatitis
   5. Food Allergies
   6. Urticaria

Q6. Please describe the allergen-positive rates in AR from your past clinical practice experiences and answer according to the percentage of total patients.
   1. Single dust mite ______: Dermatophagoides pteronyssinus and Dermatophagoides farinae ______.
   2. Single pollen ______: multiple pollens ______.
   3. Combined dust mite and pollen ______.
   4. Other allergens ______.
Q7. Which items should the patients understand before SIT?
   1. Mechanisms
   2. Efficacy evaluation
   3. Treatment course
   4. Dosing schedules for SIT
   5. Termination of SIT
   6. Adverse effects
   7. Informed consent
   8. Treatment costs
   9. Safety of SIT

Q8. What do you feel are the possible mechanisms of SIT?
   1. Long-term reduction in specific IgE levels
   2. Induction of IgG antibody response
   3. Reduction of the accumulation of effector cells
   4. Change of Th1/Th2 cytokine equilibrium
   5. Deactivation of circulating T cells
   6. Induction of regulatory T cells

Q9. What do you think about the timing of SIT usage?
   1. The treatment of first choice for allergic diseases
   2. Pharmacotherapy is invalid
   3. A second-line treatment

Q10. With respect to dosing schedules in SIT, which treatment program do you prefer?
   1. Conventional immunotherapy
   2. Cluster immunotherapy
   3. Rush immunotherapy

Q11. Regarding the method of SIT administration, which condition do you prefer?
   1. Application of a single allergen
   2. A variety of allergens, itemized desensitization
   3. A variety of allergens, mixed desensitization

Q12. Which indications do you prefer for SIT?
   1. Simply dust mite allergy
   2. Simply pollen allergy
   3. Combined dust mite and pollen allergy

Q13. Regarding the dosing interval of SIT, which do you prefer?
   1. Daily dosing
   2. 2 weeks
   3. 4 weeks
   4. 6 weeks
   5. 8 weeks
   6. The longer, the better

Q14. What do you think about the treating course of SIT?
   1. At least 3-5 years
   2. According to the efficacy, generally not less than 3 years
   3. Terminate treatment for poor patient outcomes
   4. Regular follow-up after SIT, application of appropriate preventive measures when necessary
Q15. What do you think about the standardization of allergen?
1. Standardized allergen in diagnosis
2. Standardized allergen in treatment
3. Stable concentration
4. Stable potency
5. Non-standardized allergen is not recommended

Q16. How do you evaluate the efficacy of SIT?
1. Subjective symptoms
2. Objective examinations
3. Changes in inflammatory markers
4. Allergen nasal challenge tests
5. Serum IgE levels
6. Serum IgG levels
7. Change of the results of skin tests
8. Serum T-lymphocyte subsets

Q17. What do you think about SIT and pharmacological treatments?
1. Standardized pharmacological treatments should follow ARIA guidelines which need at least 3 months of course.
2. SIT should not be implemented unless pharmacotherapy is invalid.
3. SIT is the treatment of first choice for AR.
4. Combination proper medication with SIT might reduce the rate of local and systemic reactions.
5. Choose between SIT and pharmacological treatments according to the patient’s condition and wishes.

Q18. Which of the following conditions would you prefer to choose subcutaneous immunotherapy (SCIT) for AR patients? And which one would you prefer to choose sublingual immunotherapy (SLIT)?
1. <5 years old
2. >5 years old
3. Adult
4. Good financial status
5. Poor financial status
6. Consultation is convenient
7. Consultation is inconvenient
8. High level of education
9. Low level of education
10. Adverse reactions to SCIT
11. Rejection of SCIT
12. High efficacy expectations

Q19. Which of the following do you think are novel approaches and future directions of SIT?
1. Recombinant allergens
2. Hypoallergenic allergens
3. T-cell peptide vaccines
4. Th1-cell immune stimulants
5. Mixtures of recombinant allergens
6. Anti-IgE therapy
Q20. What do you think about the safety of SIT?
1. With a clearly defined grading system
2. Relatively controllable and safe
3. Uncontrollable and unsafe
4. Possibility of local and systemic reactions
5. Possibility of severe complications

Q21. Regarding the guidelines for SIT that need improvement, which aspects do you prefer?
1. No further improvement
2. Indications and contraindications
3. Recommendation of the delivery methods
4. Dosing schedules for SIT
5. Practical aspects of immunotherapy
6. Comparison of SIT and pharmacotherapy

Q22. Which of the following do you think are the reasons for the low treatment rates of SIT in China?
1. Lack of professional training for doctors
2. Lack of patient knowledge about SIT
3. The high cost of SIT
4. The international guidelines don’t provide clear recommendations.
5. The domestic guidelines don’t provide clear recommendations.
6. Varieties of standardized agents for SIT are too little.
7. The qualified hospitals for SIT are few.