Introduction, Background, and Questions

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Allergenic Products Advisory Committee

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Scientific developments

- Investigational protocols for immunotherapy for established food allergy
  - Oral/sublingual
  - Parenteral
  - Transcutaneous
- Interest in preventing the development of respiratory allergic disease
  - Recent apparent success in preventing
    - peanut allergy in an at-risk infants
    - asthma in children with allergic rhinoconjunctivitis
  - Better understanding of the “allergic march”

Food allergy therapy

- Efficacy issues
  - Trial design
    - Field
    - Challenge
    - Surrogates
  - Endpoints
- Safety issues
  - Short term and long term
  - Treatment, challenge, and field exposure

		Exposure	
		Controlled	Natural
Allergen Type	Food	+	-
	Hymenoptera	+	-
	Pets / Molds	+/-	+
	Pollen	?	+

Rabin, RL, Allergenic Products Advisory Committee, May 2011

Prevention development of asthma

- Inclusion criteria
- Endpoints
- Duration

Presentations today

- Clinical development of allergen immunotherapies for the treatment of food allergy – Dr. Kathleen Hise, FDA
- Can we control the “atopic march": how do we design and assess relevant intervention studies? – Dr. Thomas A.E Platts-Mills, University of Virginia
- Prevention of respiratory allergic disease with allergen immunotherapy – Dr. S. Tina Chang, FDA

Questions and Discussion

- The Committee is not asked to address product-specific questions
  - Food allergy therapy
  - Prevention of development of asthma
- Although there may be some scientific overlap between the two agenda items, clinical and regulatory issues are distinct. Therefore, FDA requests separate treatment of the questions

Treatment of food allergy

1. **Regarding food challenge studies to assess effectiveness of immunotherapy in allergic individuals, please discuss:**

    - **objective criteria for determining the eliciting dose (ED), particularly in children <5 years of age; and**
    - **clinically meaningful parameters, including amplitude of response and duration of time off therapy, that could be used to demonstrate the effectiveness of immunotherapy for:**
        - **"desensitization"**
        - **"sustained unresponsiveness" (i.e., maintenance of desensitization off therapy)**
    - **safety considerations for the food challenge**

2. **Please discuss approaches other than food challenge studies to demonstrate the effectiveness of immunotherapy products intended for use in food allergic individuals.**

3. **Taking into account the route of administration of immunotherapy in food allergic subjects, and the age of study subjects, please discuss specific safety monitoring for signs and symptoms of allergic reactions.**

Prevention of development of asthma

1. **Studies to demonstrate effectiveness of allergy immunotherapy to prevent the development of asthma will likely enroll a population at increased risk for the development of asthma, including children 6 months of age and older. Please discuss:**
    - **factors to consider in the identification of subjects at increased risk of developing asthma;**
    - **the diagnosis of asthma in infants and young children;**
    - **factors to consider regarding the timing of the assessment of asthma endpoints (e.g. age, time on therapy, time off therapy, others)**
2. **Please discuss the assessment of safety in infants and young children receiving aeroallergen immunotherapy to prevent development of asthma.**

Treatment of food allergy, question 1

- Regarding food challenge studies to assess effectiveness of immunotherapy in allergic individuals, please discuss:
  - objective criteria for determining the eliciting dose (ED), particularly in children <5 years of age;
  - clinically meaningful parameters, including amplitude of response and duration of time off therapy, that could be used to demonstrate the effectiveness of immunotherapy for:
    - "desensitization"
    - "sustained unresponsiveness" (i.e., maintenance of desensitization off therapy)
  - safety considerations for the food challenge

Treatment of food allergy, question 2

- Please discuss approaches other than food challenge studies to demonstrate the effectiveness of immunotherapy products intended for use in food allergic individuals.

Treatment of food allergy, question 3

- Taking into account the route of administration of immunotherapy in food allergic subjects, and the age of study subjects, please discuss specific safety monitoring for signs and symptoms of allergic reactions.

Prevention of development of asthma, question 1

- Studies to demonstrate effectiveness of allergy immunotherapy to prevent the development of asthma will likely enroll a population at increased risk for the development of asthma, including children 6 months of age and older. Please discuss:
  - factors to consider in the identification of subjects at increased risk of developing asthma;
  - the diagnosis of asthma in infants and young children;
  - factors to consider regarding the timing of the assessment of asthma endpoints (e.g. age, time on therapy, time off therapy, others)

Prevention of development of asthma, question 2

- Please discuss the assessment of safety in infants and young children receiving aeroallergen immunotherapy to prevent the development of asthma.