

## NON-INVASIVE TREATMENT FOR POLLEN OR FOOD ALLERGIES

The non-invasive, acute or short-time preventive allergy treatment will be administered as aerosol spray, eye drops, or encapsulated for oral administration, ideally before exposure to the allergen. A complex of antibodies directed against pollen/food allergens with a cell-surface molecule prevents allergic inflammation by trapping the allergens on the mucosal surface of the respiratory tract, the eyes, or the gut.



### BACKGROUND

IgE-associated allergies affect more than 25% of the world population.

Current treatments of pollen allergies are mainly symptomatic, e.g. with antihistamines.

Alternatively, allergen-specific immunotherapy (SIT) reduces allergic symptoms by “resetting” the immune system. SIT involves

the long-term administration of (modified) allergens via invasive routes, which is often found tedious and unpleasant by patients.

For food allergies, allergen avoidance currently represents the only treatment. At present, there is no cure available.

### TECHNOLOGY

A complex of antibodies entraps the allergens (e.g. grass pollen) on the mucosal surface, binding to a cell surface molecule that is highly expressed on the respiratory and ocular epithelium of allergic patients.

The complex prevents the allergen from crossing the epithelial barrier and migrating into the tissues involved in allergic inflammation. This reduces the allergen up-take, decreases the activation of the immune system, and alleviates subsequent allergic inflammation.

### BENEFITS

- New therapeutic approach
- None-invasive, preventive application
- Easy and quick application
- First treatment of food allergies
- Large market

### REFERENCE:

534.14

### AVAILABLE FOR:

- License Agreement
- Development partnership

### APPLICATIONS:

- Intranasal, oral, or ocular treatment of respiratory allergies
- Oral treatment of food allergies

### DEVELOPMENT STATUS:

*In vitro* proof of concept

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