



# THERAPEUTICS & DRUG TARGETS

## Novel oligosaccharide immunostimulatory compound for treatment and prevention of allergy

### Background:

There are 500 million people with potentially treatable allergy. The market for allergen immunotherapy (AIT; also known as desensitization) exceeds 1 billion USD with annual growth of 8%. However, 80% of patients discontinue the intensive, long-lasting and expensive therapy within the first years.

### Description:

A new kind of glycocluster adjuvant (TADM) was synthesized. It has a superior activity profile over existing adjuvants:

- Prevents allergic inflammation in grass-induced chronic airway inflammation (animal model)
- Suppresses the cytokine and IgE responses related to allergen-induced allergic inflammation (animal model)
- Suppresses the allergen-induced cytokine responses related to allergic inflammation (cultured human leukocytes)
- Suppresses all three most important cytokines related to allergic inflammation (IL-4, IL-5 and IL-13)
- Favorable safety profile with a benign TNF profile

### Application Areas:

The novel synthetic oligosaccharide compound, TADM:

- Reduces the amount of allergen needed in immunotherapy
- Facilitates shorter, more effective and more economic therapy of allergy-related diseases, eventually leading to improved patient compliance and wider use
- Applicable also as an efficient adjuvant in vaccines for infectious diseases and cancer.
- Potential for topical allergy treatment as such

The IP is available for licensing from the TTO of the University of Turku (UTU) and Åbo Akademi University (ÅA).

ID: UTU308

Title: MULTIVALENT [BETA]-1,2-LINKED MANNOSE OLIGOSACCHARIDES AS IMMUNOSTIMULATORY COMPOUNDS AND USES THEREOF

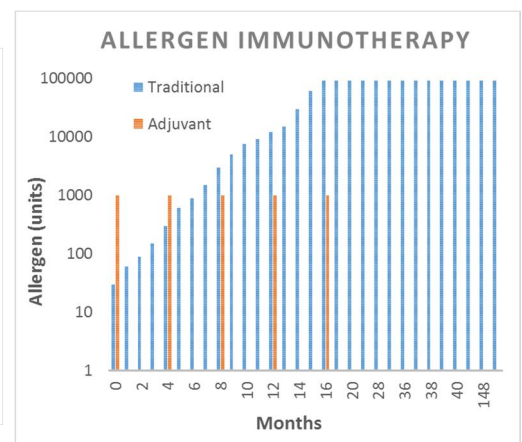
PCT Publication: WO2012175813 (A1)

National Phase: US9221861 (B2), EP2723754 (A1), CA2842136 (A1), JP2014520136 (A), CN103814041 (A), AU2012273838 (A1), KR 10-2014-0108209

+ Unpublished applications

Status: Technology Readiness Level (TRL) 5-6  
Proof-of-principle data *in vitro* and *in vivo*. Proof-of-concept data *in vivo*. Synthesis upscaling and optimization for GMP production in progress.

Traditional	50 injections	4 000 000 allergen units	Allergic reactions
Adjuvant	3-6 injections	100 000 allergen units	No side reactions



### CONTACT INFORMATION

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