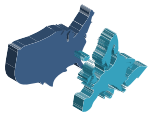
AN INVESTIGATIONAL APPROACH TO PEANUT ALLERGY

dbv technologies

DBV Technologies is a clinical-stage biopharmaceutical company with several investigational medicinal products in development. These products have not been approved for use or marketing by any regulatory authority.

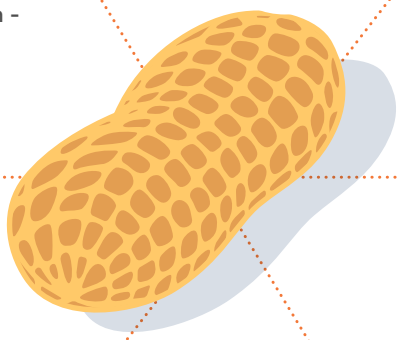
PEANUT ALLERGY: **A GROWING PUBLIC HEALTH EPIDEMIC**



Affects ~1.6% of children in Europe and ~2% of children in the United States[1,2]

Accidental exposures are common - in one medical chart review study, 39% of peanut-allergic children reported an accidental exposure within ~1 year of diagnosis[3]

Imposes a substantial social and psychological burden on patients, families, and caregivers[4-6]



Reactions are more likely to be severe compared to other food allergies[2]

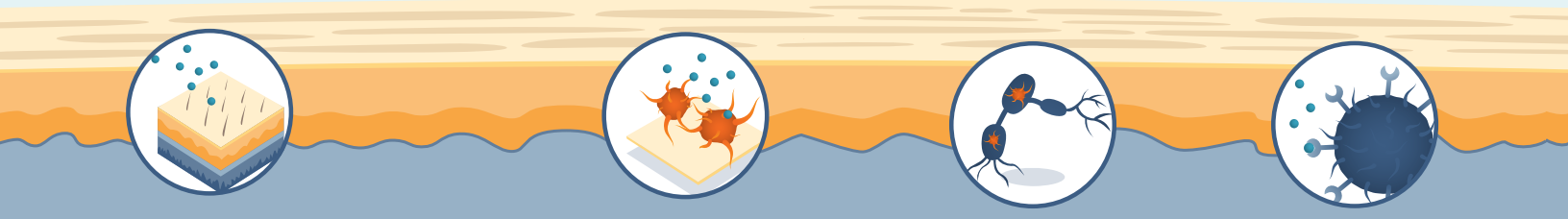
Many factors contribute to reaction severity, making reactions unpredictable[7]

There is no conclusive method for stratifying patients according to risk of a severe reaction[8]

INVESTIGATIONAL EPICUTANEOUS IMMUNOTHERAPY (EPIT): IN CLINICAL DEVELOPMENT FOR FOOD ALLERGIES

EPIT utilizes the immune properties of the skin

Animal models show that



In food allergy, EPIT aims to induce desensitization by delivering small quantities of allergen to intact skin[9]

Allergen is captured in the superficial layers of intact skin by Langerhans cells, preventing systemic absorption[10]

Langerhans cells process the allergen and migrate to lymph nodes to activate the immune system[10]

Specific EPIT-induced Tregs show sustained immune modulation (8 weeks after treatment end)[11,12]

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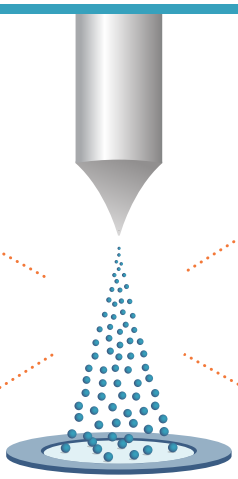
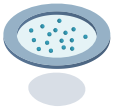
DBV'S INVESTIGATIONAL EPIT PATCH TECHNOLOGY

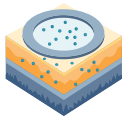
An investigational patch technology platform based on EPIT that aims to access the immune system through intact skin, while limiting the passage of allergen into the bloodstream[13]

Non-invasive potential treatment option under clinical investigation for peanut allergy[9]





Contains microgram amounts of biologically active, purified allergen[13]



When applied to intact skin, the patch is designed to utilize natural water loss from the skin to solubilize and release the allergen onto the outermost layer of the epidermis[13]

RECENT PUBLICATIONS ON INVESTIGATIONAL EPIT FOR THE TREATMENT OF PEANUT ALLERGY

Brown-Whitehorn T, de Blay F, Spergel JM, et al. Sustained unresponsiveness to peanut after long-term peanut epicutaneous immunotherapy. *J Allergy Clin Immunol Pract.* Published online August 22, 2020. doi:10.1016/j.jaip.2020.08.017.

DunnGalvin A, Fleischer DM, Campbell DE, et al. Improvements in quality of life in children following epicutaneous immunotherapy (EPIT) for peanut allergy in the PEPITES and PEOPLE studies. *J Allergy Clin Immunol Pract.* Published online August 22, 2020. doi:10.1016/j.jaip.2020.08.015.

Fleischer DM, Chinthrajah S, Scurlock AM, et al. An evaluation of factors influencing response to epicutaneous immunotherapy for peanut allergy in the PEPITES trial. *Allergy Asthma Proc.* 2020;41(5):326-355. doi:10.2500/aap.2020.41.200047.

Fleischer DM, Shreffler WG, Campbell DE, et al. Long-term, open-label extension study of the efficacy and safety of epicutaneous immunotherapy for peanut allergy in children: PEOPLE 3-year results [published online ahead of print July 10, 2020]. *J Allergy Clin Immunol.* doi:10.1016/j.jaci.2020.06.028.

Fleischer DM, Spergel JM, Kim EH, et al. Evaluation of daily patch application duration for epicutaneous immunotherapy for peanut allergy. *Allergy Asthma Proc.* 2020;41(4):278-284. doi:10.2500/aap.2020.41.200045.

Greenhawt M, Kim EH, Campbell DE, Green TD, Lambert R, Fleischer DM. Improvements in eliciting dose across baseline sensitivities following 12 months of epicutaneous immunotherapy (EPIT) in peanut-allergic children aged 4 to 11 years [published online ahead of print June 2, 2020]. *J Allergy Clin Immunol Pract.* doi:10.1016/j.jaip.2020.05.030.

Remington BC, Krone T, Kim EH, et al. Estimated risk reduction to packaged food reactions by epicutaneous immunotherapy (EPIT) for peanut allergy. *Ann Allergy Asthma Immunol.* 2019;123(5):488-493.e2. doi:10.1016/j.anai.2019.08.007.

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