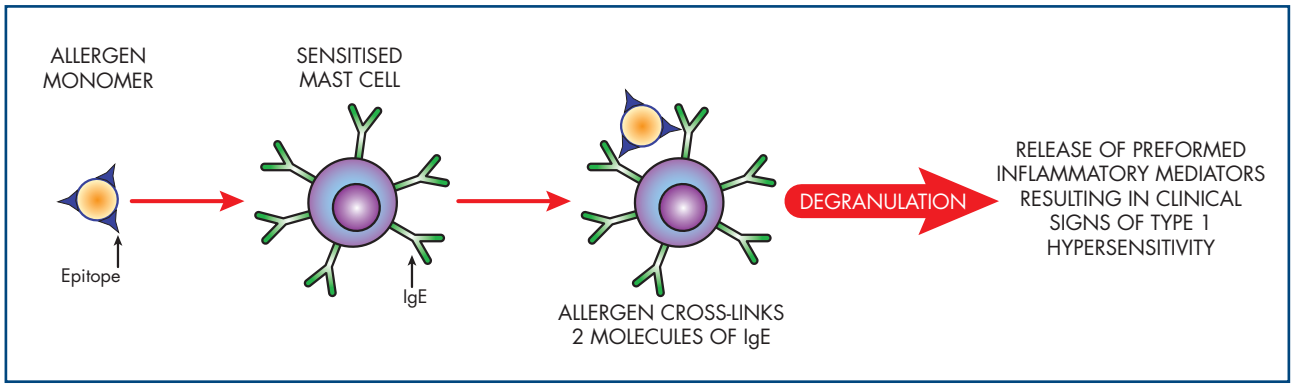
VET-GOID FAQs

How is Vet-Goid different from previous immunotherapies?

Vet-Goid is a chemically and physically modified allergen preparation; it is glutaraldehye polymerised and adjuvanted, benefiting from decreased allergenicity with enhanced immunogenicity. These properties allow it to overcome some of the major drawbacks associated with traditional immunotherapies.

What are the problems associated with traditional immunotherapy?

Two major drawbacks are the potential for immunotherapy to trigger a systemic allergic reaction including anaphylactic shock and the length of time it takes to achieve the maximum dose therefore a clinical response.

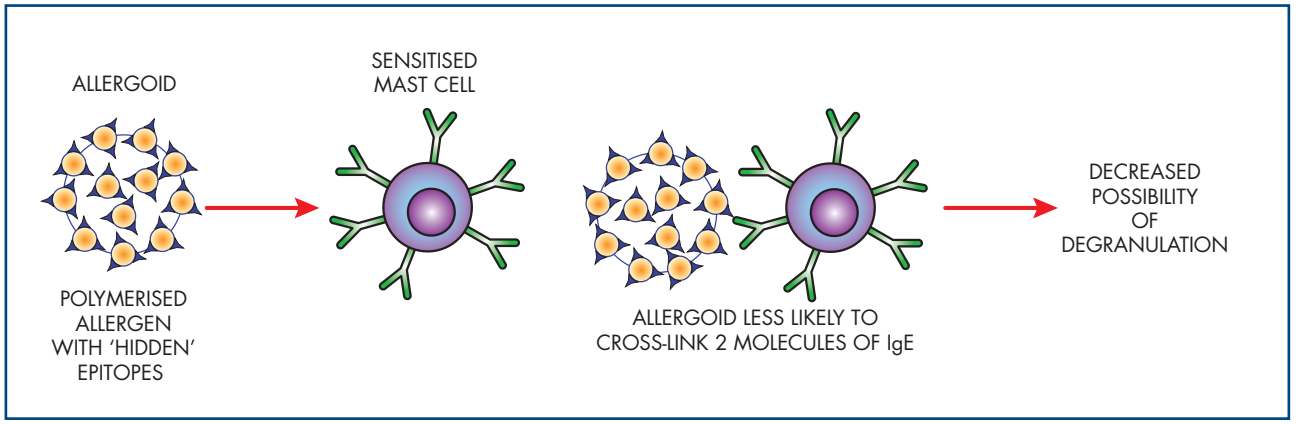


How does polymerisation lead to decreased allergenicity?

A type 1 hypersensitivity response is triggered when epitopes on the surface of an allergen cross-link two molecules of IgE on the membrane of a sensitised mast cell.

A polymer comprising multiple allergens has a smaller surface area than the same number of allergen monomers, with fewer exposed epitopes which are able to cross-link mast cell bound IgE.

In addition, the molecular weight and shape of the polymerised allergen results in cross-linking of fewer IgE pairs on tissue mast cells than would occur with allergen monomers.



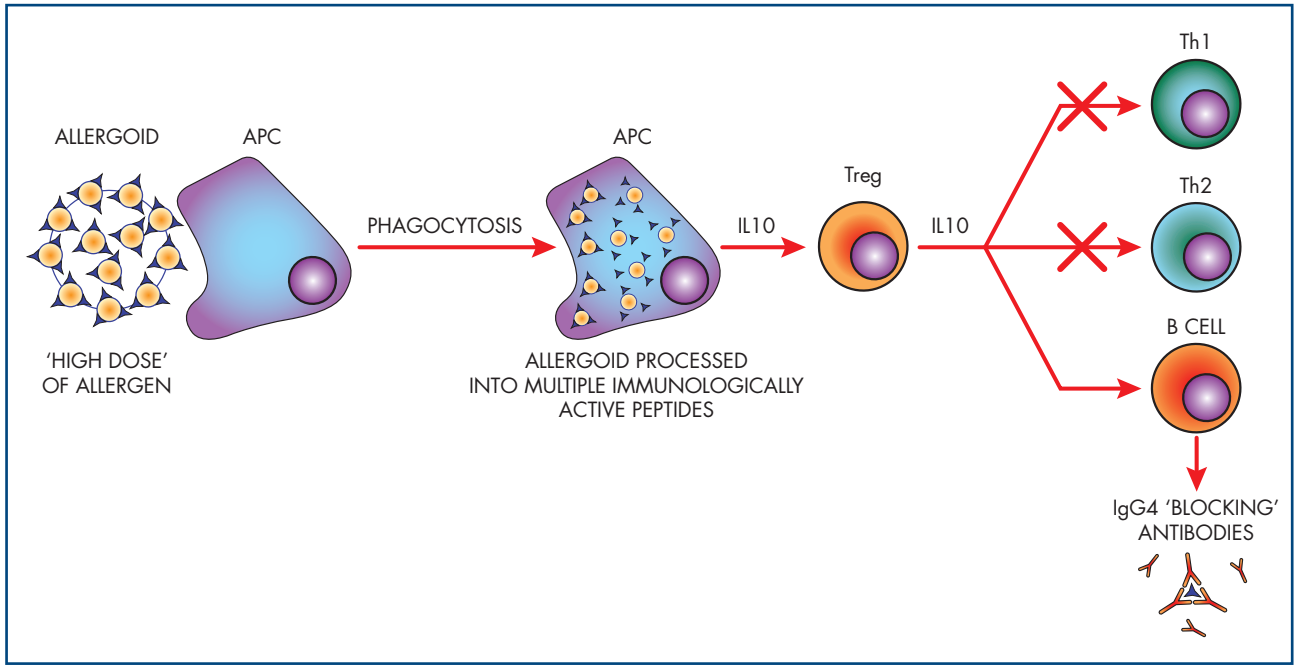
Finally, following subcutaneous injection, high molecular weight polymerised allergens diffuse more slowly towards sensitised mast cells than allergen monomers. Their progress is more likely to be interrupted by antigen processing and presenting cells (APCs) in the tissues, reducing their opportunity to react with sensitised mast cells.

These properties all contribute to decreased allergenicity and permit higher starting doses of immunotherapy with achievement of the maximal dose after just 1 week, which translates into a more rapid clinical response. There is no prolonged or complicated initial stage of treatment.

How is immunogenicity enhanced?

Allergens incorporated into immunotherapy vaccines diffuse from the site of injection, are detected and phagocytosed by surveillance APCs.

APCs exposed to high doses of allergen release IL10 which in turn activates Treg cells. Treg cells dampen down the activity of allergen reactive Th2 cells, decreasing B cell IgE production, and initiate antigen switching to IgG class 4 antibodies. IgG4 antibodies are "blocking" antibodies which capture allergen, preventing mast cell activation. It is these changes which ultimately result in immune tolerance. The use of polymerised allergens provides a safe mechanism to quickly deliver the high concentrations of allergen required to initiate immune modification, resulting in a shorter time to clinical improvement.



Vet-Goid Summary:

- Decreased allergenicity, increased immunogenicity
- Safe and efficacious
- Requires an SIC rather than an STC
- Simple dosing schedule (see opposite)
- No complicated or prolonged initial treatment phase
- Cost effective

Dosage schedule:

0.2ml - Day1

0.5ml - Day 7

0.5ml - Every month thereafter

allervet®

The answer to allergy