

## Some information for interpretation of results of imovet-biocheck

From class 1 upwards clinically significant levels of allergen specific IgE can be measured.  
A hyposensitization from class 1 and upwards is recommended.

The results have a good correlation to the results of intradermal skin tests and other in-vitro allergy tests. The belonging to classes is an artificial distribution, but should facilitate the interpretation of the results. It does not provide any grade of the severity of the illness. A hyposensitization is recommended mainly with allergens that can induce problems during longer periods of time. As the quantity of allergens in the therapy solution has to be kept as low as possible, a therapy against tree pollen allergy can be avoided, as the symptoms only appear during a short period (2-4 weeks a year). The desensitization against mould is controversial in human medicine and should only be done in animals in exceptional cases. Therapy solutions should not be composed of more than 4 to 6 allergens, or allergy groups, otherwise the chances of success are reduced.

### Some explanations about the allergens

#### Grasses and rye

The grass mixture is composed of timothy, velvet, cooks foot, blue grass, meadow fescue and ray grass. Even if these grasses exhibit a lot of cross reaction, they will still have a food-specific and individual allergic potential. The pollen of rye is a very strong allergen.

#### Tree pollen

Trees produce pollen only during a short period per year and therefore have limited effects on animals. An allergy produced only by tree pollen is rare and can be controlled by glucocorticoids.

#### Weeds

Weeds have a much more important effect on animals than on human beings as the nose and the body of the animal is much closer to the ground and consequently closer to the source of allergens. Wall pellitory (*Parietaria officinalis*) is to be found in the Mediterranean regions. Ragweed, one of the most important sources of pollen allergy, has made its way through the air over to Switzerland, the region of Geneva seeming by quite strongly affected. It is prominent in the South.

#### Mites

**House dust mites:** Dermatophagoides farinae, D. pteronyssinus.  
To be found the whole year round, mostly in late summer (wet and warm climates).

**Storage mites:** Acarus siro, Tyrophagus put., Lepidoglyphus.  
To be found in huge quantities in stored food and hay.

As recent research has shown, the house dust mites and storage mites share a lot of epitopes (protein structure). In imovet-biocheck, the band D. farinae binds the same common epitopes as all the tested mites. Positive reactions of the rest of the mites are totally different from the D. farinae.

Mites are sensitive to dry atmosphere. Above 1500 m, the itching should be reduced (additional indication for the specific allergy). The presence of storage mites in dry food can be avoided with freshly prepared food.

**6 out of 7 dogs with sarcoptic mites were negative for specific IgE against house dust mites and storage mites.** Caution: cross reactions with ectoparasites are well known in humans (for example scabies!). It is also possible that an atopic dog may suffer from sarcoptic mites and produce IgE against sarcoptic mites and their metabolic products (often only a few mites can cause massive itching).

#### Stinging insects

The saliva contains a large variety of different potential allergens. Allergens for hyposensitization are not available or are not very effective. Further studies and specially the production of recombinant allergens in the future could be a new way to control allergic reactions to stinging insects.

#### Moulds and yeasts

**Alternaria, Cladosporium:** on cereals and grasses, peak in late summer  
**Aspergillus, Penicillium:** on organic material, mostly in-house and in cities; all year round, peak May-October.

**Malassezia:** Germs similar to yeast, mainly found in wet and warm places of the body: ears, corners of the mouth, interdigital spaces and on chronically modified skin. Through an ordinary infection with Malassezia an allergenisation (IgE) is also possible. In that case, a therapy is more difficult, since due to new skin problems the Malassezia will grow and induce a complementary allergic reaction. Oral treatment with ketakonazol is very important. Regular shampoos will make the reinfection difficult. In cases of recurrence, hyposensitization trials are recommended.

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