

GUIDANCE FOR RESULTS WITH LOW REACTIVITY - AVACTA ALLERGY+™ ENVIRONMENTAL TEST

There is significant natural variation in IgE reactivity levels in both healthy and allergic animals; however, if you have received results with either no score (zero AU), or low reactivity (AU below the vertical threshold line with your results appearing in grey), there are a number of things it may be worth considering. Please find below some further guidance to complement the information on your test results sheet.

AVACTA ALLERGY+ COMPLETE ENVIRONMENTAL & FOOD TEST RESULTS

OUTDOOR ALLERGENS (POLLENS) IgE

IgE Level (AU)

Grasses

Meadow grass	3	
Meadow fescue	4	
Orchard grass	2	
Perennial rye	6	
Redtop	8	
Sweet vernal	7	
Timothy grass	2	

1. WAS THE ANIMAL FULLY SYMPTOMATIC AT THE TIME OF TESTING?

Unless clinical signs are controlled **ONLY** using medications that are not thought to affect testing (see point 3), testing should be undertaken when the animal is fully symptomatic so the immune response is likely to be at its highest.

We offer free sample storage in case you would like to sample at the optimum time but test at a later date. For more information visit the **Avacta Practice Portal** at avactaanimalhealth.com/vets/submit-a-sample-uk/



2. WAS SAMPLING UNDERTAKEN IN THE CORRECT SEASON?

We advise waiting >2 weeks after seasonal symptoms start (ideally test at peak season). Also consider if the animal has been removed from environmental allergens prior to testing e.g., stabled to avoid insects.

3. WAS THE ANIMAL ON ANY MEDICATION THAT MIGHT AFFECT TESTING?

Certain medications have been shown to affect the immune response, and therefore may impact test results. Please see our Withdrawal Guide for guidance at avactaanimalhealth.com/vets/submit-a-sample-uk/

4. WAS THE ANIMAL OVER 12 MONTHS OF AGE?

Animals should ideally be more than 12-15 months old to ensure maternally derived antibodies have subsided and they have had exposure to a full allergy season. If you would like to test an animal that is less than 12 months old, you can contact our Technical Support team on 0800 3 047 047 for advice and guidance.

5. WERE THE CLINICAL SIGNS RAPID ONSET (e.g. Urticaria?)

Timing is key for cases with rapid onset because clinical signs may only last for a few days. We would advise testing at least 24 hours after symptoms start, but ensuring that sampling takes place before clinical signs have started to improve. Sampling within this window increases the chance of serological IgE being sufficiently raised after exposure to allergens so that it can be detected, but before the IgE is on the decline due to clearance from the blood.

6. WAS THE DIAGNOSIS OF ALLERGY MADE BEFORE TESTING?

The diagnosis of allergic disease is one of exclusion, following the appropriate clinical rule-out of other differential diagnoses. Once this diagnosis is made, environmental allergy testing can be used to help identify causal allergens.

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7. HAS HYPERSENSITIVITY TO STAPHYLOCOCCUS BEEN INVESTIGATED?

For canine patients, an additional Staphylococcus IgE test is available, if required, and can be found under 'AVACTA SECONDARY INFECTION' on your submission form.

8. COULD THE HYPERSENSITIVITY BE TO AN UNUSUAL ALLERGEN?

Our species specific test panels are developed to identify the most common allergens implicated in environmental allergic disease. This is based upon guidelines within current literature, advice from dermatologists and selection of UK native plants/species wherever possible. It is, however, possible that the animal is hypersensitive to an unusual allergen not included in the panel.

9. HAS THE ANIMAL BEEN EFFECTIVELY TREATED FOR ECTOPARASITES?

In dogs and cats, regular treatment for fleas is vital, even if the parasite is not seen or an IgE hypersensitivity response not found. Around 20% of dogs with flea allergy dermatitis will only have a cell-mediated (Type IV) hypersensitivity and therefore no antibody reaction (Type I), thus giving negative IgE results.¹

Fleas and other ectoparasites (such as sarcoptes, demodex, etc.) should have been ruled out in the diagnostic work-up. This must also include all in-contact animals and the correct treatment of the environment.

10. COULD THE ANIMAL HAVE INTRINSIC ATOPIC DERMATITIS?

Intrinsic atopic dermatitis (AD) (or atopic-like dermatitis) has been shown to occur in up to 20% of dogs and is suspected to also exist in cats and horses.² The term refers to animals that have identical clinical signs to those with AD, but no detectable allergen-specific IgE (on both serological and intradermal skin testing). Animals with intrinsic AD are therefore expected to have entirely negative IgE serology results; in these cases immunotherapy is not an option. A negative result is however still helpful in the diagnostic process. It is worth noting that some dermatologists report that dogs with intrinsic AD may be less responsive to ciclosporin and steroids.

11. DOES THE ANIMAL SUFFER FROM ANY KIND OF IMMUNODEFICIENCY?

A generalised immunodeficiency can influence results.

12. WOULD ADDITIONAL INTRADERMAL TESTING BE OF USE?

Dependent on the outcome of evaluating the information above, it may also be worth considering intradermal skin testing (IDT) as the next step for this case. Depending on the allergen involved and the timing of testing, AD cases which return negative or minimally-reactive results on serology, may show positive results on IDT. The reverse is also true – some animals with negative IDT results, or responses incompatible with history, will have positive or meaningful responses on serology. Remember IDT measures mast-cell bound IgE whereas serology measures serum IgE, so they are measuring slightly different things. In an ideal world you would do both!

1. Laffort-Dassot, C. (2009) Flea allergy in dogs: Clinical signs and diagnosis. *European Journal of Companion Animal Practice* 19 (3), pp242-248.

2. Botoni, L.S., et al. (2019) Comparison of demographic data, disease severity and response to treatment, between dogs with atopic dermatitis and atopic-like dermatitis: a retrospective study. *Veterinary Dermatology* 30 (1), pp10-e4.

If you would like to discuss your results further, please contact our Technical Support team on **0800 3 047 047** or at technical.support@avacta.com

For further information and resources visit the Avacta Practice Portal at avactaanimalhealth.com/login

