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AMPATH LABORATORIES

INTRODUCING THE PAX PET ALLERGY TEST

Diagnosing a pet allergy starts with a detailed history and physical examination, followed by diagnostic IgE testing, to rule out conditions with similar symptoms. Testing for specific IgE antibodies against allergens can be done by laboratory testing. Laboratory testing of IgE antibodies against whole allergen extracts evaluate IgE production to the whole allergen, while molecular component testing looks for IgE antibodies against the specific part of the allergen responsible for eliciting the reaction. Molecular allergen testing is therefore more specific.

The first quantitative multiplex molecular component IgE assay specially designed for dogs, cats and/or horses is now available. This multiplex pet allergy assay simultaneously detects specific IgE antibodies against more than 200 allergen extracts and molecular components in one test. It is also a cost-effective way to examine IgE sensitisation patterns, especially in pets with cross-reactive antibodies where false positive results occur for multiple clinically irrelevant whole allergens.

GROUPS OF ALLERGENS TESTED FOR WITH THE PAX

<table>
<tr><th>Inhalants</th><th colspan="2">Food</th><th>Insect venom</th></tr>
<tr>
<td>• Pollen (grasses, trees and weeds)
• Dander from other pets (cattle, dogs, horses, cats mice and rabbits)
• House dust mites and storage mites
• Moulds and yeast
• Cockroaches and fleas</td>
<td>Plant-based
• Legumes, e.g. peanut, soy, lentil, peas
• Fruit and vegetables, e.g. apple, carrot, tomato
• Cereals and seeds, e.g oats, wheat, corn, rice, sunflower seeds, linseed</td>
<td>Animal-based
• Cow's milk
• Hen's egg
• Meat, e.g. beef, turkey, chicken, rabbit, lamb, pork
Seafood
• Cod, salmon, tuna, mackerel
Edible insects
• Mealworms</td>
<td>• Ant, honey bee and wasp
Others
• Midges and flies, e.g. deer fly, stable fly and horse fly
• Latex
• Roundworm</td>
</tr>
<tr><td colspan="4">Cross-reactive components
• CCD, PR-10, profilin, lipid transfer protein (LTP), storage proteins, parvalbumin, tropomyosin and lipocalins</td></tr>
</table>

INTERPRETATION OF PAX RESULTS

A personalised and user-friendly interpretative report is provided that outlines individual allergy profiles with relevant supporting information.

CONCLUSION

The PAX test aims to improve allergy management in pets through accurate IgE-mediated allergy diagnosis and risk assessment. Once a diagnosis has been made, the selection of appropriate allergen avoidance strategies, medical therapy and/or immunotherapy will help to improve the animal's (dog, cat or horse) symptom control and quality of life.

For more information, contact the NRL Immunology Laboratory at 012 678 0613/4