WELCOME TO AVACTA ANIMAL HEALTH

Avacta Animal Health provides innovative laboratory services to companion animal veterinary surgeons worldwide. Our portfolio of tests cover allergy, acute phase protein assays (APPs) and the unique canine Lymphoma Blood Test (cLBT), which assists vets in the diagnosis and remission monitoring of canine lymphoma.

Based in Wetherby, Yorkshire, we have a growing team of research and development scientists, manufacture our plates in-house and have a knowledgeable, friendly customer service team on hand to provide support and guidance through your cases.

Coming soon….

NATURAL VETCARE

We are delighted to announce that we will become the distributor for the Natural Vetcare veterinary exclusive nutraceutical range. The Natural Vetcare range of premium supplements for cats and dogs is manufactured in the UK. Formulated for the British market to address some of the most common issues found in pets today; these include skin problems, joint wear and tear and age related conditions. Offering the highest quality ingredients, Natural Vetcare provides a vet exclusive range to support veterinary practices and ensure that pet owners get the specialist advice needed for their pets.

FEATURED PRODUCT: DOG’SKIN

Supports the needs of dogs with skin conditions before and after allergy testing and alongside other treatments such as allergen-specific immunotherapy treatment. Dog'Skin is a unique formulation combining premium targeted nutrients for optimum skin health in dogs. Salmon oil is included for Essential Fatty Acids (EFA’s), required for strong, shiny hair growth. Nutrient rich sea algae extracts nourish the skin and support skin elasticity. Key herbal support is provided including liquorice, traditionally used for sensitive skin optimum levels of beta-carotene and bio-available sulphur are included to support healthy, undamaged skin and coat. The essential vitamin biotin is included, and is particularly noted for its contribution to nail health. Finally a broad spectrum of those vitamins and minerals most beneficial for skin and hair nutrition complete this unique formulation. Dog’Skin is available in the veterinary exclusive strength sprinkle capsules and pellet format for OTC sales. To find out more and to sign up for a free trial of the products visit us at London Vet Show.

INNOVATION IN ANIMAL HEALTHCARE

LONDON VET SHOW 2015!

Avacta Animal Health will be exhibiting at the London Vet Show 2015. Visit us at stand N30 to meet the team and to learn about our latest product developments in our laboratory services.

Come and see us and we’ll provide you with information on our complete allergy service of tests and treatments, our Acute Phase Protein tests; which can be used to identify sub-clinical conditions, and the unique canine Lymphoma Blood Test (cLBT); which assists vets in the diagnosis and remission monitoring of canine lymphoma.

We can also introduce you to our exclusive new offerings; the Cyno/ Feli-Dial test and the Natural Vetcare Nutraceutical range.

Plus we’ll also be one of the participating sponsors for the holiday passport, which offers delegates the opportunity to win a Thailand adventure worth £12,000!

So come and see us on stand N30!
Lymphoma is a variable and complex disease resulting in dramatic differences in treatment response and outcome. The condition is routinely classified as low, intermediate or high grade. The low-grade disease is characterised by slow development and low chemosensitivity. Patients exhibit relatively long survival times. However, the most common lymphoma cases (approximately 80%) fall into the intermediate and high-grade categories. These malignancies consist of rapidly dividing cells causing the disease to develop rapidly. Since most cytotoxic drugs target rapidly growing cells, these patients initially respond well to chemotherapy. Despite this, lymphoma is a highly heterogeneous disease making it extremely difficult to predict the outcome of an individual case.

Immunophenotyping is increasingly performed to determine whether the malignancy is of B- or T-cell origin: T-cell lymphoma generally exhibits poorer prognosis and greater chemoresistance than B-cell lymphoma. More recently, flow cytometry is becoming employed to determine immunophenotype, cell size and surface expression of MHC class II molecules. Also polymerase chain reaction (PCR) for antigen receptor rearrangements (PARR), has been used to diagnose and classify lymphomas. Unfortunately, none of these methods are completely specific and sensitive and a combination of the techniques is recommended to estimate prognosis. Despite the clear benefits conferred by these more recent methods they are still expensive and not widely available in the UK.

We have previously published data which indicates that the canine Lymphoma Blood Test (cLBT) is a good prognostic indicator for the disease\(^1\). The cLBT score taken at diagnosis but prior to commencement of chemotherapy (week 0) provides an indication of which cases should respond well to treatment. In the longitudinal study of 57 dogs all receiving the Wisconsin Madison protocol, the median survival time (MST) for dogs having a cLBT score $> 4.11$ at diagnosis was 7 months, whereas dogs scoring between 3.29 and 4.10 had a MST of 16 months.

Running the test during treatment provides an insight into whether the dog is responding to chemotherapy. A low score at this stage suggests that the dog is responding well, however if a high score is seen, the patient is not ideally responding to treatment, and an alternative approach could be considered. Another test a few weeks later may then confirm this.

The cLBT requires a simple serum sample from 1 ml of blood and results are usually available within 24 hours. Also, the cost of the test is considerably lower than either Flow Cytometry or PARR.

References:
\(^1\) I. Alexandakis, et al. Utility of a multiple serum biomarker test to monitor remission status and relapse in dogs with lymphoma undergoing treatment with chemotherapy. Veterinary and Comparative Oncology. Article first published online: 15 OCT 2014 | DOI: 10.1111/vco.12123

THE CANINE LYMPHOMA BLOOD TEST – INSIGHTS AND EXPERIENCE FROM FIRST OPINION PRACTICE

A Webinar with Iain Grant DipACVIM, The University of Glasgow, Tuesday 1st December 2015, 7pm

Increasing use of the canine Lymphoma Blood Test (cLBT) in first opinion practices is beginning to highlight new areas where the test can be helpful to both practitioners and clients. A number of cases have been observed with no obvious lymphadenopathy but with positive cLBT results and accompanying hypercalcaemia. In each of these cases further investigation revealed an occult lymphoma located in either the spleen, bone marrow or GI tract.

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It is well known that the response rate drops for re-induction therapy following relapse. Determination of the cLBT score at relapse prior to commencing re-induction therapy can indicate the efficacy of re-induction. If the cLBT score does not reduce early in the re-induction phase, it could be prudent to consider a rescue protocol earlier than might otherwise be implemented.

Data and case studies will be presented which illustrate these applications of cLBT with specific reference to assisting first opinion practitioners in their treatment and monitoring of lymphoma in dogs. Examples of how the information derived from the cLBT can also benefit clients by keeping them well informed about the treatment and prognosis of lymphoma in their dog will also be presented.

Register now to reserve your place!
http://lymphoma.avactaanimalhealth.com/cpd-seminars/ian-grant-webinar/
THE EFFECT OF LONG-TERM FEEDING OF SKIN BARRIER-FORTIFIED DIETS ON THE OWNER-ASSESSED INCIDENCE OF ATOPIC DERMATITIS IN LABRADOR RETRIEVERS


Summary: From 5 weeks after mating, 11 pregnant Labrador bitches were fed either a basic pregnancy diet, or one supplemented with extra amounts of pantothenate, nicotinamide, histidine, inositol and choline. Such a diet had been shown in previous studies to improve skin barrier function and reduce transdermal water loss. After birth, the 80 puppies were fed the same diets as their mothers up to 8 weeks of age, and then a regular growth diet or a growth diet supplemented as above. Thus the puppies that received the supplement in utero, did so also during the growth phase. They were then sent to individual homes and the same diets were maintained up until 12 months of age. IgE specific for dust mite antigens Der f and Der p was measured at 6 and 12 months. All dogs were then placed on a regular diet and followed for a further 22 months by means of telephone consultations and questionnaires regarding the presence or absence of pruritus and dermatitis consistent with canine atopic dermatitis (CAD).

At both 6 and 12 months of age, the levels of IgE specific for Der f were significantly higher in puppies receiving the regular diet as opposed to the supplemented diet. Levels for Der p also differed, but not significantly so. At 22-36 months, there was no significant difference in the numbers exhibiting pruritus, but at 34-48 months, a significantly greater proportion of those who had received the basic diet exhibited signs of pruritus consistent with CAD than did those who had received the supplemented diet (30.3% vs 8.3%).

Comments: The two major theories on the development of CAD are (i) the inside/out theory, which suggests that the immunological defects develop first and lead to defects in skin barrier function, and (ii) the outside/in theory which supposes that the barrier defect develops first thus facilitating access of allergen and the development of the allergic response. The results of this study obviously are supportive of the outside/in theory. They are also of practical significance in that it suggests that the development of CAD can be ameliorated, if not prevented, by feeding the supplemented diet during pregnancy and for the first 12 months of life. Many of the Royal Canin diets, including those sold as hypoallergenic, skin support or as supporting barrier function are supplemented with these additives, although not yet at the level used in this trial. One does not know, of course, whether it is necessary to provide supplementation for the dam during pregnancy as well as for the puppies during their first year, or merely the latter. One unfortunate weakness of the study was that, for logistical reasons, it was not possible to carry out full dermatological examinations on the dogs, but nonetheless, the results of the IgE studies were, in themselves, very persuasive.

LATEST NEWS:
The updated 2015 ICADA Guidelines on the Treatment of Canine Atopic Dermatitis have recently been published and are available for open access at:
http://www.biomedcentral.com/content/pdf/s12917-015-0514-6.pdf
The 2010 guidelines were downloaded > 50,000 times, and this publication is essential reading for small animal practitioners.

HIGH MOLECULAR-WEIGHT PROTEINS IN HYDROLYSED DOG FOODS

O Roitel, D Maurice, G Douchin, S Jacqueten, B Bihain, C Favrot and N Couturier
Vet Dermatol 26: 304, 2015

Summary: This study, undertaken by the French immunodiagnostic laboratory Gencils, analysed three brands of hydrolysed diets, namely Royal Canin Anallergenic®, Purina HA® and Hills z/d low allergen® for evidence of high molecular weight molecules. Sophisticated immunological techniques including Western-blot analysis enabled detection of several antigens with molecular weights ranging from 15-60 kDa against which an IgE response was shown in canine sera. In one instance, mass spectrometry identified one as starch synthase 1 protein derived from maize which was used in the kibble.

Comments: The theory behind the use of hydrolysed diets in adverse food reactions (AFRs) is that if proteins are split into molecular weights below 4-5 kDa, they will be too small to bridge two molecules of IgE on mast cells required to trigger the allergic reaction in IgE-mediated allergic diseases. Similarly, in cases where cell- mediated reactions are involved, for which there is increasing evidence in canine AFRs, they are unable to react with T cells. In the case of all three products, higher molecular weight reactants were present. However in the case of Hills z/d, the low allergen product was assessed rather than z/d Ultra®. The former has been discontinued, and the original z/d ultra® is now marketed ad z/d original®. One cannot know if studies with the latter would have yielded the same results. An important question is whether the immunoactive molecules were in fact proteins, or carbohydrates, against which IgE responses are possible. At all events, an IgE response against any such molecule in the diet is theoretically capable of triggering an allergic reaction, and should be absent from such a diet.

In a number of studies some 15-20% of dogs suffering from well-documented AFRs have failed to respond to hydrolysed diets – including dogs from the North Carolina colony of Maltese/beagle crosses which suffer from spontaneous AFRs. Thus the suggestion that hydrolysates represent the “gold standard” for the diagnosis of AFRs is no longer tenable. The studies reported herein may provide the explanation, and this should emphasize the value of the alternative approach of identifying the causative allergen via hypoallergenic diet trials, ideally aided by serology.
In partnership with Galileo Diagnostics, we are delighted to announce the launch of Cyno-Dial and Feli-Dial; an innovative, unique canine and feline test that assists in the selection of a veterinary prescribed diet for an elimination trial. The next step after a SENSITEST food allergy test, the Cyno/Feli-Dial detects the presence of specific IgE for each of the allergenic proteins contained in the various veterinary prescribed diets tested alongside the animals’ existing diet.

The comparative analysis uses a Western blot technique (figure 1,) that has proven to be highly reliable and specific, based on 10 years of expertise in immunology of allergy. All that’s required to run the test is 1ml of serum and a sample of the animals’ current food. Within 15 days (from receipt of sample), you will receive precise recommendations on which diets will be tolerated by the animal and your results will clearly state which of the foods are ‘highly’, ‘low’ or ‘not sensitised’, therefore determining the most appropriate veterinary prescribed diet to favour during the elimination diet. This significantly reduces the traditional 10-12 week food trial and dietary history methods with a better chance of reducing the clinical signs of atopic dermatitis and an adverse food reaction, preventing the risk of aggravating further occurrences.

**Figure 1.** Lane 1 shows a sensitization of the dog on its common food by the IgE.

Lanes 2 to 5 are alternative foods tested, to choose the appropriate elimination diet of the dog.

Lane 5 does not show any sign of sensitization, showing the most suitable diet.

A submission form will be provided following a SENSITEST food allergy test or contact our customer services team to request one. The test price is £75 excl VAT.

**For more information on this exclusive new offering from Avacta Animal Health, please contact your local territory manager or call our customer service team on 0800 8494 550.**

**CANINE PANCREATITIS**

Pancreatitis is a common, painful disorder in dogs. Diagnosis is challenging because the disease is often subclinical or associated with nonspecific clinical signs such as vomiting, anorexia, abdominal pain, diarrhea, and fever. If not treated on time, the acute form of the disease (which occurs in around 1.5% of dogs) can be fatal. The complexity and seriousness of pancreatitis means that a rapid, reliable point of care test is in demand by general practice.

Pancreatitis is known to be induced by factors including obesity, lack of exercise and a high fat diet, widely used drugs, physical trauma and infections. Dogs suffering from diabetes mellitus, Cushing’s disease, hypothyroidism or epilepsy, other types of gastrointestinal conditions and dogs who have had previous pancreatitis attacks are also at risk.

Depending on the severity of the disease, full recovery is possible if the animal survives the initial acute episode. Treatment focuses on supporting the patient with hydration and pain relief combined with either total parenteral nutrition (TPN) or enteral nutrition (EN) to allow the pancreas to heal by itself. Post recovery, dogs are often maintained on a low fat diet to help prevent recurrence.

The only gold standard test is histology. However, veterinarians are reluctant to take a biopsy for fear of inducing the disease. Consequently, testing methods should not be used in isolation and should include imaging techniques in addition to blood biochemistry results. Currently, the predominant test for pancreatitis is canine pancreatic lipase immunoreactivity (cPLi), with slight variations on the test being supplied by different laboratories. However, it has been reported that the cPLi test exhibits poor sensitivity resulting in a high false negative rate.

It is recognised that serum amylase and lipase are elevated in pancreatitis. However, false positive and negative results are common since these enzymes are raised in other diseases. We have investigated these two enzymes plus additional serum biomarkers which are elevated in pancreatitis. Avacta’s new pancreatitis test (cPAN) utilises the same approach as its unique canine Lymphoma Blood Test, whereby an algorithm is used to combine the serum levels of several biomarkers, with additional clinical information. The new test has been validated by comparison to the best non-invasive gold standard method employing multiple clinical parameters to arrive a pancreatitis score published by McCord et al (2012). Furthermore, we have been fortunate to participate in an additional study which included post mortem histopathology from dogs suspected of dying from pancreatitis. The combined studies using the McCord score and post mortem histopathology represent the most thorough investigation to date into testing methods for canine pancreatitis. The data shows dramatic improvements in both sensitivity and specificity when compared to commercially available cPLi tests.

The parameters employed by the cPAN test can be conveniently obtained from laboratory reports and from many in house biochemistry analysers. We therefore plan to make the algorithm accessible to vets in practice via a unique “pay per click” web site. This will bring you the first in clinic, accurate and fully validated test for pancreatitis in dogs without the need to wait for external laboratory results.
Paw Allergy Week 2015 has had fantastic coverage raising allergy Awareness!

Avacta Animal Health launched the first Pet Allergy Week, to help raise awareness of dogs and cats with allergies. Practices that took part signed up and received a ‘PAW pack’, which was full of promotional display material to create an exciting and informative waiting room display. Practices were also encouraged to send in allergy tests and were eligible for discounted Complete and Complete+ allergy tests throughout the whole month of June.

Over 500 practices signed up to Pet Allergy Week, so a massive thank you to everyone that was involved. Thanks to you, Pet Allergy Week didn’t go unnoticed - from articles in Your Cat and Your Dog magazine, veterinary blogs and magazines, and regional papers from all over the UK, to mentions on local and national BBC Radio!

We also ran a competition for the practice with the best PAW display! The well-deserved winner was Charlton Kings Veterinary Centre, Cheltenham!

PET ALLERGY WEEK WILL RETURN IN JUNE 2016!

Avacta Animal Health attended the 28th Annual Congress of the European Society of Veterinary Dermatology (ESVD), this year held in Krakow, Poland. We supported our European distributors, Laboklin, in promoting SENSITEST Food Allergy Testing.

NEW SENSITEST® CASE STUDY: Lola Holland, a Three Year old Staffordshire Bull Terrier!

HISTORY: From a young age, Lola has suffered with uncomfortable symptoms such as alopecia, pruritus, pyoderma and otitis externa. Skin scrapes were negative and Lola was responsive to steroids for a short period. Malaseb, Apoquel and Rilexine were all used to try and control Lola’s worsening symptoms but they never cleared up. In January 2015, a blood sample was taken and sent in for a SENSITEST complete allergy test.

ACTION: After receiving Lola’s results and based on the advice from her vet, her owners implemented various changes, including changing the bedding to dust mite resistant bedding, steam cleaning their house and giving Lola Nutramega. Lola’s diet also changed, from ocean white fish, to salmon and potato. However it was the allergen-specific immunotherapy for the house dust mites, which helped improve Lola’s conditions the most.

RESULTS: After starting immunotherapy, Lola came off steroids and her overall body condition is much healthier. She is itching less and her skin is much less red. Some of her hair has also grown back.

“Since starting the immunotherapy Lola no longer itches, her fur is growing back and she looks less red and angry. She is a much happier and healthier dog. After trying everything, immunotherapy is the only thing we have seen results with.” - Lola’s owner

Lola’s full case study is available at: http://allergy.avactaanimalhealth.com/case-studies/lola/
Avacta Animal Health welcomes two new faces to the sales team.

CLAIRE LAWTON
Territory Manager (South Central)
“I am a Veterinary Nurse with 14 years’ experience of working within the veterinary sector in a variety of roles. During the last 2 years I have been territory based in the South West as a Customer Manager for Vets Now Ltd, prior to this I worked in clinic for Vets Now as an emergency and critical care nurse for a number of years. Based just south of Chippenham I live in a cottage converted from the old school house within the village with my partner and daughter. I enjoy country walks with my English Springer Spaniel, attending equestrian events and going to the gym. I am delighted to have joined Avacta Animal Health. Over the coming months I will be working my way around the territory and look forward to meeting all our customers.”

CHLOE BARRACLOUGH
Territory Manager (North East)
“I joined Avacta Animal Health’s customer service team in September 2013, after graduating with a BSc(Hons) degree in Equine Science. The opportunity to expand my role has arisen due to changes to the territories, as a result of expansions in the business and increasing sales. Joanne Beardsworth, your previous territory manager, is now focussing on an area closer to her home town in Lancashire. Based in a small village in North Yorkshire, I enjoy competing my horses in equestrian events and walking through the countryside with my Border Terrier, Buster. I now look forward to meeting our customers face-to-face, as well as speaking to them over the phone.”

CONTACT US

AVACTA ANIMAL HEALTH
Unit 706, Avenue E, Thorp Arch Estate, Wetherby, LS23 7GA, United Kingdom

CUSTOMER SERVICES
T – 0800 8494 550
T – +44 (0)1904 21 7071
F – 0800 8494 560
E – customer.services@avacta.com

For more information visit avactaanimalhealth.com