

NATIONWIDE LABORATORIES WINTER NEWSLETTER

YOUR PRACTICE PLUS LABORATORY DIAGNOSTICS YOU CAN TRUST

BLOG, NEWS, CPD

NWL blog: 5 Essential Tips for Building Your Successful New Veterinary Practice

[READ MORE →](#)

Explore our multimedia content hub in partnership with The Veterinary Practice by Improve International

[READ MORE →](#)

NWL blog: What to Look for When Choosing an External Laboratory

[READ MORE →](#)

Our LabFacts handbook is our laboratory handbook filled with tips, tricks, information, and advice on a range of animal pathologies and laboratory techniques, created by our very own expert veterinary pathologists

[READ MORE →](#)

SPECIAL OFFER: we believe in the power of veterinary education, so we teamed up with the Webinar Vet to offer you 5 courses covering different aspects of veterinary content. And to make this offering more exciting for you we are happy to offer these to you **FREE** of charge with promo code **NATIONWIDE**

[WATCH FREE →](#)

One of London Vet Show's 30 Under Thirty Class of 2023 Ajith Rekha is leading the way in science and innovation

[READ MORE →](#)



BSAVA

Proud to be exhibiting at

Congress 2024

Where The Profession Connects

SEE US ON STAND D601

MANCHESTER MARCH 21-23

NVS Group®

NVS National Veterinary Services

select from NVS

NationWide LABORATORIES

vetiT

Message from David Charvill

Dear friends,

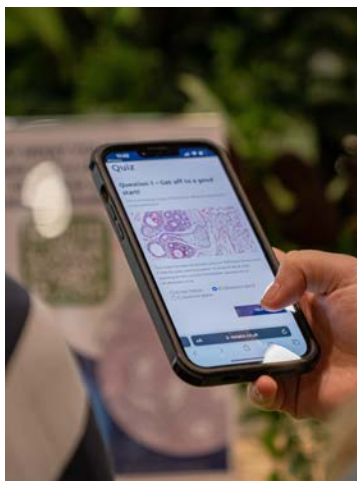
Welcome to our spring newsletter! NationWide Laboratories is your trusted laboratory partner that works as part of your practice team. We understand the importance of having reliable and efficient laboratory services to support your veterinary practice, and we are committed to providing you with the highest level of care and support. Our commitment to continuous improvement and innovation ensures that we are always at the forefront of veterinary diagnostics. Our team of experts is always available to provide help and guidance on complex cases. Being part of NVS Group enhances our ability to meet your requirements with more precision. We would like to thank all of our clients for their continued support and trust in our services. If you have any questions or would like to learn more about how we can support your practice, please do not hesitate to contact us or come and see us in person at BSAVA Congress 2024.

David Charvill,
Director of Laboratory Services



NationWide Laboratories at BSAVA 2024: Your Practice Plus Laboratory Diagnostics You Can Trust

NationWide Laboratories is a proud member of NVS Group, offering a wide range of laboratory diagnostic solutions for veterinary professionals and their animal patients. At the upcoming BSAVA Congress 2024, NationWide Laboratories is excited to showcase its latest advancements with a focus on integration, technological innovation, and collaboration. By leveraging expertise across the whole of NVS Group and embracing new technologies, NationWide Laboratories aims to support vets in fulfilling their diagnostic, therapeutic and business objectives.



BSAVA Congress 2024 offers a great opportunity to engage with veterinary community and to demonstrate how we can become your trusted partner through personal service tailored to the needs of modern veterinary practices.

At NationWide Laboratories, we want BSAVA 2024 to be an engaging and educational experience for veterinary professionals. Be sure to stop by our stand D601 to:

- Try out our "Say What You See" competition based on digital pathology images. This fun activity lets you explore the possibilities of digital pathology while giving you a chance to win great prizes.
- Learn more about our full range of laboratory diagnostic services, including our specialised tests and profiles, [Nu.Q® Vet Cancer Screening Test](#), as well as our digital solutions like an [online portal](#) and courier booking app. Our experts will be on hand to answer your questions and discuss how we can support your practice.
- Find out more about us being part of the wider NVS Group and how this benefits your practice. We're bringing everything closer together to enhance your experience.

We look forward to meeting you and discussing how our commitment to innovation, integration and expertise can help your practice!

NationWide Laboratories, as part of the NVS Group, is committed to providing integrated, innovative, and dependable diagnostics for veterinary professionals. We constantly advance our capabilities to better serve our clients through investments in technology. Being part of NVS Group offers enhanced customer experiences via consolidated solutions. At our core, we maintain a people-first approach to understand our clients' needs and deliver laboratory services they can trust.

Our presence at BSAVA 2024 is an exciting chance to demonstrate how we support vets with comprehensive diagnostics they need to best care for animals. We invite you to visit our stand D601 to learn more about our commitment to integration and reliable testing. Our experts will be available to talk about how NationWide Laboratories and NVS Group can help take your practice business to the next level.

[Read full article](#)



NATIONWIDE LABORATORIES NOW OFFERS NU.Q® VET CANCER SCREENING TEST IN THE UK

It is a simple, affordable, easy to use blood test which can be used as part of a wellness check for older dogs as well as younger dogs with an increased risk of developing cancer in their lifetimes, such as those with a familial history and certain breeds. By measuring and analysing nucleosomes in the DNA, the Nu.Q® Vet Cancer Test can identify patients who may have cancer. This must be confirmed by follow up procedures, for example, a biopsy or a scan. Alongside other routine blood work and imaging, this test may help find cancer at an early stage, before symptoms appear, allowing for a better chance at effective treatment.

To enquire about this service/ subscribe to it please email cls.info@nwlabs.co.uk

NATIONWIDE SPECIALIST LABORATORIES OFFERS A SERVICE FOR THE ANALYSIS OF ERYTHROPOETIN (EPO)

EPO plays a key role in the regulation of red cell mass and erythrocyte production. EPO may be used to aid the differential diagnosis of polycythemia and non-regenerative anaemia. Raised levels of EPO occur in secondary polycythemias and renal tumours. Low/normal levels may occur in renal failure and polycythemia vera.

Sample requirement is 0.5mL separated serum. For further enquiries, please ring 01223 493400

CENTRE OF EXCELLENCE FOR HISTOPATHOLOGY

We provide diagnostic veterinary histopathology services to veterinary practitioners and universities throughout the UK and worldwide. Our interest does not stop at the point of diagnosis, and we are involved in research in veterinary medicine.

We have contributed to publications based upon both the samples that our clients send us and also in collaboration with other veterinary centres and universities.

Rebecca Helder:
Microbiology is very much an investigative process. When we can identify the pathogen/parasite causing a problem and it all fits together with the history provided, it feels rewarding



Helen Evans:
At NationWide Specialist Laboratories we do endocrinology, and we have a worldwide clientele. We have a great team and work very well together

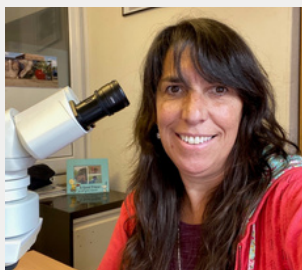
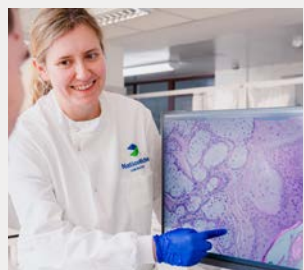


Hannah Browning:
I have a real passion for haematology and I love that my work directly supports the diagnosis and treatment of animals



Stacey Newton:
Our pathologists are very experienced and extremely dedicated. We always take time to talk to the practitioners about complex cases if required

INTERNATIONAL WOMEN'S DAY : Celebrating female team members



The leader who believes change starts at home


"I want to inspire people that I have interactions with and leave them feeling a little bit better"



Sandra Wells

Helen Campbell and Alina Bodnariu – When colleagues become friends

"I personally believe human connection is a very important thing, at home and at work, when you have friendship, it makes life so much better."



Alina Bodnariu & Helen Campbell

Being the best you can be

"I don't need to use google anymore! If I have a question, I can ask one of the team who are always so helpful. I have complete trust in them, they are superstars."



Jana Leontescu

Looking on the bright side of life

"Give people space to talk and vent if they need to. Even if you don't agree with their opinion, there is always a middle ground to be found."



Catriona Bailey

Educating the Future Generation

"I describe my job to the kids in a STEM class that it's like opening a present when you get the slide on the scope."



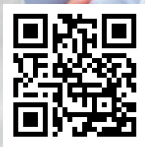
Sandra Dawson

About Us

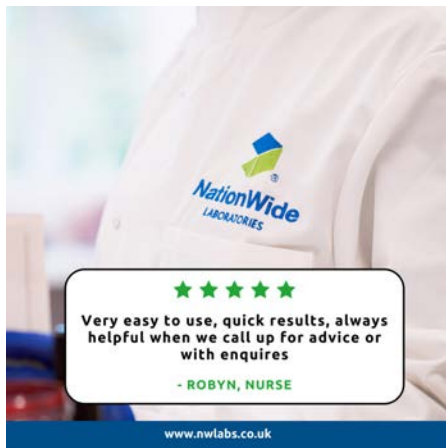
NationWide Laboratories is committed to making a positive impact on animal health by offering innovative products, technology and laboratory services to your veterinary practice. We have been providing a comprehensive range of veterinary diagnostic services since 1983. Our expert teams can assist you in making decisions on relevant testing for companion, exotic and farm animals. We offer full interpretation in a range of testing areas including biochemistry, haematology, cytology, histopathology, endocrinology, microbiology, etc. NationWide Laboratories is proud to be part of NVS Group. By leveraging expertise across the whole Group and embracing new technologies, NationWide Laboratories aims to support you in fulfilling your diagnostic, therapeutic and business objectives



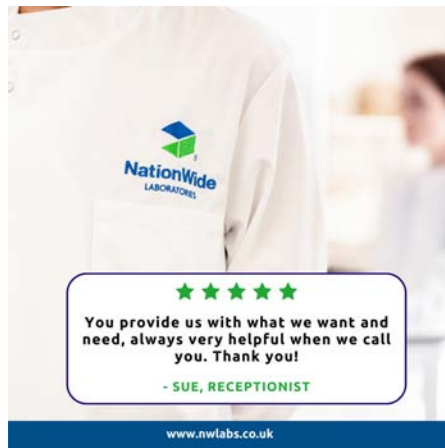
www.nwlab.co.uk



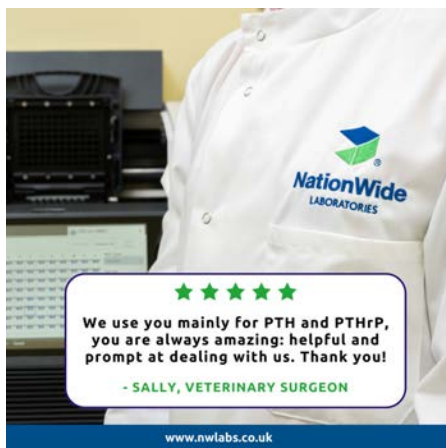
Dear Clients, thank you for your custom & feedback: we appreciate it!



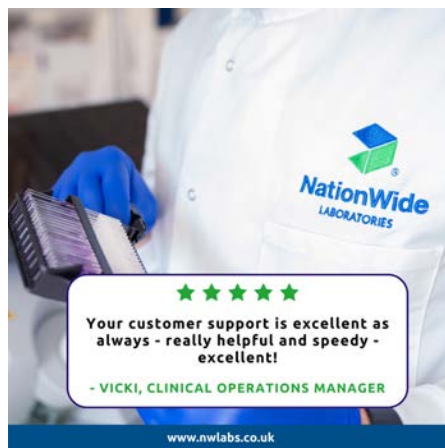
★★★★★
Very easy to use, quick results, always helpful when we call up for advice or with enquires
- ROBYN, NURSE
www.nwlabs.co.uk



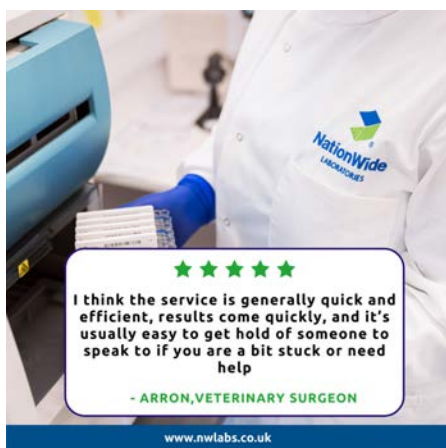
★★★★★
You provide us with what we want and need, always very helpful when we call you. Thank you!
- SUE, RECEPTIONIST
www.nwlabs.co.uk



★★★★★
We use you mainly for PTH and PTHrP, you are always amazing: helpful and prompt at dealing with us. Thank you!
- SALLY, VETERINARY SURGEON
www.nwlabs.co.uk



★★★★★
Your customer support is excellent as always - really helpful and speedy - excellent!
- VICKI, CLINICAL OPERATIONS MANAGER
www.nwlabs.co.uk



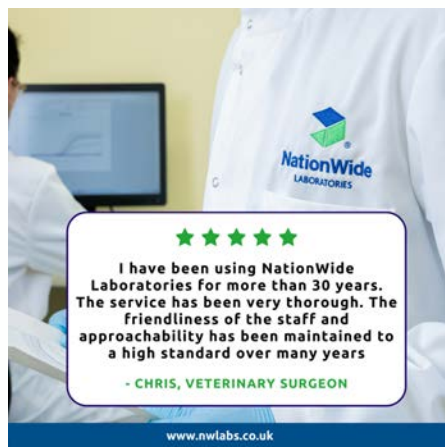
★★★★★
I think the service is generally quick and efficient, results come quickly, and it's usually easy to get hold of someone to speak to if you are a bit stuck or need help
- ARRON, VETERINARY SURGEON
www.nwlabs.co.uk



★★★★★
Good supply of materials; rapid, reliable service; specialist advice available if needed
- JAMES, VETERINARY SURGEON
www.nwlabs.co.uk

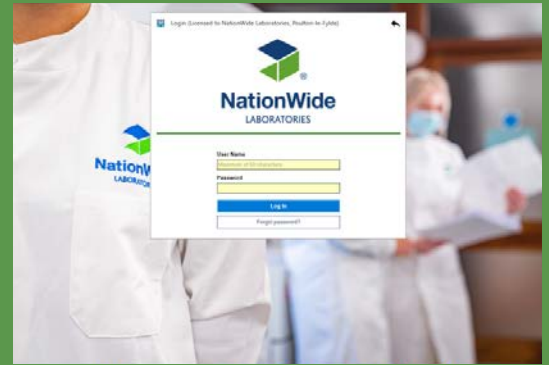


★★★★★
We have used NationWide Laboratories for certain lab tests and found turnaround time very good considering we are in Hong Kong and also very cost competitive
- JANE, VETERINARY SURGEON
www.nwlabs.co.uk



★★★★★
I have been using NationWide Laboratories for more than 30 years. The service has been very thorough. The friendliness of the staff and approachability has been maintained to a high standard over many years
- CHRIS, VETERINARY SURGEON
www.nwlabs.co.uk

ONLINE CUSTOMER PORTAL: IT'S LIKE 1, 2, 3 - JUST AS EASY AS CAN BE



Our online customer portal which was first launched at the London Vet Show in 2022 is now up and running. The portal is designed to streamline the sample submission, tracking and result reporting process. It perfectly aligns with our commitment to delivering a greener pawprint by offering you this alternative to a paper-based system.

This platform is set to give you another additional way to interact with us, offering a faster and more convenient means of managing sample submissions, tracking their progress and obtaining results. It is a software interface that gives you complete visibility into your interactions with our laboratories. To start using the platform please contact us at CBailey@nwlabs.co.uk

HOW CLEAN IS YOUR PRACTICE?

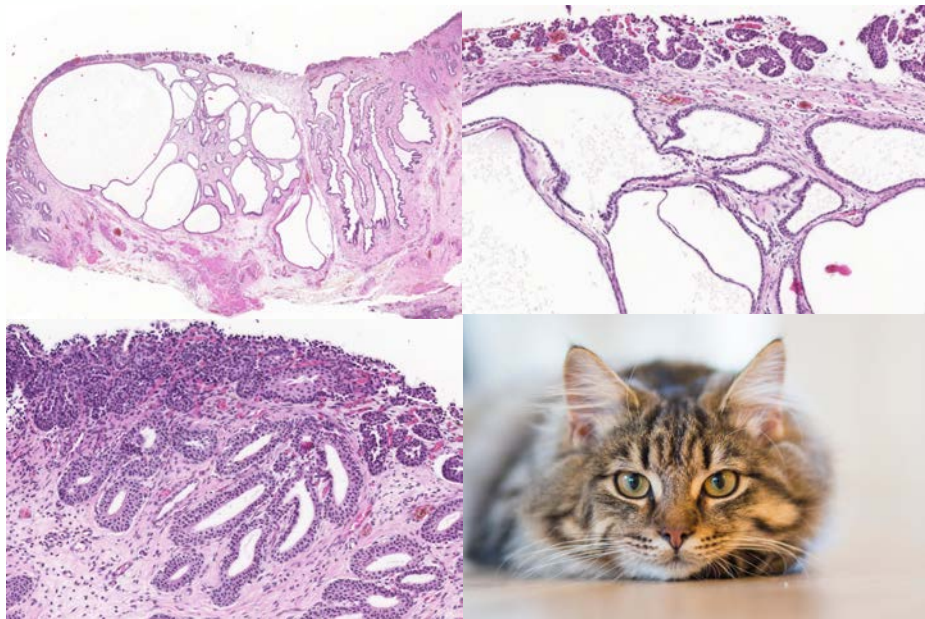
We offer you a microbiological screening programme to screen your facilities and equipment. Swabs are supplied with simple instructions and a postage paid envelope for return to our laboratory for testing. We test for aerobic and anaerobic cultures as well as specific cultures for yeast and fungi. This comprehensive testing includes (but is not limited to) cultures for the following major groups of organisms: *Enterobacteriaceae*, *Enterococci*/*Streptococci*, *Pseudomonadaceae*, *Staphylococci* (Meticillin resistant/sensitive) as well as spore forming bacteria such as *Bacillus* and *Clostridium spp.*

For more information, contact us at info@nwlabs.co.uk.

Leave us a review



Cystitis Glandularis in a 13-year-old female cat



Cystitis is a clinically significant disease that affects various species, with a higher incidence in females, likely linked to their shorter urethra. This condition can manifest as either acute or chronic. Chronic cystitis takes on diverse forms based on the pattern and type of inflammatory response, including diffuse, follicular, and polypoid variants.

Chronic polypoid cystitis is characterized by the presence of polypoid masses, particularly common in dogs but may occur in any species. These masses likely develop as an inflammatory and hyperplastic response to chronic irritation, often stemming from persistent bacterial urinary tract infections (UTIs) and/or uroliths.

The polyps found in the bladder mucosa consist of a core of proliferative connective tissue covered by surface epithelium. This surface epithelium can form nests of hyperplastic urothelial cells in the lamina propria, known as Brunn's nests, or undergo metaplasia to a mucus-secreting, glandular epithelial type, leading to a condition called CYSTITIS GLANDULARIS. These resulting polypoid masses may have a broad-based or pedunculated structure, occurring most frequently in the cranioventral bladder wall. Chronic haematuria, often unresponsive to antimicrobial therapy, is a common observation in cases of chronic polypoid cystitis. This bleeding is often associated with the breakdown of polyps, potentially promoting urine retention and bacterial introduction, thus establishing a cyclic pattern of infection, proliferation, and inflammation.

Histologically, our case had in lamina propria, occasionally extending from mucosa, multiple hyperplastic tortuous glands that were often cystic dilated. They were lined by one to multiple layers of uniform cuboidal or columnar epithelial cells, occasionally surrounded by a few layers of urothelial cells. They had no evident atypia. The lamina propria where they were immersed contained a few plasma cells, lymphocytes, neutrophils and rare histiocytes.

Credit: **Karina Fresneda DVM DiplACVP**

DIGITAL SCANNING SERVICE USING OUR 3DHISTECH PANNORAMIC P1000 RX

NationWide Laboratories is pleased to offer a high speed and high-resolution slide scanning service to professionals and organisations. We guarantee the best quality digital slide scanning solution, using the largest throughput scanner available on the market; the 3DHitech Panoramic P1000 RX scanner. Using our digital slide scanning service gives you all the advantages of digital pathology without the high-cost investment.

Benefits

- The highest resolution scanning available today - 82x water immersion
- Brightfield scanning at resolutions of 20x, 40x, including whole slide scanning
- Z stack and extended focus scanning options available too
- High throughput and quick turnaround service
- Our specialist service allows the highest quality images but without the large file sizes often associated with scanned images.
- Digitisation of slides allows for efficient sharing of images, whether that be with a colleague for preparing for publication or presentation
- Archiving and convenient storage of digital images vs onsite storage of glass allows for centralisation, control and security of your images

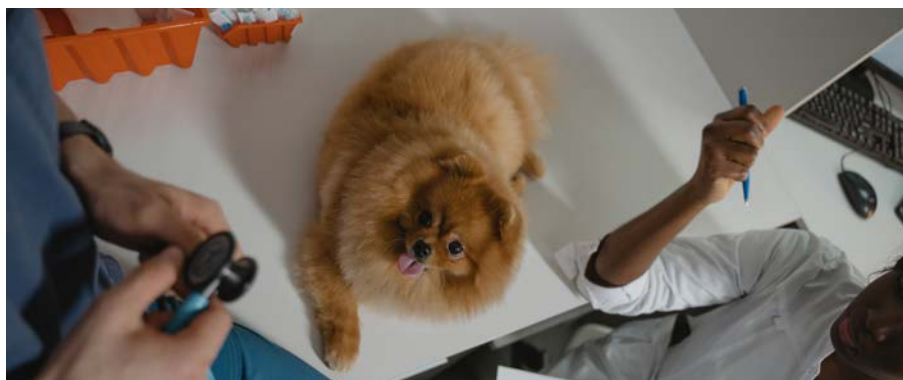
Service

- All you need to do is send us your glass slides and in return you will receive the high-resolution digital images either as a cloud storage link or physical hard drive
- 30-day image storage is included; extended image storage options are available
- A range of image types are available
- Low-cost and rapid turnaround service

Contact

andrew.pritchett@nwlab.co.uk to discuss your project and to take advantage of the high-quality slide scanning service!

Granular cell tumour in an 8-year-old Pomeranian



A mass that was attached to the underside of the tongue in an 8-year-old Pomeranian was noted on clinical examination by the primary veterinarian. This was surgically removed and sent for histopathological evaluation to NationWide Laboratories.

The tissue was composed of typical skeletal muscle and oral epithelium consistent with that of the tongue, yet focally there is also extensive ulceration. The underlying connective and muscular tissue is effaced and infiltrated by a densely cellular, unencapsulated, poorly demarcated mass. The mass is composed of sheets of densely packed, round to polygonal cells supported by a fibrovascular stroma (see Fig 1). These neoplastic cells have variably distinct borders, often eccentrically placed round nuclei with abundant eosinophilic granular cytoplasm. There was mild to moderate pleomorphism of the cells and low mitotic activity. Unfortunately, the mass extends to the deep and lateral margins of the sections examined.

Additional staining of the tissue with periodic acid Schiff (PAS), shows fine PAS positive granules within the cytoplasm of neoplastic cells (seen in Fig 2 and 3).

The findings of the histopathology and additional stains confirmed the presence of a granular cell tumour of the tongue of this dog. These are fairly uncommon, yet benign tumours found in the skin and subcutis, oral cavity or even the central nervous system, as well as a common tumour in the lung of horses. The name is descriptive and does not imply a specific cell of origin or differentiation, which is, yet, unknown in these tumours. Immunohistochemistry adds little additional information as to the cell of origin, but these tumours tend to be well demarcated, nonencapsulated and have variable amounts of collagenous stroma. Most granular cell tumours are benign and complete surgical excision is curative.

The clarity afforded by the 3DHISTECH system allows pathologists to see the greatest of detail at both a tissue and cytoplasmic level of the neoplastic cells. This enables us to make more informed and accurate diagnoses of tumours that may not have additional tests to confirm their histogenesis. In this case, we are also able to accurately report surgical margins with software tools that accurately measure and outline the neoplastic against the normal tissue.

Credit: **Dr Marvin Firth BVSc (Hons.), DipRCPath, DipFMS, AFHEA, MRSB, MRCVS**

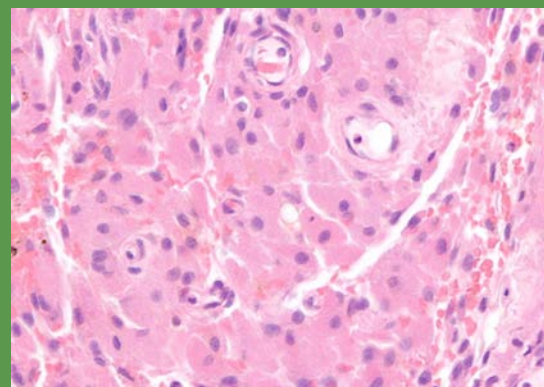


Fig 1. H&E, Granular cell tumour, dog. Neoplastic cells are densely packed and are round to polygonal with abundant eosinophilic granular cytoplasm.

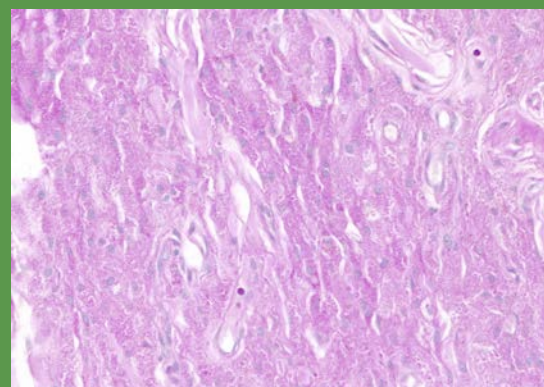


Fig 2. PAS, Granular cell tumour, dog. X40 Magnification. Densely cellular mass containing neoplastic cells with abundant finely PAS-positive granules.

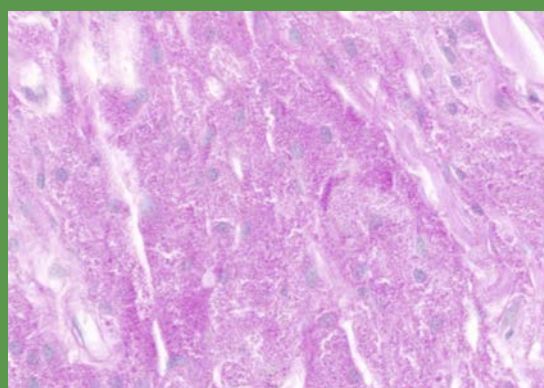
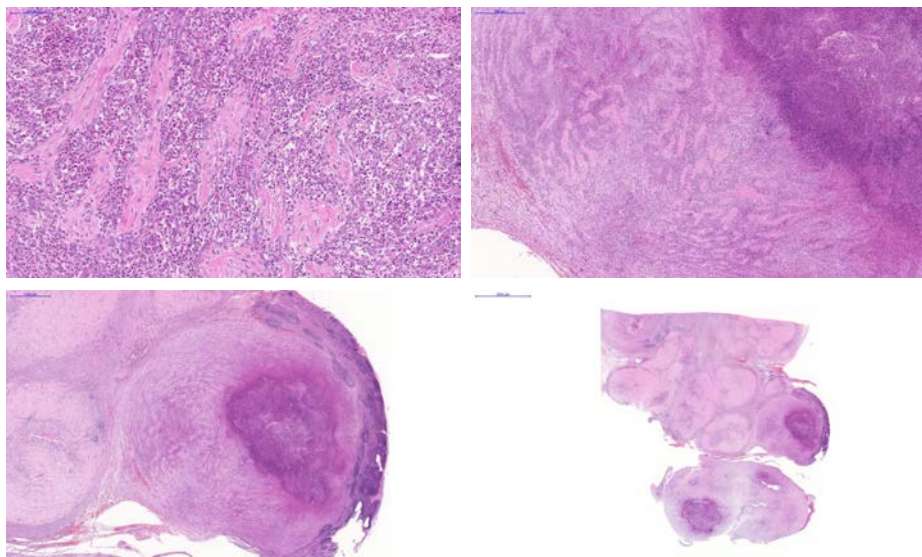


Fig 3. PAS, Granular cell tumour, dog. X60 magnification. Easily noted PAS positive granules within the cytoplasm of neoplastic cells.

NationWide Laboratories offers SDMA assay with results available the same day. This assay has been validated against Liquid Chromatography – Mass Spectrometry method which is the Gold standard. This is an immunoturbidimetric assay and has been validated for dogs, cats and horses. Li-hep plasma or serum are suitable samples for this assay.

Feline eosinophilic sclerosing fibroplasia



This is a section of ileum, where submucosa and tunica muscularis were almost entirely effaced by an extensive proliferation of irregular anastomosing trabeculae of collagen separated by numerous eosinophils and spindle cells, and fewer mast cells, histiocytes, neutrophils, lymphocytes and plasma cells. These findings are consistent with eosinophilic sclerosing fibroplasia. In this case was also observed in colon. Feline eosinophilic sclerosing fibroplasia is an unusual condition observed in cats. The aetiology is still unknown. Some cases were associated with bacteria, but antibiotic treatment was not effective. It has been hypothesized that genetically predisposed cats may develop FESF in response to the introduction of bacteria or other antigens into the intestinal wall. The disease was most often observed in middle-aged cats, that generally had a long history of vomiting and/or diarrhoea. Lesions are typically large, hard, non-painful, easily palpable and most commonly situated near the pylorus or ileocaecocolic junction; however, it has also been reported outside of the abdominal cavity. The lesion is often grossly, and might be misdiagnosed as osteosarcoma, due to the branching collagen trabeculae that resemble osteoid tissue, sclerosing mast cell tumour, due to the presence of eosinophils and mast cells, and sarcoma, because the reactive spindle cells shared many cytological features with sarcomatous mesenchymal cells. Cats treated with prednisone had a significantly longer survival time than those receiving other treatments.

Credit: **Karina Fresneda DVM DiplACVP**

The benefits of digital cytology and histology working together

A 13-year-old Jack Russell terrier presented with a fast-growing, non-painful dermal swelling on the hind leg that had been present for 3 weeks. Both fine needle aspirates for cytology and a further excisional biopsy were taken for analysis. The diagnosis was confirmed as a liposarcoma on the histopathology, and surgical margins reported that the mass was fully excised. Digital pathology allows for accurate measurements of surgical margins of masses that are removed surgically as well as comparison of both cytological and histopathological findings.

Credit: **Kerry Freel BVMS GPCert (SAS) FRCPath MRCVS, Roberio Gomes Olinda**

[Read full article](#)



SAME DAY PTH

NationWide Specialist Laboratories is offering a SAME DAY service for the analysis of canine, feline and equine parathyroid hormone (PTH). Parathyroid hormone-related protein (or PTHrP) is assayed once a week on Wednesday with results available on Thursday. If you want our RAPID PTH service as well as PTHrP, please submit 2 separate frozen EDTA Plasma samples. PTHrP will continue to be analysed once a week. **For more details, please contact us at 01223 493400.**

GERIATRIC PET PROFILES

Comprehensive testing is recommended for senior dogs and cats, due to the higher risk of underlying disease. There are four main categories of wellness testing for senior pets: **complete blood count, biochemistry profile, urinalysis, and thyroid hormone testing.** Our canine and feline geriatric profiles include a chemistry panel to **evaluate kidney and liver function, antibody and protein levels, blood sugar, cholesterol, electrolytes and more.** For more information, contact us at info@nwlabs.co.uk.

HYDROTHERAPY POOL WATER TESTING

We all know that hydrotherapy in conjunction with veterinary treatment can assist in improving the rate of recovery and healing of animals after injury or surgery. At NationWide Laboratories we can assist you in demonstrating to your clients that your facility meets the guidelines for water safety and quality through our hydro pool testing service, which meets the requirements of hydrotherapy associations such as CHA and NARCH.

We will provide you with the sample bottle, guidance on how to take the sample and prepaid postage to get the sample to us. You will receive a report of printed enumerated results for total viable count at 37 degrees itemising *total coliforms*, *E. coli*, *Pseudomonas aeruginosa* and guidance for interpretation. **Simply call 01253 899215 or email info@nwlabs.co.uk for more information.**