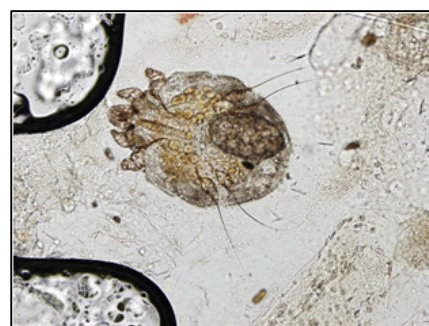


## Newsletter 06 / 2016

### NEW - PCR testing for *Sarcoptes* infection

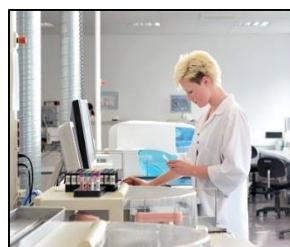
*Sarcoptes spp* infestation is a highly contagious disease of dogs causing intense pruritus and characteristic skin lesions, mainly papulocrustous eruptions with thick, yellow crusts, erythema, and alopecia. Lesions are initially localised on the ventral abdomen, chest, ears, elbows and hocks and then may become generalised, if untreated.



Diagnosis is routinely made by microscopic examination of (preferably multiple) skin scrapings. However, making a definitive diagnosis is sometimes difficult (and frustrating), since false negative results are very common.

An enzyme-linked immunosorbent assay (**ELISA**) test for serum-specific Sarcoptic immunoglobulin (**IgG**) is available and may be a good alternative in patients with suspected *Sarcoptes* infection and negative skin scraping results. Unfortunately, both false positive and false negative results may occur. The latter are not uncommon and may be observed early in the course of the disease, when seroconversion has not completed.

**Recently we developed a new PCR testing** that is able to identify the presence of DNA of *Sarcoptes sp.* from skin scrapes, even if very low concentrations are present. This test offers a **higher sensitivity and specificity**, when compared with the traditional diagnostic techniques, and can also be used for therapy monitoring. For more information, don't hesitate [to contact us](#).



Similarly, **we offer PCR tests for other specific organisms** which may cause skin lesions, including *Demodex sp*, *Microsporum sp*, and *Trichophyton sp*. Don't hesitate to [contact our laboratory](#) if you want to receive more information.

**Sample needed:** multiple skin scrapes (deep and superficial), for dermatophyte organisms collect plucked hair and skin scrapings from the active border of lesions and place into an empty, sterile container.

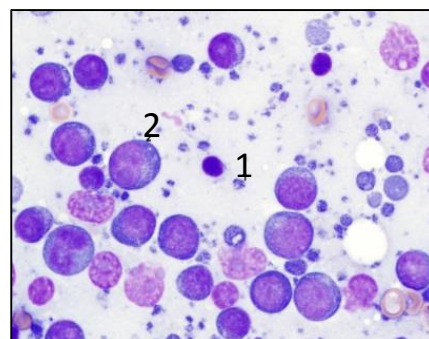
**Turnaround time:** 3-4 days

### Cytology picture of the month

This picture is from an aspirate from an enlarged prescapular lymph node of an 8 years old, female dog with generalised lymphadenomegaly (Wright Giemsa, 100x).

**What is your diagnosis?**

Description: The submitted sample is highly cellular, with adequate preservation. The background is clear with low numbers of red blood cells and high numbers of rounded, light to dark blue cytoplasmic fragments (also referred to as lymphoglandular bodies, labelled as 1).



There is a main population of large lymphoid cells (labelled as 2), which have moderate amounts of deep blue granular cytoplasm, and an intermediate to large paracentral nucleus (>2 red blood cells), with coarse granular chromatin, and up to three prominent round nucleoli. There are occasional atypical mitotic figures. Rare small lymphocytes are also noted.

Comment: In the submitted aspirate you can appreciate the presence of a monomorphic population of large lymphoid cells, which accounts for more than 80% of all cells. Together with the clinical history of a generalised lymphadenomegaly, these findings are supportive of **lymphoma**, and more specifically, a high-grade large cell form. No additional investigations are needed in this case to confirm the diagnosis of lymphoma, but further testing may be helpful to further characterise the process. T-cell phenotype has been reported to be a negative prognostic factor in high-grade multicentric canine lymphomas, and is associated with shorter remission and survival durations (*Valli et al, 2013*).

Immunophenotyping can be achieved with several techniques, including **flow cytometry** and **PARR testing**; both tests can be requested to our laboratory. Don't hesitate to call us to have more information.

Flow cytometry was performed on a new fresh lymph node sample and the above population was positive to CD79a and CD21, both of which are B-cell markers, confirming the diagnosis of a diffuse large B-cell lymphoma (DLBCL). This is the

### Genetic testing



BattLab, together with LABOKLIN, is leader in genetic testing in Europe for both small animals and equines. The catalogue of genetic tests developed by our team is in constant expansion, therefore, don't hesitate to contact us to have additional information any genetic testing.

One of the newest additions to the list of our genetic tests is **HEREDITARY MACROTROMBOCYTOPENIA**, an inherited genetic condition, due to an autosomal dominant trait, that results in low platelet counts (thrombocytopenia) and the presence of circulating macroplatelets. This is an asymptomatic condition and its distinction to other causes of thrombocytopenia may be very important.

Several breeds may be affected and include Cavalier King Charles (MTC-D), Norfolk and Cairn Terrier dogs (MTC-R).

Should you have a patient suspected to have hereditary macrothrombocytopenia that you wish to perform genetic testing on, sample requirement is a small volume of whole blood in an EDTA tube (0.5-1ml) or a buccal swab. Please contact BattLab for more details.

If you are interested to read more about the asymptomatic macrothrombocytopenia of Norfolk Terrier dogs, don't miss this article:

(<http://www.ncbi.nlm.nih.gov/pubmed/25060661>)



### 60 seconds with...

We hear from Kirsty Ingram, Office Manager at BattLab.

**How long have you been at BattLab?**

I joined Battlab six months ago at the end of November 2015. Only a short time but it has been very exciting with lots of new challenges.

**What is your role at BattLab?**

I have the position of Office Manager here at Battlab. This is a hard one as it would take me all day to list all my responsibilities! Basically I need to make sure all the administration is in place to enable the lab to function as a business, coordinate the couriers and also be the first port of call on the phones for anyone wanting help or advise from our pathologists or even add on further tests to previously received submissions.



**What do you enjoy doing in your spare time?**

I'm a social butterfly! I love to socialise. I am a member of an organisation called Spice that coordinates anything from a meal in a nice restaurant to jumping out of planes. I haven't jumped out any planes just yet but it has introduced me to friends the length and breadth of the country. We like to arrange weekends away and in the summer months love a festival or camping!

Yours sincerely,

The BattLab team



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