

IDEXX Reference Laboratories

Guidance on Submitting Splenic Samples for Histopathology

Submission of whole, intact spleens that are adequately and appropriately fixed in 10% neutral buffered formalin is the gold standard for complete and accurate histopathologic evaluation. We recognize that logistical considerations such as formalin handling and transport may sometimes limit the ability to submit the entire organ. When submission of adequately and appropriately formalin fixed, whole, intact spleens is not feasible, careful selection and proficient preparation of representative tissue samples (subsampling) becomes especially important.

The purpose of this document is to provide subsampling guidance for the in-clinic selection of splenic samples, so that smaller representative sections of the lesions can be provided to the laboratory to reach a meaningful and reliable diagnostic interpretation.

Subsampling Objectives

- + To select representative sections of splenic lesion(s).
- + To preserve tissue integrity and ensure optimal fixation.
- + To support accurate histopathological diagnosis.

Sample Collection Guidelines

- + Dissect representative areas of the lesion(s) and place each section into an appropriately sized, formalin approved container to ensure adequate fixation.
- + Maintain a formalin-to-tissue ratio of approximately 10:1 to ensure adequate fixation.
- + Place one tissue sample per container.
- + Recommended tissue size: approximately 2 × 2 × 8 cm
- + Ensure the tissue is fully submerged in formalin at all times.

Adhering to these guidelines will help optimise tissue preservation and maximise the diagnostic value of submitted splenic samples.

Submission Reminders:

- + Take a photo of the spleen and clearly label the areas where samples were collected.
- + Email images to anz-caseinfo@idexx.com, including the patient name in the subject line.
- + If a photo cannot be taken, draw a labelled diagram on the submission form.
- + Label all pots as spleen and number them in reference to your photo/diagram.
- + Ensure HISO code is used.
- + Ensure it is clear on the submission form that the submission is multiple samples from the same organ.

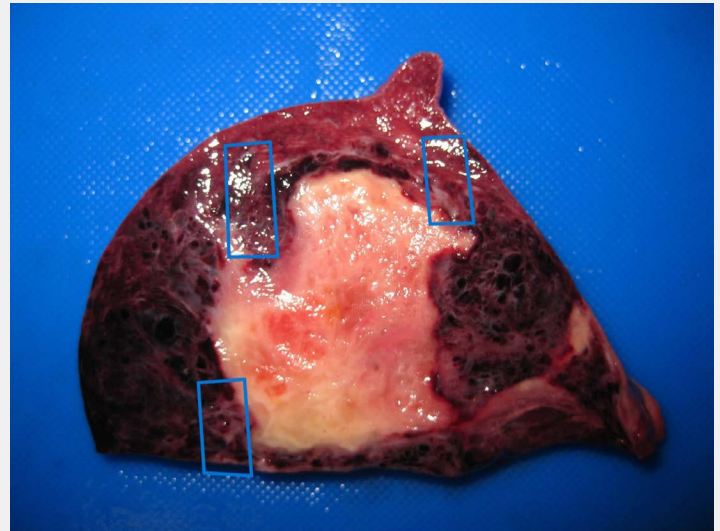


Image 1. Sample non-necrotic, non-hemorrhagic, solid areas.

Diffuse splenomegaly with no obvious lesions

- + Bread-loaf the spleen looking for masses or lesions (i.e. slice the spleen into 1-2 cm slices, like garlic bread).
- + If no masses are found, take 5 samples from different areas across the organ, including at least one portion with the capsule.
- + Avoid sampling areas of necrosis or haemorrhage. Avoid any areas that have been excessively handled or squeezed.

Multiple small masses or lesions

- + Take one (1) sample of each mass (up to 4), and
- + One (1) sample of "normal looking spleen".
- + Target solid areas and the interface between the mass and spleen. Avoid sampling areas of necrosis, or haemorrhage.

Single large mass

- + Section the entire mass in half to assess the architecture.
- + For large masses you might have to make multiple cuts. Most masses have cavities or large areas of blood (haemorrhage and/or necrosis). Avoid sampling here.
- + Target solid areas. This is most often at the edge of the mass (i.e. the interface between the mass and the spleen).
- + Take 4 samples of solid (non-necrotic, non-haemorrhagic) areas. Take 1 sample of "normal looking spleen".

If you would like to talk to a pathologist regarding this process, please contact customer service and ask for the anatomic pathologist on duty.