

# Advia cytograms and abdominal fluid cytology from a dog

E. Furman<sup>1</sup>, G. Kirtz<sup>1</sup>, E. Hooijberg<sup>1</sup>, G. Prechtl<sup>2</sup>, E. Kasper<sup>3</sup> and E. Leidinger<sup>1</sup>.

<sup>1</sup>InVitro Labor, Vienna, Austria.

<sup>2</sup>Siemens Austria.

<sup>3</sup>Tierklinik Aspern, Vienna, Austria.

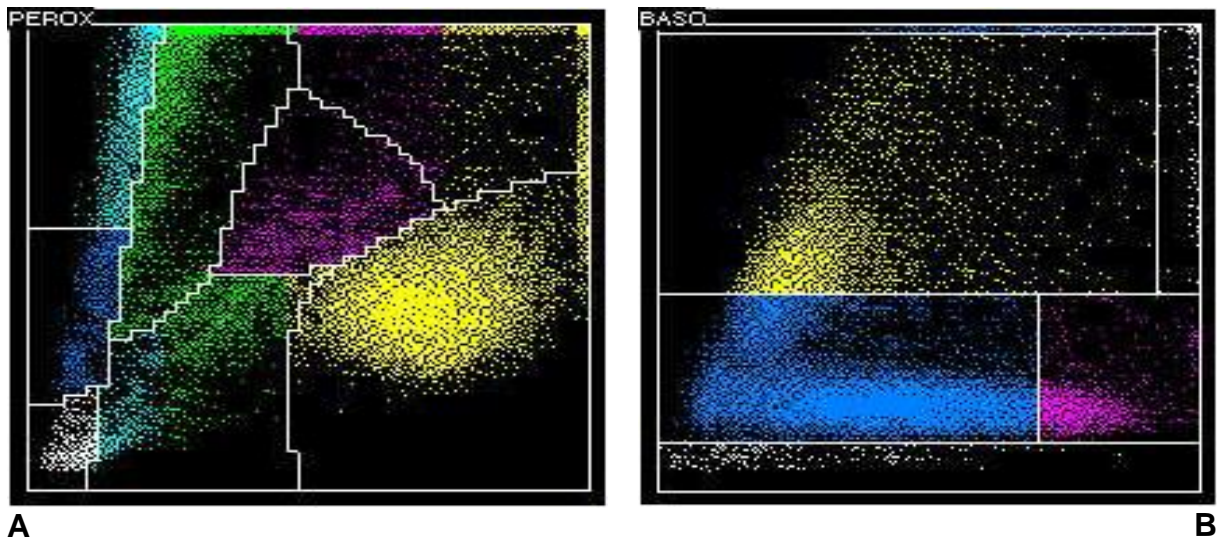
**Signalment and history:** “Diabolo”, a male 9 YO Rottweiler dog, was referred to a private veterinary clinic with a history of inappetence over a few days. The dog was calm, and on ultrasound examination a large amount of abdominal fluid was detected. An abdominal tap was performed and the fluid submitted in plain tubes (without anticoagulant) to the laboratory for examination.

## Laboratory Examination

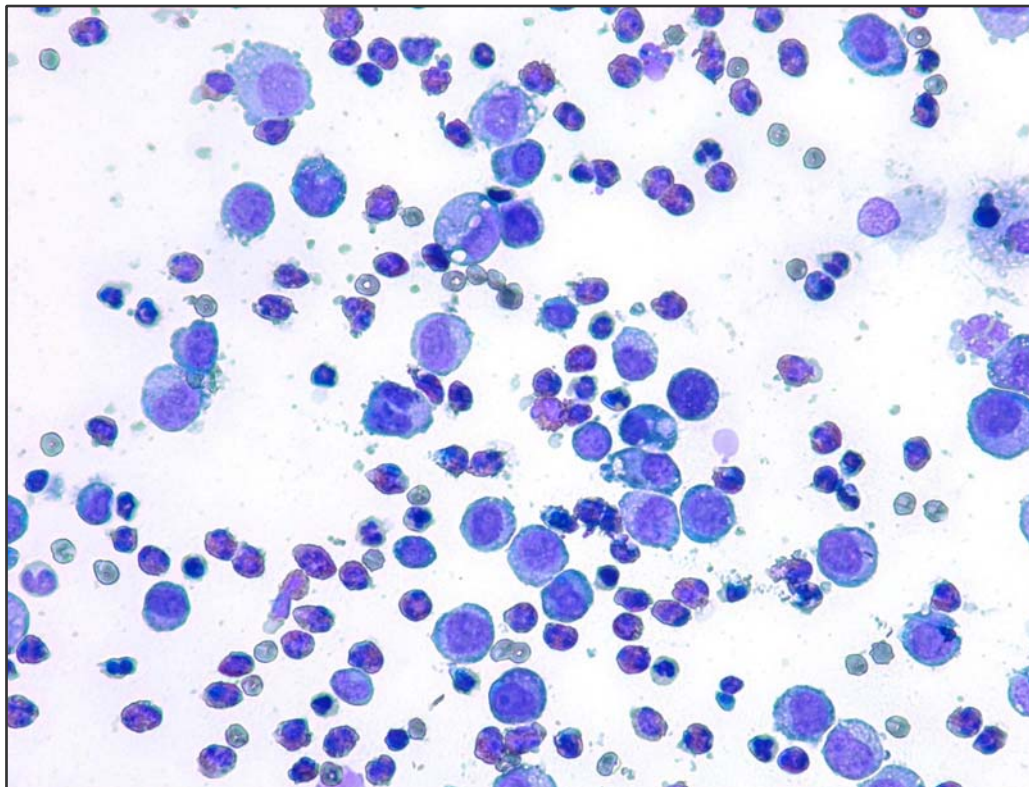
The total nucleated cell count was performed with an Advia 2120i (Siemens Diagnostics, using the software settings for dogs. Abdominal fluid results are in **Table 1**. Advia cytograms are shown in **Fig. 1**, and the photomicrograph from the cytology in **Fig. 2** and **3**.

**Table. 1:** Result of the abdominal fluid examination.

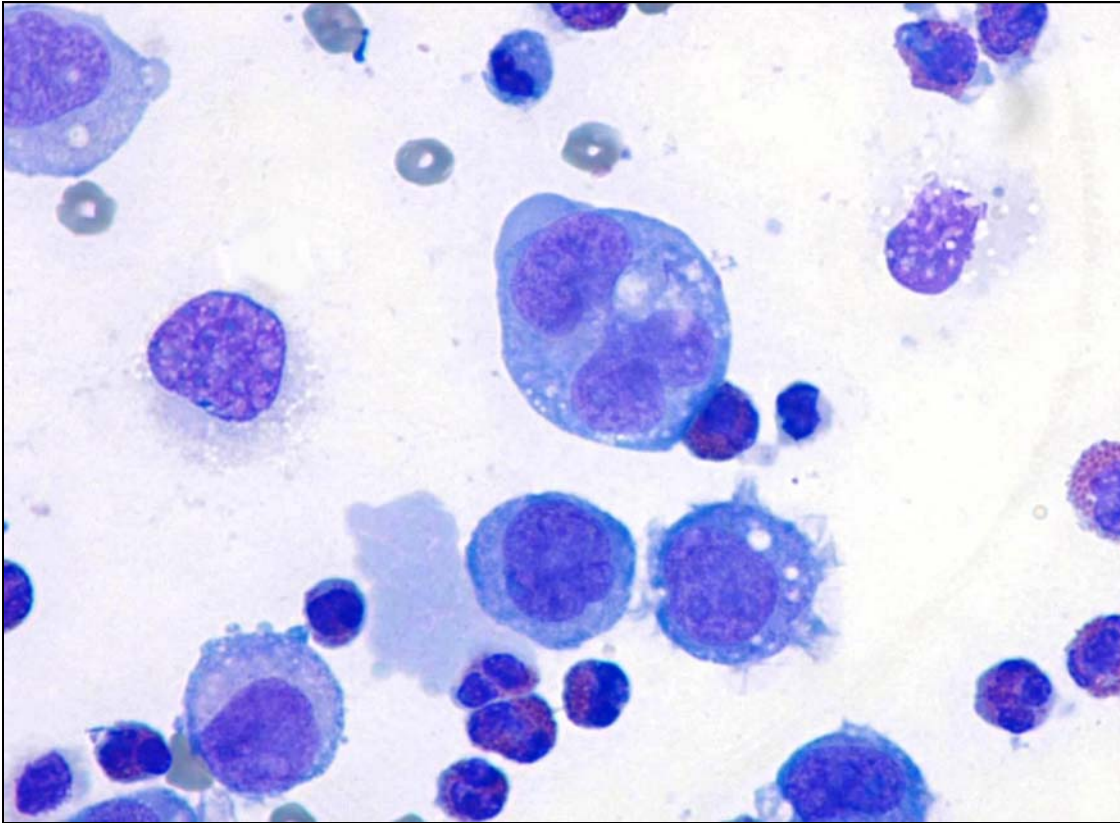
Macroscopic	6 ml of reddish, slightly turbid fluid
TNCC	24,210/ $\mu$ l
Total protein	26.6 g/l
Albumin	10.6 g/l
A/G ratio	0.66
LDH	144 U/l
Cholesterol	111 mg/dl
Triglycerides	not detectable
Lipase	344 U/l



**Fig. 1:** (A) shows the peroxidase channel cytogram, (B) the baso/lobularity channel cytogram.



**Fig. 2:** Photomicrograph of the ascites smear, modified Romanowsky stain, 400x.



**Fig. 3:** Photomicrograph of the smear of the ascitic fluid, modified Romanowsky stain, 1000x.

Questions:

1. How would you classify the abdominal fluid according to the chemistry findings and the TNCC?
2. How would you interpret the cytograms: which two cell populations in the perox cytogram are well represented on the photomicrographs?
3. Can you identify the cell population shown on the two photomicrographs?