



# ECVP/ESVP Summer School in Veterinary Pathology



## Marie Curie Training Courses

### Summer School 2007 – Cytology Case 10

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#### Case #10 – PP1008/01

DOG

Bone (scraping)

#### Cytologic description

Good cellular sample with common naked nuclei, some necrotic debris and nuclear streaming. In the background there are pink granules (proteinaceous material) and small black granules (melanin). There is a large prevalence (>95%) of a population of neoplastic, variably sized (15-30  $\mu$ ) round to spindle cells often with some degree of cohesive appearance. They have margins both well and poorly defined and a variable N/C ratio (usually high). The nucleus is round, central to paracentral, with coarse granular chromatin and a prominent round, medium-size nucleolus. Multinucleated cells are present. Occasional mitotic figures are seen. The cytoplasm is moderate, bluish, granular, occasionally containing a variable number (few too many) of fine black granules (melanin).

Moderate to high anisocytosis and anisokaryosis. There are also macrophages, foamy or in phagocytosis of melanin granules (melanophages). Rare lymphocytes and non-degenerated neutrophils.

#### Score

Style	(2 points)
Naked nuclei /necrosis/nuclear streaming	(1 point)
Background	(1 point)
Prevalence of round to spindle/cohesive	(2 points)
Cell size	(1 point)
N/C ratio	(1 point)
Nuclear features	(2 points)
Multinucleation	(1 point)
Mitosis	(1 point)
Cytoplasmic features	(2 points)
Anisocytosis/Anisokaryosis	(1 point)
Macrophages (melanophages)	(1 point)
Lymphocytes, neutrophils	(1 point)

#### MD

Metastatic malignant (poorly pigmented) melanoma	(3 points)
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