In veterinary medicine a real distinction between these two entity is lacking and it's based on mitotic activity, cellular atypia and amount of necrosis. Aims → describe clinico-pathological features of canine SMTs and identify potential criteria to differentiate benign from malignant one.

Sixty-eight SMTs were collected in 67 dogs. 18 cases were classified as UMP (uncertain malignant potential) because of:

- well-differentiated
- slightly higher MC than leiomomas
- some degree of cellular atypia and necrosis

We suggest to use LI with a cut-off of 5 to distinguish leiomomas from leiomysarcomas when histology alone is not sufficient.

**Inclusion criteria:**
Morphology suggestive of smooth muscle differentiation.
IHC reactivity: α-SMA and/or Desmin +, c-kit+

**Clinicalopathological features of canine intra-abdominal masses:**
80 cases

Epidemiological data on canine abdominal masses are fragmentary and focused on specific diagnoses and sites.

**Aims →** describe the epidemiology, distribution, and diagnoses of canine abdominal masses.

**Histopathological assessment of disease target organs in a mouse model of progeria (LMNA G609G/G609G)**

Hutchinson-Gilford Progeria syndrome is a fatal disorder characterized by accelerated aging caused by an LMNA gene mutation, which elicits production of progerin, a mutant lamin A precursor.

We collected 41 mice of this strain further genotyped as 5 wild type (WT), 27 Heterozygotes (Het.) and 9 Homozygotes (Homo.) as for the mutation.

**Aims →** assess the target organs and their changes at the clinical end point stage.

**Results →** The most frequently affected organs were lung, skin, large arteries, spleen, bones. Genotype-associated lesions are shown in table 2.

**Discussion →** The findings reflect most of the lesions occurring in the human disease (weight loss, lipodystrophy, dermic and cardiovascular changes, bone disorders) [4]. Genotype-associated changes including atrophy of the adipose tissue in the subcutis, catagen follicles and artheriopathy can be quantified to evaluate severity of disease at end point or the effectiveness of therapy in a pharmacological trial.

**References:**