# ECVP/ESVP Summer School in Veterinary Pathology

## Summer School 2010 – Mammary Tumours 30444/3

Cat

Bulging within the lumen of an ectatic duct there is a well demarcated, non-encapsulated, non-infiltrative, 3 mm in size nodule composed of cells arranged in irregularly size clusters and occasionally in uniform bi-layered cords with two clear rows (basal/myoepithelial and luminal).
The bi-layered cords are composed of cuboidal to columnar, from 20 to 25 micron in size cells with poorly demarcated cell borders and scant to moderate homogenous eosinophilic cytoplasm. Nuclei are irregularly round, from 10 to 15 micron in size, central to basal, occasionally hyperchromatic (mainly luminal cells). A basophilic nucleolus is occasionally evident. Anisokaryosis and anisocytosis are minimal. The irregularly size clusters are composed of irregularly polygonal cells, disposed in irregular short bundles. The cells are from 20 to 30 micron in size with not well defined cell borders, minimal eosinophilic, homogeneous cytoplasm and an ovular, from 15 to 20 micron in size nucleus with marginated or finely granular chromatin and a rarely evident nucleolus. The anisocytosis and anisokaryosis are minimal. There are 1 to 2 mitotic figures per HPF. Minimal multifocal areas of squamous differentiation are evident (not present in all slides). The remaining mammary parenchyma is characterized by severe and diffuse ductal ectasia and by multifocal lobular hyperplasia (adenosis). Ectatic ducts contain abundant eosinophilic amorphous material and occasional cellular debris. Multifocal lymphocytic aggregates are evident multifocally within the periglandular connective tissue.

**MD**:
Mammary gland, ductal adenoma (basaloid adenoma), severe diffuse ductal ectasia and moderate multifocal lobular hyperplasia (adenosis), *Felis catus*