



Fig. S1. Pathological presentation of UC of the urinary bladder in a canine, feline, bovine and human. Macroscopic image of an invasive UC from an **a**, 7-year old female neutered Great Dane dog, **c**, 18-year old female neutered Domestic shorthair cat, **e**, 4-year old female Holstein-Friesian cow and **g**, 73-year old male. Histopathological image of a H&E-stained section (x20 magnification) of invasive UC from an **b**, 7-year old female dog of unknown neutering status and breed, **d**, 5-year old male neutered Domestic shorthair cat, **f**, female Holstein-Friesian cow of unknown age and **h**, 73-year old male. Photo credits: Dr. Jeff Caswell, Department of Pathobiology, University of Guelph, Canada (**a**, **c**) and Professor Antonio Lopez-Beltran, Champalimaud Clinical Center, Portugal (**g**, **h**).