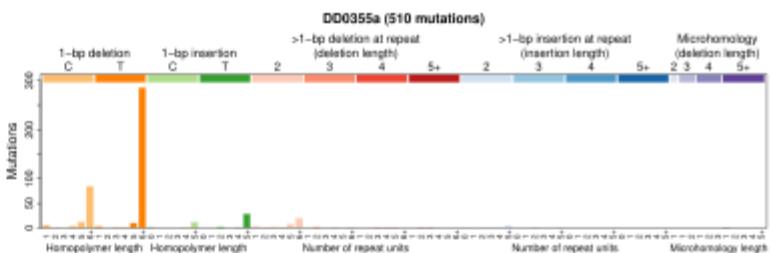
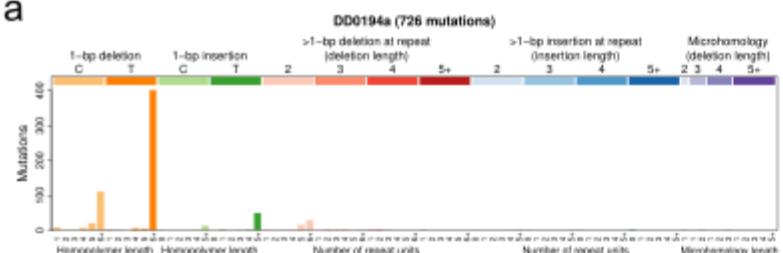
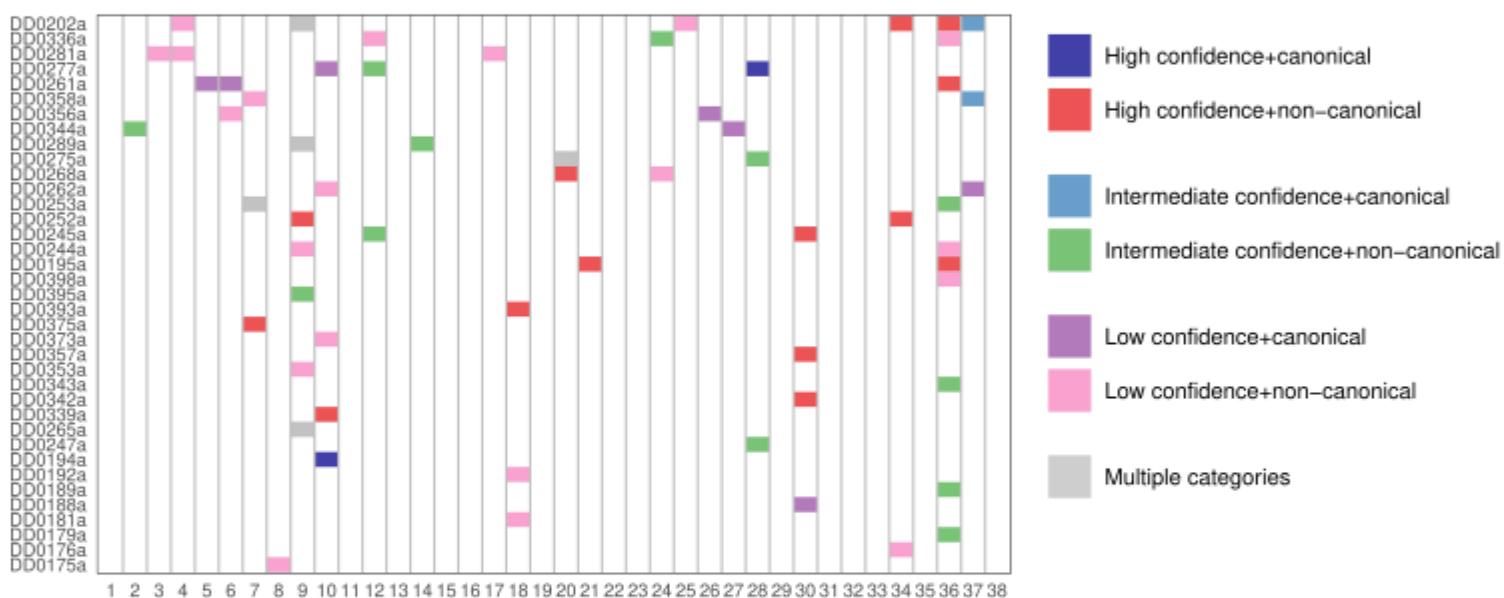
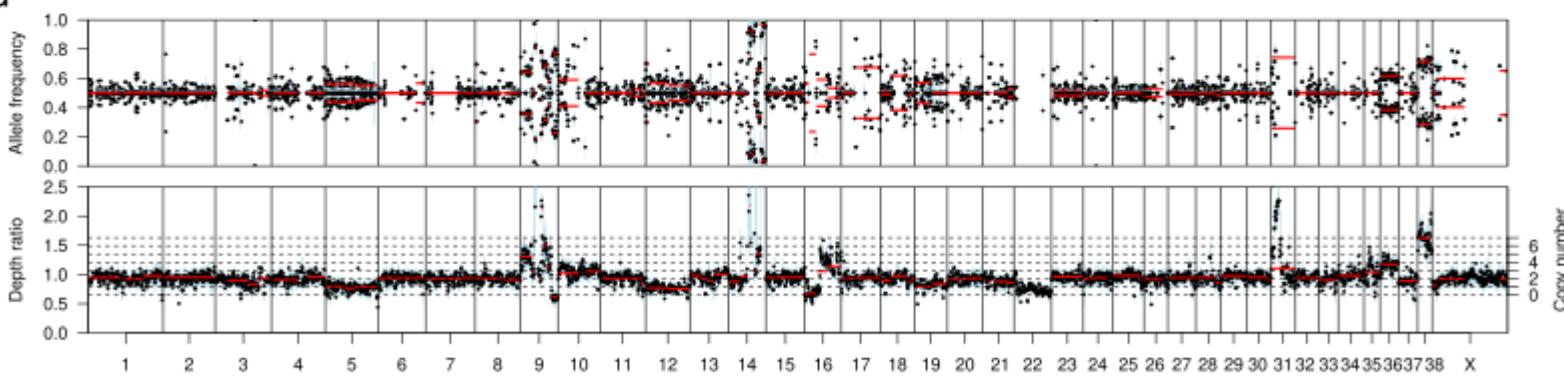


**a****b****c****d**

**Fig. S4. Indel mutational spectra, copy number and chromothripsis in canine urinary bladder UC.** **a**, Indel mutational spectra for samples DD0194a (left) and DD0355a (right), which show similarities to COSMIC signatures ID2 and ID7. **b**, Somatic copy number alteration (SCNA) penetrance plot (using SCNA data from  $n=62$  samples) showing gains and losses 5Mb or larger in 1 Mb windows along each chromosome. **c**, Chromosomes with one or more chromothripsis-like events of high, intermediate and low confidence identified in 37 samples. **d**, Genome plot for DD0289a showing B-allele frequencies and depth ratios derived from sequencing data, with chromothripsis-like events on chromosomes 9 and 14.