

**Supplementary table 2.** Primary carcinoma or sarcoma and concurrent secondary or tertiary tumours and concurrent inflammation in the dogs included in the study.

Primary tumour	Secondary tumour	Tertiary/ quaternary tumour or concurrent inflammation identified
<b>Sarcomas</b>		
Subcutaneous soft tissue sarcoma	Focal hepatic cystadenoma	
Splenic haemangiosarcoma	Round cell tumour of the face	Multifocal, moderate, acute to subacute renal tubular and medullary necrosis Focal adrenal cortical nodular hyperplasia
Right atrial haemangiosarcoma	Focal hepatocellular adenoma	
Splenic & right atrial haemangiosarcoma	Pheochromocytoma	
Hepatic haemangiosarcoma	Adrenal cortical carcinoma	
Hepatic hemangiosarcoma		Focal chronic-active pyogranulomatous aortic lesion with intralesional <i>Spirocerca lupi</i>
Cutaneous haemangiosarcoma	Pulmonary bronchoalveolar carcinoma	Pheochromocytoma Moderate chronic lympho-histiocytic interstitial nephritis Bacterial cystitis
Cutaneous haemangiosarcoma	Early splenic stromal sarcoma	Renal adenomas Mild granulomatous cholangiohepatitis
Subcutaneous haemangiosarcoma	Thyroid follicular carcinoma	
Mammary osteosarcoma	Mammary mixed type carcinoma	Multifocal adrenal cortical adenomas
Mammary osteosarcoma		Bacterial cystitis
Maxillary osteosarcoma	Compact thyroid carcinoma of the ascending aorta	
Mandibular osteosarcoma	Pulmonary squamous cell carcinoma (primary organ not identified)	
Splenic stromal sarcoma	Simple mammary intraductal papillary carcinoma	
Muscle soft tissue sarcoma	Subcutaneous haemangioma	Bacterial prostatic abscess & cystitis
Cutaneous soft tissue sarcoma	Suspected indolent lymphoma in part of the duodenal lymph node	

<b>Carcinomas</b>		
Complex mammary carcinoma	Simple tubulopapillary mammary carcinoma	Bronchoalveolar adenoma Adrenal cortical adenoma
Complex mammary carcinoma	Metastatic melanoma (metastasis to inguinal ln and liver), source unknown	Hepatocellular adenoma
Complex mammary carcinoma	Oesophageal osteosarcoma ( <i>S. lupi</i> )	Bacterial cystitis
Simple tubular mammary carcinoma	Subcutaneous soft tissue sarcoma (hindlimb)	

Simple tubular mammary carcinoma	Complex mammary carcinoma	Subcutaneous mast cell tumour Subcutaneous haemangioma Benign fibrolipoma Bacterial cystitis
Mixed mammary carcinoma	Compact thyroid carcinoma	Adrenal cortical carcinoma
Mixed mammary carcinoma	Cutaneous melanoma (metastatic to inguinal lymph node)	Bacterial cystitis
Anaplastic mammary carcinoma	Complex mammary carcinoma	
Simple tubulopapillary mammary carcinoma	Focal scirrhous pulmonary carcinoma	Severe chronic, multifocal to extensive, renal interstitial fibrosis & lymphoplasmacytic nephritis Bacterial cystitis
Simple tubular mammary carcinoma	Benign oesophageal <i>Spirocerca lupi</i> nodule	
Mixed type carcinoma & simple tubulopapillary mammary carcinoma		<i>Spirocerca lupi</i> migratory track: severe mural inflammation of the aorta
Mammary ductal carcinoma	Pheochromocytoma	Mild chronic interstitial lymphocytic and fibrosing nephritis
Sinonasal transitional carcinoma	Benign oesophageal <i>Spirocerca lupi</i> nodule	
Squamous cell carcinoma		Multifocal granulomatous nephritis
Squamous cell carcinoma		Chronic interstitial nephritis and a chronic membranous glomerulopathy
Solid scirrhous prostatic carcinoma		Focal, subacute, mild aspiration pneumonia

