Online resource S3. Study-level charting dataset for the final audited corpus (n = 98)

Study-level variables are presented in grouped form aligned with the descriptive synthesis reported in the manuscript; DOI/URL is retained for traceability.

Study citation	Year	DOI / URL	Species	Clinical problem / diagnostic domain	Primary data modality (as charted)	Primary AI task (grouped)	AI methodological family	Reference standard (ground truth)	Sample size (n)	Validation strategy (as reported)	External validation	Primary diagnostic metric (as reported)	Open data	Open data link / identifier	Open code	Open code link / identifier	Interpretability	Multicentre	Evaluation unit (grouped)
Kaijima et al., 2012	2012	https://doi.org/10.2460/ajvr.73.7.973	Dog-only	Automated lameness severity assessment from gait analysis	Force plate / gait analysis (ground reaction force waveforms)	Classification / diagnostic prediction	Neural networks (non-deep / non-CNN)	Subjective diagnostic lameness score during trotting (scores 1–3) assigned by expert observers	Animals/cases: 21 dogs;	Dog-wise split: data from 14 dogs for model development and 7 dogs for evaluation	No	Overall accuracy (96–99% with 2 preferred input variables)	No		No		No	No	Signal/waveform record
Mirkes et al., 2014	2014	https://doi.org/10.1016/j.compbiomed.2014.08.006	Dog-only	Canine lymphoma diagnosis; screening; remission monitoring/risk evaluation	Tabular – serum biomarkers and clinical variables (CRP, haptoglobin, age, sex, lymphadenopathy)	Mixed-output tasks	Machine learning-based approaches	Lymphoma confirmed by excisional biopsy or fine needle aspirate; non-lymphoma state confirmed free of lymphoma after	Animals/cases: 303 dogs;	Leave-one-out cross-validation (LOOCV) used for model selection and evaluation; no	No	Differential diagnosis sensitivity/specificity	No		No		Yes	Yes	Case
Takagi et al., 2014	2014	https://doi.org/10.1587/transinf.2013EDP7464	Dog-only	Benign vs malignant focal splenic lesion classification	Contrast-enhanced ultrasound (CEUS) / time-intensity curves	Classification / diagnostic prediction	Machine learning-based approaches	Histology or cytology	Animals/cases: 36 canine focal splenic lesions	Leave-one-out cross-validation; hyperparameter optimization across 5,700 combinations	No	Accuracy (91.7%; 33/36)	NR		No		Yes	No	Lesion/image sequence
Awaysheh et al., 2016	2016	https://doi.org/10.1177/1040638716657377	Cat-only	Differential diagnosis of inflammatory bowel disease vs alimentary lymphoma (and normal vs diseased cats)	Tabular / laboratory data (CBC; serum chemistry)	Classification / diagnostic prediction	Machine learning-based approaches	Endoscopic duodenal biopsy histopathology; original attending pathologist diagnosis with blinded	Animals/cases: 120 cats;	CV/resampling: 10-fold cross-validation repeated 10 random	No	Sensitivity	NR		NR		Yes	No	Animal/patient/case
Torrecilha et al., 2017	2017	https://doi.org/10.1016/j.vetpar.2016.12.016	Dog-only	Canine leishmaniasis; lymph node parasite load estimation	Tabular / laboratory / clinical data (serology; biochemical markers; physical	Regression	Neural networks (non-deep / non-CNN)	qPCR quantification of Leishmania infantum load in lymph node aspirates	Animals/cases: 55 dogs (35	CV/resampling: leave-one-out cross-validation; bootstrap	No	Correlation between observed and predicted	NR		NR		No	Yes	Animal/patient/case
Banzato et al., 2018a	2018	https://doi.org/10.1016/j.tvjl.2018.04.001	Dog-only	Prediction of histopathological grading of canine meningiomas from MR images	Imaging – MRI (pre-contrast T1W; post-contrast T1W; T2W)	Classification / diagnostic prediction	Deep learning-based approaches	Histopathological grading of canine meningiomas (WHO 2007 grades I–III)	Animals/cases: 56 selected	Split: 60% training / 10% validation / 30% test;	No	Accuracy (82.2% with scr/DNN on post-contrast	NR		NR		No	Yes	Image
Banzato et al., 2018b	2018	https://doi.org/10.1186/s12917-018-1638-2	Dog-only	Differentiation of canine meningiomas vs gliomas on MR images	Imaging – MRI (pre-contrast T1W; post-contrast T1W; T2W;	Classification / diagnostic prediction	Deep learning-based approaches	Final histopathological diagnosis of meningioma or glioma	Animals/cases: 80 selected	Split: 70% training / 15% validation / 15% test;	No	Accuracy (94% on post-contrast T1 images)	No	Available on reasonable request from authors with permission	NR		No	Yes	Image
Banzato et al., 2018c	2018	https://doi.org/10.1016/j.tvjl.2017.12.026	Dog-only	Diffuse degenerative hepatic disease detection	Ultrasound images (liver)	Classification / diagnostic prediction	Deep learning-based approaches	Histopathology (post-mortem liver histology); neoplastic cases excluded from	Animals/cases: 48 analyzed	Internal image-level split: 70% train, 15% validation, 15% test;	No	AUC	No		No		No	No	Image
Yoon et al., 2018	2018	https://doi.org/10.1016/j.tvjl.2018.05.009	Dog-only	Detection of five thoracic radiographic abnormalities (cardiomegaly; abnormal lung pattern;	Imaging – thoracic radiography (computed thoracic radiographs;	Classification / diagnostic prediction	Hybrid DL/ML approaches	Three veterinary radiologists independently labeled findings using	Animals/cases: task-	Split: 60% training / 40% testing for each task; no cross-	No	Accuracy (test set; BOF 79.6–96.9%; CNN	No		No		No	No	Image
Kim et al., 2019	2019	https://doi.org/10.1038/s41598-019-50437-0	Dog-only	Ulcerative keratitis severity classification (normal vs superficial vs deep corneal ulcer)	Photos / camera images (corneal photographs)	Classification / diagnostic prediction	Deep learning-based approaches	Veterinary ophthalmologists' diagnostic evaluation/labeling of corneal	Animals/cases: 281 dogs;	Split: 96-image training set / 34-image validation set; data	No	Accuracy	NR		NR		No	Yes	Image
Spiteri et al., 2019	2019	https://doi.org/10.1111/jvim.15621	Dog-only	Chiari-like malformation-associated pain vs control; symptomatic syringomyelia vs control in	Imaging – MRI (T2-weighted midsagittal head/cranial cervical DICOM images)	Classification / diagnostic prediction	Machine learning-based approaches	Clinically defined phenotype groups using clinical signs/behavior plus MRI criteria	Animals/cases: 32 dogs;	Split: leave-5-out train/test partitions; CV/resampling:	No	AUC (0.78 for CM-P biomarkers; 0.82 for SM-S	NR		No		Yes	No	Animal/patient/case
Yoon et al., 2019	2019	https://doi.org/10.4142/jvs.2019.20.e44	Dog-and-cat	Radiographic lung pattern classification (normal; alveolar; bronchial; unstructured interstitial)	Imaging – thoracic radiography (ROI-based texture analysis)	Classification / diagnostic prediction	Machine learning-based approaches	Consensus classification by three veterinary radiologists; ROI selection by	Animals/cases: 317 animals	Split: 70% training / 30% testing; no cross-validation	No	Accuracy (91.9% testing dataset)	No		No		Yes	No	ROI/patch
Boissady et al., 2020	2020	https://doi.org/10.1111/vru.12912	Dog-and-cat	Automated screening for primary thoracic radiographic lesions in dogs and cats	Imaging – radiography (thoracic radiographs; DICOM)	Classification / diagnostic prediction	Deep learning-based approaches	Board-certified veterinary radiologist reports; labels extracted with custom NLP	Animals/cases: 6,584 patients;	Split: patient-level 90% training / 10% validation;	No	Overall error rate (10.7% for CNN on 120-radiograph	NR		NR		No	No	Image
Burrai et al., 2020	2020	https://doi.org/10.3390/ani10091687	Dog-only	Prediction of benign vs malignant canine mammary tumors from epidemiological/clinical	Tabular – epidemiological and clinical variables (age; breed; spayed status;	Classification / diagnostic prediction	Machine learning-based approaches	Histopathological diagnosis of mammary neoplasm	Animals/cases: NR dogs;	Nested cross-validation: outer split into 5 nonoverlapping	No	Accuracy (GLM 0.63; GBM 0.62)	No		Yes	https://doi.org/10.3390/ani10091687 (Supplementary Materials)	Yes	Yes	Tumor/case
Burti et al., 2020	2020	https://doi.org/10.1016/j.tvjl.2020.105505	Dog-only	Cardiomegaly detection on thoracic radiographs	Imaging – radiography (right lateral thoracic radiographs)	Classification / diagnostic prediction	Deep learning-based approaches	Breed-specific VHS classification on radiographs; jointly assessed by two	Animals/cases: NR;	Temporal/scanner-based internal split; computed	No	AUC	No		No		No	No	Image
Kumar et al., 2020	2020	https://doi.org/10.1016/j.ins.2019.08.072	Dog-only	Binary classification of canine mammary tumors (benign vs malignant) with human breast cancer	Histopathology (H&E-stained microscopic images)	Classification / diagnostic prediction	Hybrid DL/ML approaches	Histopathologic diagnosis by experienced veterinary pathologists (Goldschmidt	Animals/cases: 44 canine	Split: patient-level 70% training / 30% test; CV/resampling: 5-	No	Accuracy (92.75% for canine CMTHIs, 100× magnification,	NR		NR		No	No	Image
Li et al., 2020	2020	https://doi.org/10.1111/vru.12901	Dog-only	Left atrial enlargement detection on thoracic radiographs	Imaging – radiography (right lateral thoracic radiographs)	Classification / diagnostic prediction	Deep learning-based approaches	Echocardiographic left atrial enlargement status from formal echocardiography	Animals/cases: 792 dogs;	Chronological split: first 711 images (90%) development;	No	Accuracy (82.71%)	No		No		No	No	Image
Nagamori et al., 2020	2020	https://doi.org/10.1186/s13071-020-04215-x	Dog-and-cat	Intestinal parasite egg detection/identification on fecal flotation slides	Microscopy – scanned fecal flotation slide images	Mixed-output tasks	Deep learning-based approaches	Microscopic examination by experienced diagnostic parasitologists on the same	Animals/cases: 100 animals	Independent evaluation of a pre-existing system on 100 pre-	Yes	Pearson correlation coefficient with	No		No		No	No	Sample
Reagan et al., 2020	2020	https://doi.org/10.1016/j.domaniend.2019.106396	Dog-only	Hypoadrenocorticism screening/diagnosis	Structured laboratory data (CBC and serum chemistry)	Classification / diagnostic prediction	Machine learning-based approaches	ACTH stimulation test; cases defined by post-ACTH cortisol <2 μg/dL; controls by	Animals/cases: 1041 dogs (133	Random 80%/20% train/test split; Bayesian optimization	No	AUC	No		No		No	No	Animal/patient/case
Schofield et al., 2020	2020	https://doi.org/10.1111/jvim.15851	Dog-only	Cushing's syndrome diagnosis at first suspicion in primary-care practice	Tabular (primary-care EHR demographics, clinical signs, routine clinicopathologic	Classification / diagnostic prediction	Machine learning-based approaches	Final veterinarian-recorded diagnosis of Cushing's syndrome with LDDST or ACTH	939 dogs (398 cases, 541	Internal validation by 200 bootstrap resampling;	No	AUROC (0.78)	No		No		Yes	Yes	Animal/patient/case
Banzato et al., 2021a	2021	https://doi.org/10.3389/fvets.2021.731936	Cat-only	Automatic detection of thoracic radiographic findings in cats	Imaging – radiography (X-ray)	Classification / diagnostic prediction	Deep learning-based approaches	Consensus interpretation by two experienced veterinary radiologists;	Animals/cases: NR;	Split: 8:1:1 training/validation/test;	No	AUC	No	Data available from corresponding author on	NR		Yes	Yes	Image
Banzato et al., 2021b	2021	https://doi.org/10.1038/s41598-021-83515-3	Dog-only	Thoracic radiographic finding classification (multi-label; 9 findings)	Imaging – thoracic radiography (latero-lateral radiographs)	Classification / diagnostic prediction	Deep learning-based approaches	Consensus labels assigned by three experienced veterinary radiologists	Animals/cases: NR;	Data Set 1: train/validation/test split 8:1:1;	No	AUC (per finding; ResNet-50 >0.8 for most included	No		No		Yes	No	Image
Baydan et al., 2021	2021	https://doi.org/10.33988/auvfd.772685	Dog-and-cat	Tibial fracture detection and fracture localization	Radiography (whole/partial body X-ray images)	Detection / localisation	Deep learning-based approaches	Veterinarian-annotated fracture/no-fracture tibia labels and fracture-location	Animals/cases: NR;	Multiple train/test splits across experiments; no cross-	No	F1 score (84.5%; proposed two-stage S1 framework)	No		No		No	Yes	Image
Caputa et al., 2021	2021	https://doi.org/10.3390/app11167181	Dog-only	Round-cell neoplastic cell detection in canine skin cytology (lymphoma; histiocytoma; mastocytoma)	Cytology microscopy / smear images (skin FNA cytology)	Mixed-output tasks	Deep learning-based approaches	Vet doctor manual annotation of tumor cells in cytology images	Samples/records: 1219	Split: 70/20/10 train/validation/test on	No	mAP (0.7416)	Yes	https://git.plgrid.pl/projects/CYFRONET/repos/dataset-	Yes	https://git.plgrid.pl/projects/CYFRONET/repos/vet-	No	NR	ROI/lesion/object
Cheng et al., 2021	2021	https://doi.org/10.1093/bib/bbaa252	Dog-only	Canine hemangiosarcoma vs nonmalignant splenic hematoma	Transcriptomics (RNA-seq from tissue)	Classification / diagnostic prediction	Machine learning-based approaches	Histopathology (hemangiosarcoma vs splenic hematoma)	Animals/cases: 74 dogs;	Training on 14 inflammatory hemangiosarcomas + 10	No	AUC (1.00; EXT, 10-fold CV on all samples)	Yes	https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE95183;	NR		Yes	No	Sample
Larios et al., 2021	2021	https://doi.org/10.1002/jbio.202100141	Dog-only	Canine visceral leishmaniasis diagnosis vs noninfected and Trypanosoma evansi-infected	FTIR spectroscopy of blood serum	Classification / diagnostic prediction	Machine learning-based approaches	ELISA and immunochromatographic assay for L. infantum; PCR and DNA sequencing	Animals/cases: 48 dogs;	CV/resampling: LOO-CV; no train/test split	No	Accuracy (0.8542; 3-class classification)	No		NR		Yes	NR	Animal/patient/case
Nagamori et al., 2021	2021	https://doi.org/10.1186/s13071-021-04591-y	Dog-and-cat	Intestinal parasite egg/oocyst/cyst detection on fecal flotation slides	Microscopy – scanned fecal flotation slide images	Mixed-output tasks	Deep learning-based approaches	Expert microscopic evaluation by parasitologists/technician on the same	Animals/cases: NR;	Independent evaluation of an updated pre-existing system on	Yes	Sensitivity_range (75.8–100%)	No		No		No	No	Sample
Salvi et al., 2021	2021	https://doi.org/10.3389/fvets.2021.640944	Dog-only	Cutaneous round cell tumor subtype classification; mast cell tumor grading	Histopathology (H&E-stained digital images)	Classification / diagnostic prediction	Deep learning-based approaches	Pathologist diagnosis supported by immunohistochemistry; Patnaik grade for	Animals/cases: 117 RCT cases	Random train/test split; RCT classification used 392 train	No	Image-level accuracy (RCT test) (0.9166)	No		No		No	Yes	Image
Schofield et al., 2021	2021	https://doi.org/10.1038/s41598-021-88440-z	Dog-only	Diagnostic support for Cushing's syndrome at first suspicion in primary-care practice	Tabular (EPR demographics, clinical signs, and laboratory data)	Classification / diagnostic prediction	Machine learning-based approaches	Final veterinarian-recorded diagnosis of Cushing's syndrome with LDDST or ACTH	Animals/cases: 939 dogs (398	Random 67% training / 33% independent test split; 10-fold	No	AUROC (test, LASSO) (0.85)	No		No		Yes	Yes	Animal/patient/case
Shaker et al., 2021	2021	https://doi.org/10.1111/vru.13012	Dog-only	Hepatic mass histologic malignancy prediction	CT radiomics (triphasic abdominal CT; precontrast and delayed postcontrast)	Classification / diagnostic prediction	Machine learning-based approaches	Histopathology of the corresponding biopsied liver mass	Animals/cases: 40 dogs (13	Initial 30/10 train-test split followed by model reduction	No	Accuracy (0.90)	No		No		Yes	No	Tumor/case
Ye et al., 2021	2021	https://doi.org/10.1111/vco.12747	Dog-only	Intraoperative surgical margin assessment of canine soft tissue sarcoma	Spectral-domain optical coherence tomography (OCT)	Classification / diagnostic prediction	Deep learning-based approaches	Complete surgical margin pathology (tangential sections) with expert-reviewed	Animals/cases: 24 dogs;	Split: training 80 cancer + 80 normal images; validation 20	No	Accuracy (97.1% validation; 96% independent test)	No		No		Yes	No	ROI/patch
Burti et al., 2022	2022	https://doi.org/10.3389/fvets.2022.872618	Dog-only	Classification of focal splenic lesion histotype on CT	Computed tomography (pre-contrast and delayed post-contrast CT)	Classification / diagnostic prediction	Machine learning-based approaches	Cytopathology and/or histopathology	Animals/cases: 52 dogs / 52	No independent train/test split reported; recursive partitioning	No	Balanced accuracy (NH 0.79; OBL 0.79; RCT 0.50; SA 0.89)	No		No		Yes	Yes	ROI/lesion/object
Dumortier et al., 2022	2022	https://doi.org/10.1038/s41598-022-14993-2	Cat-only	Detection of pulmonary radiographic abnormalities / radiographic pulmonary patterns	Thoracic radiography (lateral thoracic radiographs)	Classification / diagnostic prediction	Deep learning-based approaches	Medical imaging report (MIR)-based annotation / case report label	Animals/cases: 348 cases /	Split: 455 images for training/validation and 45	No	F1-score (85%)	No	Partial test-set material: https://github.com/Latreth/Vet_	No		Yes	No	Image
Engelsman et al., 2022	2022	https://doi.org/10.3389/fvets.2022.912253	Dog-only	Detection of ataxic gait	Wearable IMU (smartphone accelerometer + gyroscope)	Classification / diagnostic prediction	Machine learning-based approaches	Neurological examination / clinician-assigned healthy vs ataxic status	Animals/cases: 78 dogs (55	Window-size benchmarking with 80:20 train-test split;	No	Accuracy (95.77%)	No		No		Yes	No	Exam/recording/time
Ferreira et al., 2022	2022	https://doi.org/10.3390/s22093128	Dog-only	Canine visceral leishmaniasis diagnosis from physical examination findings	Tabular – physical examination / clinical features	Classification / diagnostic prediction	Machine learning-based approaches	ELISA serological test	Animals/cases: 340 dogs (177	80/20 train/test split; recursive feature elimination with cross-	No	Accuracy (0.75)	No		No		Yes	NR	Animal/patient/case
Figueirinhas et al., 2022	2022	https://doi.org/10.3390/ani12141755	Dog-only	Unilateral supporting hindlimb lameness detection	IMU inertial-sensor roll-angle time series	Classification / diagnostic prediction	Neural networks (non-deep / non-CNN)	Clinical classification of dogs as sound vs unilateral hindlimb lame; exact reference	Animals/cases: 15 working	Development on 12 dogs with verification on 3 additional	No	Accuracy (85.7%)	No		Yes	https://github.com/AgSanches/TFG-Backend;	No	No	Signal/waveform record
Hespel et al., 2022	2022	https://doi.org/10.1111/vru.13069	Dog-only	Detection of 15 thoracic radiographic labels	X ray	Classification / diagnostic prediction	Deep learning-based approaches	Majority of 3 board-certified radiologists (gold standard)	Animals/cases: 50;	Split: train 90/validation 10/test (50 cases);	No	Overall error rate (best model) (15.8%)	No		No		NR	No	Animal/patient/case
Hwang et al., 2022	2022	https://doi.org/10.1007/s13273-022-00249-7	Dog-only	Bacterial dermatosis / fungal infection / hypersensitivity allergic dermatosis classification	Skin images (RGB + multispectral)	Classification / diagnostic prediction	Deep learning-based approaches	Veterinarian diagnosis / label assignment after clinical examination	Animals/cases: 95 dogs;	Split: separate hold-out validation set of original images	No	Accuracy (0.89; bacterial dermatosis consensus	Yes	https://doi.org/10.17632/5dbht54kw7.1	No		No	No	Image
Jeong et al., 2022	2022	https://doi.org/10.1038/s41598-022-18822-4	Dog-only	Canine cardiomegaly detection	X ray	Classification / diagnostic prediction	Deep learning-based approaches	Manual masks; echocardiography labels	Animals/cases: 1200;	Split: train/validation/test; CV/resampling: 10-fold inner	No	AUROC (0.83)	No		Yes	https://github.com/JeongYeojin/aHVI	Yes	No	Image

Kim et al., 2022	2022	https://doi.org/10.1111/vru.13062	Dog-only	Cardiogenic pulmonary edema detection	X ray	Classification / diagnostic prediction	Deep learning-based approaches	ACVR board-certified radiologist diagnosis	Animals/cases: 481;	Split: test-only (real-world); CV/resampling: No	No	Accuracy (92.3%)	No		No		NR	No	Animal/patient/case
Muller et al., 2022	2022	https://doi.org/10.1111/vru.13089	Dog-only	Detect pleural effusion	RX	Classification / diagnostic prediction	Deep learning-based approaches	Clinical records/diagnosis confirmed	62	CV/resampling: No	No	Accuracy (0.887)	No		No		NR	No	Exam/recording/time
Pijnacker et al., 2022	2022	https://doi.org/10.1186/s13071-022-05163-4	Dog-only	Babesia canis parasitemia screening	Tabular hematology analyzer data (ADVIA CBC parameters)	Classification / diagnostic prediction	Machine learning-based approaches	Positive cases with blood smear and/or PCR-confirmed Babesia canis parasitemia;	Samples/records: modeling	Temporal modeling and validation cohorts (2002-2013	Yes	AUC (99.4%)	No		Yes	https://github.com/richardbartels/babesia-canis-hematology	Yes	No	Sample
Reagan et al., 2022a	2022	https://doi.org/10.1111/jvim.16566	Dog-only	Hypoadrenocorticism screening	Tabular (same-day CBC + serum chemistry)	Classification / diagnostic prediction	Machine learning-based approaches	Serum cortisol measurement ± ACTH stimulation test; clinician diagnosis used	Animals/cases: 1025 dogs;	Prospective temporal validation of a previously	Yes	Positive likelihood ratio (145–254)	NR		NR		No	No	Animal/patient/case
Reagan et al., 2022b	2022	https://doi.org/10.1177/1040638721096781	Dog-only	Early leptospirosis detection	Tabular (CBC, chemistry, urinalysis, MAT titer)	Classification / diagnostic prediction	Machine learning-based approaches	Positive: compatible clinical features plus ≥4-fold MAT rise and/or single MAT	Animals/cases: 466 analysed	Temporal split (training set 2000–2018; test set	Yes	AUC (BW+MAT 0.959; BW 0.955)	No		Yes	https://github.com/sf-deng/lepto-classifier	No	No	Animal/patient/case
Barge et al., 2023	2023	https://doi.org/10.1111/vru.13242	Dog-only	Texture analysis for glioma typing/grading	MRI	Classification / diagnostic prediction	Machine learning-based approaches	Histopathology	Animals/cases: 38;	Split: LOOCV; CV/resampling: Yes	No	Accuracy (0.87)	No		No		Yes	No	ROI/lesion/object
Basran et al., 2023	2023	https://doi.org/10.1111/vru.13250	Cat-only	Normal vs abnormal intestine; biopsy vs no-biopsy	Ultrasound radiomics + CBC + serum biochemical biomarkers	Classification / diagnostic prediction	Machine learning-based approaches	Histopathology	Animals/cases: 149 cats.	Split: 10-fold CV; CV/resampling: Yes	No	Accuracy (0.886)	Yes	https://osf.io	Yes	https://osf.io	Yes	Yes	Animal/patient/case
Burrai et al., 2023	2023	https://doi.org/10.3390/ani13091563	Dog-only	Benign vs malignant canine mammary tumors	Histopathology images (H&E)	Classification / diagnostic prediction	Hybrid DL/ML approaches	Histopathologic benign/malignant classification by one board-certified and	Animals/cases: 44 canine	Split: none (patient/slide-grouped outer folds only);	No	Accuracy (0.85; canine CMTD, ten-crop testing,	Yes	https://www.mdpi.com/article/10.3390/ani13091563/s1	Yes	https://github.com/cpctools/CMTD_classification	No	No	Image
Celniak et al., 2023	2023	https://doi.org/10.1038/s41598-023-46345-z	Dog-only	Thoracic lesion multi-label classification on veterinary radiographs	Thoracic radiography (X-ray)	Classification / diagnostic prediction	Deep learning-based approaches	Consensus labels assigned by 3 experienced veterinary radiologists	Annotated veterinary	Internal split 0.75/0.05/0.25 per class; self-supervised	No	Mean ROC AUC (0.77 LL; 0.66 DV)	No		NR		Yes	NR	Image
Chun et al., 2023	2023	https://doi.org/10.52549/ijeei.v11i4.5177	Dog-only	Detection/classification of canine eye diseases (5 categories)	Mobile phone eye photos (smartphone/casual images)	Classification / diagnostic prediction	Deep learning-based approaches	Image-level disease labels from collected reference images; per-image diagnostic	60 images total (40	Training data fraction 0.4; benchmark testing across	No	Accuracy (Dmodel40, MobileNet) (0.779)	NR		NR		No	No	Image
Coelho et al., 2023	2023	https://doi.org/10.1016/j.pdpdt.2023.103575	Dog-only	Visceral leishmaniasis diagnosis	UV–Vis spectroscopy	Classification / diagnostic prediction	Machine learning-based approaches	ELISA test and immunochromatographic test	Animals/cases: 52;	Split: train/test; CV/resampling: LOO CV +	Yes	Accuracy (0.75)	No		No		Yes	Yes	Sample
Corsini et al., 2023	2023	https://doi.org/10.3389/fvets.2023.1292988	Dog-only	Hypothyroidism diagnosis / diagnostic prediction	Tabular clinical + hematological + biochemical + thyroid-function data	Classification / diagnostic prediction	Machine learning-based approaches	Final diagnosis based on thyroid function testing (rhTSH stimulation when available;	Animals/cases: 315 dogs (82	CV/resampling: 10-fold cross-validation repeated 10 times;	No	AUROC (0.85–0.99 across optimal models; best 0.99)	No		No		No	No	Animal/patient/case
Dank et al., 2023	2023	https://doi.org/10.3389/fvets.2023.1109188	Dog-only	Benign vs malignant cutaneous/subcutaneous masses	citology/histology and heat diffusion throught the tissue	Classification / diagnostic prediction	Machine learning-based approaches	Cytology/Histopathology	Animals/cases: 45;	CV/resampling: LOO-CV	No	Accuracy (0.90)	No		No		NR	No	ROI/lesion/object
Fragoso-Garcia et al., 2023	2023	https://doi.org/10.1177/03009858231189205	Dog-only	Diagnosis of 7 common skin tumors	Histology	Classification / diagnostic prediction	Deep learning-based approaches	HE-based histologic diagnosis	Animals/cases: 490 slides;	Split: 245/35/70 train/val/test; CV/resampling: No	No	Accuracy (0.95)	No		No		NR	No	Image
Haghofer et al., 2023	2023	https://doi.org/10.1038/s41598-023-46607-w	Dog-and-cat	Histologic lymphoma nuclear-size classification / subtyping	Histology images (representative 1024×1024 TIFFs from WSIs)	Classification / diagnostic prediction	Deep learning-based approaches	Three-pathologist consensus image label for nuclear-size class; two-pathologist	Animals/cases: 154	Separate datasets for segmentation and	No	Accuracy (92.0% canine test set with Unet++; 84.21%	Yes	https://git.fh-ooe.at/fe-extern/Lymphoma-Dataset.git	No		Yes	No	Image
Isik et al., 2023	2023	https://doi.org/10.18280/ts.400444	Dog-only	Benign vs malignant canine mammary tumors on histopathology	Histology / digital pathology	Classification / diagnostic prediction	Deep learning-based approaches	Histopathology / pathologist-labelled tumor sections	Samples/records: 146 raw	Held-out evaluation reported; exact train/validation/test split	No	Accuracy (0.989)	No		No		No	No	Image
Ji et al., 2023	2023	https://doi.org/10.3389/fvets.2023.1236579	Dog-only	Kidney calculi detection on non-contrast CT	CT (non-contrast)	Mixed-output tasks	Deep learning-based approaches	Manual 3-class segmentation by 10 clinicians (Medilabel)	Animals/cases: 167 dogs/CT	80/20 split of 76 calculi-positive CT scans (61 training;	No	Dice Similarity Coefficient (0.741; AttUNet best in	No		No		NR	Yes	Pixel/slice
Joao et al., 2023	2023	https://doi.org/10.1016/j.compbiomed.2023.107203	Dog-and-cat	Gastrointestinal parasite detection/identification in cats and dogs	Microscopy images of temporary-stained fecal smears	Mixed-output tasks	Deep learning-based approaches	Pixel-wise annotations by researchers plus	Animals/cases: 197 (122 dogs;	5-fold cross-validation	No	Combined detection/identification	Yes	https://github.com/LIDS-Datasets	NR		Yes	No	Image
Jung et al., 2023	2023	https://doi.org/10.1038/s41598-023-43872-7	Dog-only	Medial patellar luxation (MPL) detection/diagnosis	Color photograph (single rear-view hindlimb image)	Classification / diagnostic prediction	Deep learning-based approaches	Veterinarian clinical examination and MPL grading by palpation/touch of the medial	Dogs/cases: 1830 used for	5-fold cross-validation; split by dog (same dog not duplicated	No	Accuracy (0.925)	No		NR		Yes	Yes	Image
Morisi et al., 2023	2023	https://doi.org/10.3390/vetsci10010045	Dog-only	Histopathological necrosis detection for soft-tissue sarcoma grading	Digital histopathology / whole-slide H&E images	Classification / diagnostic prediction	Deep learning-based approaches	Consensus necrosis annotations by veterinary pathologist + trained veterinary	Samples/records: 90 WSIs	Split: separate train/validation/test sets;	No	Accuracy (0.927, best test fold)	No		No		Yes	No	ROI/patch
Nagamori et al., 2023	2023	https://doi.org/10.1177/1040638731216185	Dog-and-cat	Parasite egg/oocyst detection	Fecal microscopy	Detection / localisation	Deep learning-based approaches	Expert parasitologists (blind)	Animals/cases: 2191;	Split: train/test split	Yes	Sensitivity_range (73.6–97%)	NR		No		Yes	Yes	Sample
Nakazawa et al., 2023	2023	https://doi.org/10.1292/jvms.23-0315	Dog-only	Differential diagnosis of canine nasal diseases (NP/SNA vs NIR/DD vs FB)	Clinical/radiographic multimodal tabular data	Classification / diagnostic prediction	Machine learning-based approaches	Definitive diagnosis by CT/MRI/endoscopy with histopathology or extracted foreign	Dogs/cases: 189 (GM 103	Temporal development/validation	Yes	Sensitivity/specificity (Model 2: NP/SNA 0.93/1.00	NR		NR		Yes	Yes	Animal/patient/case
Nam et al., 2023	2023	https://doi.org/10.1109/ACCESS.2023.3344579	Dog-and-cat	Ocular surface disease multi-class classification	Images (slit-lamp/camera)	Classification / diagnostic prediction	Deep learning-based approaches	Expert labels (vet ophthalmology)	Images (400x400)	Split: Train/val/test split; CV/resampling: No	No	Accuracy (0.847)	Yes	AI-Hub public	NR		NR	Yes	Image
Oren et al., 2023	2023	https://doi.org/10.1038/s41598-023-47308-0	Dog-only	Brachycephalic obstructive airway syndrome (BOAS) assessment / screening	Audio respiratory sounds (electronic stethoscope) during a standardized	Classification / diagnostic prediction	Machine learning-based approaches	Standardized BOAS treadmill fitness test / functional grading (pass/fail) with	Animals/cases: 148 dogs (69	Leave-one-out cross-validation on analytic subsets; additional	Yes	Accuracy (0.85 for BOAS pass/fail classification in	No		No		Yes	No	Exam/recording/time
Pomerantz et al., 2023	2023	https://doi.org/10.1111/vru.13287	Dog-only	Detection of pulmonary nodules and masses	Thoracic radiography (2- or 3-view studies)	Classification / diagnostic prediction	Deep learning-based approaches	Confirmed pulmonary nodule/mass by CT and/or cytology/histopathology; control	Animals/cases: 88	Independent retrospective external test of a fixed vendor	Yes	Balanced accuracy (74.6%)	No		No		No	No	Animal/patient/case
Rho et al., 2023	2023	https://doi.org/10.1371/journal.pone.0280438	Cat-only	Hypertrophic cardiomyopathy diagnosis / screening	Thoracic ventrodorsal radiography (X-ray images)	Classification / diagnostic prediction	Deep learning-based approaches	Disease-state label (normal vs HCM) assigned / approved by a veterinary	Animals/cases: 273 cats;	Split: 231 training images; internal validation during	Yes	Accuracy (95.45% on the 22-image test set for 4/5	Yes	10.6084/m9.figshare.21128266	Yes	https://doi.org/10.1371/journal.pone.0280438 (supplementary	Yes	Yes	Image
Ruparell et al., 2023	2023	https://doi.org/10.1186/s12917-023-03668-3	Dog-only	Canine periodontitis / periodontal health-state discrimination	Tabular molecular data (qPCR from pooled subgingival plaque samples)	Classification / diagnostic prediction	Machine learning-based approaches	Clinical periodontal diagnosis (PDD/PD1/PD2) under general anaesthesia	Dogs/cases: 223 total;	5-fold cross-validation with grid-search tuning; bootstrap	No	Sensitivity/specificity (best models: COT-339	No		NR		No	No	Sample
Shim et al., 2023	2023	https://doi.org/10.1111/vru.13181	Dog-only	Radiographic stifle joint abnormalities / stifle joint disease	Radiography (craniocaudal and mediolateral stifle radiographs)	Classification / diagnostic prediction	Deep learning-based approaches	Official radiology reports generated by veterinarians with a practice focused to	Studies/cases: 1304	Split: 80:20 train/validation for object detection; 80:20	No	Accuracy (81.25%–93.18% across findings; 86.49%	NR		NR		Yes	Yes	Image
Solomon et al., 2023	2023	https://doi.org/10.1111/jsap.13666	Dog-only	Automated vertebral heart score (VHS) measurement / heart-size assessment on canine lateral thoracic radiographs	Radiography – canine lateral thoracic radiographs	Regression	Deep learning-based approaches	Manual Buchanan-method VHS measurements by three ACVIM board-certified radiologists	Animals/cases: NR;	Separate development and validation cohorts: CNN trained on 1559 annotated radiographs	Yes	95th percentile absolute difference versus radiologist VHS (1.05	No		No		Yes	NR	Image
Upadhyay et al., 2023	2023	https://doi.org/10.1007/s42979-022-01645-5	Dog-only	Skin disease pre-screening/classification (ringworm, fleas, mange)	Clinical and internet-sourced photographs	Classification / diagnostic prediction	Deep learning-based approaches	Image labels from hospital and internet sources; exact veterinary confirmation	Animals/cases: NR;	75/25 train/validation split; no held-out test set or cross-	No	Validation accuracy (0.55)	No		No		No	NR	Image
Valente et al., 2023	2023	https://doi.org/10.3389/fvets.2023.1227009	Dog-only	Myxomatous mitral valve disease staging (ACVIM B1/B2/C+D)	Thoracic radiographs (lateral and DV/VD views)	Classification / diagnostic prediction	Deep learning-based approaches	Echocardiography-based ACVIM staging; stage D merged with stage C because of	Samples/records: 1242	5-fold cross-validation performed separately for	No	AUC (lateral views: B1 0.87; B2 0.77; C+D 0.88)	NR		NR		Yes	Yes	Image
Zhao et al., 2023	2023	https://doi.org/10.1186/s12859-023-05479-9	Dog-only	Mitosis detection in H&E histopath slides	Histology	Detection / localisation	Machine learning-based approaches	Pathologist annotations	Thousands of mitotic figures	Split: train/validation/test (official split); CV/resampling:	Yes	F1 score (test, mitosis detection) (0.739)	NR		Yes	https://github.com/cmb-chula/ReCasNet	Yes	Yes	ROI/lesion/object
Baruah et al., 2024	2024	https://doi.org/10.35882/jeeemi.v6i4.484	Dog-only	Babesia detection from RBC images	Microscopy (blood smear)	Classification / diagnostic prediction	Deep learning-based approaches	Annotated infected vs uninfected	4000 images (augmented);	Split: train/test; CV/resampling: No	No	Accuracy (0.9775)	No		No		NR	NR	Image
Boufenar et al., 2024	2024	https://doi.org/10.1080/21681163.2023.2274947	Dog-only	Grading canine hip dysplasia (FCI grades A–E)	Imaging – radiography (ventrodorsal hip/pelvic X-rays; cropped hip-joint	Classification / diagnostic prediction	Deep learning-based approaches	Veterinarian expert annotation / FCI grade assignment	Animals/cases: NR;	Split: 70% training / 15% validation / 15% testing; data	No	Accuracy (98.32% with best VGG16 model, k = 5	Yes	https://www.mediafire.com/folder/06inzwuptnf2v/dataset	No		No	NR	Image
Buric et al., 2024	2024	https://doi.org/10.1016/j.heliyon.2024.e38287	Dog-only	Canine ocular disease segmentation	Mobile photos (smartphone camera)	Segmentation	Deep learning-based approaches	Veterinary ophthalmologist annotations	200 images	Split: CV kfold; CV/resampling: Yes	No	IoU (0.7599)	Yes	URN:NBN:HR:195:405214	No		NR	Yes	Pixel/slice
Castle et al., 2024	2024	https://doi.org/10.1186/s13071-024-06351-0	Dog-and-cat	Fecal egg count automation / helminth ova detection	Fecal microscopy / fluorescence image analysis	Detection / localisation	Deep learning-based approaches	Comparator-method study versus mini-FLOTAC and Imagyst; positivity for	Samples/records: 59	No train/test split or CV; comparative method	No	Sensitivity at <50 eggs/g (92.7%)	Yes	In article / https://doi.org/10.1186/s13071-	No		No	Yes	Sample
Dunbar et al., 2024	2024	https://doi.org/10.1038/s41598-024-52577-4	Cat-only	Non-effusive FIP diagnosis	Clinical data and laboratory results	Classification / diagnostic prediction	Machine learning-based approaches	Development labels were consensus expert clinical interpretation following	2019 cases total (1939	Random 40/40/20 split of expert-opinion cases into	No	AUC (gold-standard set) (0.969)	No		Yes	https://github.com/ddunbar84/Dunbar_FIP_NonEffusive_ML	Yes	No	Animal/patient/case
Engel-Manchado et al., 2024	2024	https://doi.org/10.3390/vetsci11030118	Dog-only	Myxomatous mitral valve disease (MMVD) staging / classification (ACVIM)	Structured clinical data (quality-of-life survey/FETCH-Q; anamnesis; physical	Classification / diagnostic prediction	Machine learning-based approaches	Echocardiography and thoracic radiography with ACVIM stage assignment	Animals/cases: 1011 dogs (64	Classification trees plus random forest using 66%	No	Accuracy (0.855, simplified model)	No		No		Yes	Yes	Patient
Enginler et al., 2024	2024	https://doi.org/10.1007/s00216-024-05444-0	Dog-only	Canine mammary tumor detection and grade prediction	Electrochemical biosensor signals (serum and tissue homogenate)	Mixed-output tasks	Machine learning-based approaches	Histopathology for tumor diagnosis/grade; immunohistochemistry	Animals/cases: 18 dogs (17	Leave-one-out cross-validation	No	Accuracy	No		No		Yes	No	Sample
Farhoodimoghadam et al., 2024	2024	https://doi.org/10.3389/fvets.2024.1291318	Dog-only	Portosystemic shunt diagnosis and classification	Tabular (CBC + chemistry + demographics)	Classification / diagnostic prediction	Machine learning-based approaches	Imaging/surgery confirmation	Animals/cases: 1241;	Split: 70/30 split + 10-fold CV; CV/resampling: Yes	No	AUC (0.976)	No		Yes	https://github.com/MakanFar/pss_classification	No	No	Animal/patient/case
Flanders et al., 2024	2024	https://doi.org/10.1111/jvim.17071	Dog-only	Sinus node dysfunction caused by sinoatrial conduction block vs high parasympathetic/low	ECG / 24 h Holter / RR interval time-series / Poincaré plots	Classification / diagnostic prediction	Machine learning-based approaches	Board-certified veterinary cardiologist Holter diagnosis / rhythm criteria	Animals/cases: 73 dogs (26	Random train/test split by diagnostic group (13/13, 10/16,	No	Confusion matrices (24 h and stable/sleep-hour	NR		No		Yes	Yes	Exam/recording/time

Flegel et al., 2024	2024	https://doi.org/10.3389/fvets.2024.1406107	Dog-only	Structural epilepsy diagnosis / risk of structural epilepsy in seizuring dogs	Structured clinical history + neurological examination / diagnostic work-up tabular data	Classification / diagnostic prediction	Machine learning-based approaches	Final clinical diagnosis of structural epilepsy after diagnostic work-up	Animals/cases: 328 dogs (279 [illegible]	CV/resampling: 10-fold cross-validation	No	Accuracy (0.969)	No		No		Yes	No	Animal/patient/case
Flory et al., 2024	2024	https://doi.org/10.2460/javma.23.10.0564	Dog-only	Multi-cancer screening / early cancer detection	Liquid biopsy / plasma cfDNA quantification + reflex NGS	Classification / diagnostic prediction	Machine learning-based approaches	Cancer diagnosis from histopathology/cytology where available, [illegible]	Animals/cases: 1,947 dogs; [illegible]	Split: 60/40 random training/testing split; [illegible]	No	Sensitivity at specificity (71.3% at 98.7% specificity)	No		No		No	Yes	Animal/patient/case
Huang et al., 2024	2024	https://doi.org/10.1038/s41598-024-67749-5	Dog-only	Intervertebral disc herniation (IVDH) lesion detection/localization	MRI (T2-weighted sagittal spinal MRI)	Detection / localisation	Deep learning-based approaches	Veterinary radiologist annotation of spine region and IVDH lesions on MRI	Animals/cases: 213 dogs; [illegible]	Split: 50% train / 50% test by dog; CV/resampling: No; [illegible]	No	AP (0.7532)	No		NR		No	No	ROI/lesion/object
Ii et al., 2024	2024	https://doi.org/10.1292/jvms.23-0299	Cat-only	Intestinal T-cell lymphoma vs chronic enteropathy (with additional secondary models for cell size, [illegible]	Histology images (digital slide image crops from duodenal endoscopic biopsy [illegible]	Classification / diagnostic prediction	Hybrid DL/ML approaches	Histopathologic diagnosis by blinded pathologist with consensus review when [illegible]	Animals/cases: 72 cats (35 lymphoma, 37 [illegible]	Automatic random train/validation/test split by [illegible]	No	AUC (Experiment 1: 0.943)	No		No		No	No	Image
Kim et al., 2024	2024	https://doi.org/10.3389/fvets.2024.1390296	Dog-only	Canine cognitive dysfunction syndrome (CCDS) early detection / screening	Blood biomarkers (plasma ELISA) + clinical questionnaire score	Classification / diagnostic prediction	Machine learning-based approaches	Modified 10-item CCDR score-based grouping (Normal / MCI / SCI / CCDS) from [illegible]	Animals/cases: 85 dogs; [illegible]	Split: 70/30 train/test; 10 random repeated experiments [illegible]	No	AUC (0.84; normal vs MCI, RBP4 + NOX4, SVM)	Yes	https://www.frontiersin.org/articles/10.3389/fvets.2024.1390296/full#supplementary-material	No		No	Yes	Animal/patient/case
Kuo et al., 2024	2024	https://doi.org/10.1016/j.compbiolchem.2024.108227	Cat-only	FIP diagnosis	Tabular + molecular (qPCR, S gene mutations, clinical)	Classification / diagnostic prediction	Machine learning-based approaches	Autopsy + IHC confirmed FIP	Animals/cases: 127; [illegible]	Split: bootstrap, k-fold, LOOCV; CV/resampling: Yes	No	Accuracy (0.9541)	No		NR		No	No	Sample
Li et al., 2024	2024	https://doi.org/10.1038/s41598-023-50063-x	Dog-only	Cardiomegaly assessment on thoracic radiographs via VHS-linked prediction	Imaging – thoracic radiography (X-ray images)	Mixed-output tasks	Deep learning-based approaches	Expert-labeled VHS key points and derived VHS-based class labels (small, [illegible]	Animals/cases: 2000 dogs; [illegible]	Split: training 1400 (70%), validation 200 (10%), test 400 [illegible]	No	Test accuracy (87.3%; RVT with proposed loss)	No		No		Yes	No	Image
Loureiro et al., 2024	2024	https://doi.org/10.1007/s11042-024-20072-7	Dog-only	Canine hip dysplasia (CHD) assessment	X ray	Classification / diagnostic prediction	Deep learning-based approaches	Specialist manual measurements	Animals/cases: 53; [illegible]	Split: train 70 / val 15 / test 15; CV/resampling: No	No	FNT index ICC vs expert (0.883)	No		No		Yes	Yes	Image
McDonald et al., 2024a	2024	https://doi.org/10.1111/jvim.17224	Dog-only	Heart murmur detection/grading; preclinical MMVD stage B1 vs B2 support	Heart sound audio (electronic stethoscope recordings)	Classification / diagnostic prediction	Deep learning-based approaches	Cardiologist murmur grading (reduced Levine scale) and echocardiographic [illegible]	Animals/cases: 756 dogs; [illegible]	Split: repeated stratified 50/50 train/test over 50 runs; [illegible]	No	AUC (0.861; differentiation of preclinical MMVD stage [illegible]	No		No		No	Yes	Exam/recording/time
McDonald et al., 2024b	2024	https://doi.org/10.1371/journal.pone.0305633	Dog-only	BOAS screening and grading	Audio (electronic stethoscope)	Classification / diagnostic prediction	Deep learning-based approaches	Veterinarian-assigned BOAS functional grading (RFG scheme) from pre- and post- [illegible]	Animals/cases: 341 dogs (374 [illegible]	Nested cross-validation: 5-fold outer / 4-fold inner with [illegible]	No	AUROC (0.85)	No		Yes	https://github.com/am2234/boas	Yes	Yes	Exam/recording/time
Nery et al., 2024	2024	https://doi.org/10.5380/avs.v29i3.95142	Dog-only	Left atrial enlargement detection / MMVD radiographic screening	X ray	Classification / diagnostic prediction	Deep learning-based approaches	Radiologist review with echocardiographic confirmation of atrial enlargement	Animals/cases: 451 adult [illegible]	CV/resampling: 5-fold cross-validation; training repeated [illegible]	No	AUC (0.8942 mean best model; 0.9535 best fold)	No		No		No	Yes	Image
Park et al., 2024	2024	https://doi.org/10.3389/fvets.2024.1453765	Dog-only	Automatic detection of narrowed intervertebral disc spaces as a screening/localization aid for IVDD	Lateral caudal thoracic and lumbar radiographs	Detection / localisation	Deep learning-based approaches	Three veterinary clinicians' labels of narrowed IVD sites on radiographs; MRI [illegible]	Animals/cases: 142 dogs; [illegible]	Approximate 80/20 train/validation split (85/21 [illegible]	No	Kappa vs veterinary clinicians in the validation [illegible]	No		No		No	No	ROI/lesion/object
Rajan et al., 2024	2024	https://doi.org/10.1186/s12917-024-04242-1	Dog-only	Estrous cycle stage classification / optimal mating period assessment	Vaginoscopic images of the anterior vagina	Classification / diagnostic prediction	Hybrid DL/ML approaches	Vaginoscopic stage labels confirmed by same-day serum progesterone levels	Animals/cases: NR; [illegible]	80/20 train/test split; within the training set, 80/20 [illegible]	No	Average accuracy (best model: 0.9037)	No		No		Yes	No	Image
Santos et al., 2024	2024	https://doi.org/10.3389/fvets.2024.1523170	Dog-only	Hypoadrenocorticism screening/diagnosis in dogs with resting hypocortisolemia	Clinical signs + haematology / biochemistry / electrolytes	Classification / diagnostic prediction	Machine learning-based approaches	ACTH stimulation test (post-ACTH cortisol <2.0 µg/dL = HA; otherwise not HA)	Animals/cases: 90 analyzed [illegible]	Split: none reported; CV/resampling: none reported [illegible]	No	AUC (0.92)	No		No		No	Yes	Animal/patient/case
Smith et al., 2024	2024	https://doi.org/10.1111/vde.13221	Dog-only	Paw lesion detection: pododermatitis vs neoplasia vs healthy paw	Still and video paw images / clinical photographs	Detection / localisation	Deep learning-based approaches	Clinical class labels with manual bounding-box annotations; neoplasia cases [illegible]	Animals/cases: NR; [illegible]	Random 90/10 train/validation split without data leakage; [illegible]	No	mAP (Dataset A, Tiny YOLOv4: 0.95)	No		No		No	No	ROI/lesion/object
Suksangvoravong et al., 2024	2024	https://doi.org/10.1111/vru.13413	Dog-only	Tracheal collapse screening and severity grading	X ray	Classification / diagnostic prediction	Deep learning-based approaches	Radiographic tracheal height/thoracic inlet (TH/TI) ratio-based grading on [illegible]	Animals/cases: 600 dogs; [illegible]	Split: 540 training/integrated validation + 60 test (90/10); [illegible]	No	Accuracy (0.989)	No		No		No	No	Image
Valente et al., 2024	2024	https://doi.org/10.1016/j.rvsc.2024.105377	Dog-only	MMVD severity staging (ACVIM and MINE)	X ray	Classification / diagnostic prediction	Deep learning-based approaches	ACVIM stage assigned from concomitant echocardiography plus [illegible]	Animals/cases: 556 dogs; [illegible]	Split: No fixed hold-out split reported; CV/resampling: 5-fold [illegible]	No	AUC (ACVIM classes: 0.79–0.89; MINE classes: [illegible]	No		No		Yes	Yes	Image
Yu et al., 2024	2024	https://doi.org/10.3389/fvets.2024.1443234	Dog-only	Chronic kidney disease IRIS staging	US	Classification / diagnostic prediction	Deep learning-based approaches	CKD IRIS stage assigned from clinical records using blood tests and ultrasound [illegible]	Animals/cases: 198 dogs; [illegible]	Split: ~7:1:1 train/validation/test per [illegible]	No	Accuracy (binary IRIS 0–2 vs 3–4) (0.85)	No		No		No	No	Image

Note. Concise study citation and DOI/URL are retained for traceability. Primary AI task and AI methodological family are presented in grouped form for consistency with the descriptive synthesis reported in the manuscript.