

Case Log Instructions for the CSAVP and CASVM

Laboratory Diagnostics



Case log explanations and instructions:

The case log for the **ESAVS Certificate / Laboratory Diagnostics** shall contain at least 100 cases mostly compiled in the second half of the program. Among the 100 cases, all shall be laboratory medicine related. These should be from both cats and dogs, and each of these species must account for at least 25% of cases.

Each of the following categories shall have at least the following number of cases:

Cytology:	35
Haematology:	35
Endocrinology:	15
Biochemistry/infectious diseases:	15

Please note: if the chosen major subject courses do **not** include biochemistry / endocrinology, further cytology and haematology cases can be selected to reach a total number of 100 cases.

For each case, the following information is mandatory:

1. **Date:** give date of first presentation for current complaint.
2. **Name/file number:** number in computer system or name of dog/cat and owner.
3. **Species, breed, age and sex:** dog or cat (use drop-down list). Age should be expressed in years or months if < 1 year.
4. **Major complaint / problem:** give all pertinent abnormal findings from history and physical examination.
5. **Examinations:** list and briefly describe all diagnostic tests performed and the pertinent abnormal findings, in particular laboratory ones.
6. **Final diagnosis:** give all reached diagnoses.
7. **Follow-up:** this includes drugs, surgical procedures, dietary and other management recommendations, information about follow-up and case outcome.
8. **Category:** indicate which subjects the case belongs too.

Please note: In general, follow-up information for all cases is required. However, this information may not always be available in particular for those working in diagnostic laboratories. Therefore, not all the columns of treatment/outcome will necessarily have to be filled, as long as a minimum of 50% of the cases contain some degree of follow-up information.

The case log needs to be compiled as an Excel file using the template in the appendix.

Abbreviations may be used but must be explained on an extra sheet List the cases in chronological order.

A case log may not be acceptable and may be rejected in its entirety if critical concerns regarding one or more categories result in a fail, regardless of whether all other required criteria are adequately met.

Example for the Laboratory Diagnostics Certificate Case Log:

Categories: Cytology, Haematology, Endocrinology, Biochemistry/Infectious diseases								
Case #	Date	Name / file number	Species, breed, age, sex	Major complaint / problem:	Examinations	Final diagnosis	Follow up	Category
1	01. Feb 22	Lola, N154	Dog, CKCS, F, 4Y	Vocalization, lethargy, anorexia, fever, severe neck pain	CBC: mild leukocytosis Biochemistry: raised globulin RX neck region: no abnormalities CSF: moderate pleocytosis (80cc/ul) mostly containing non-degenerated neutrophils (90%), no bacteria, high IgA and total protein. Culture of CSF: negative after 48 hours	Neutrophilic pleocytosis, suggestive of steroid responsive meningitis	Treatment with prednisolone (2mg/kg BID 2 days and reducing dosage). Control of CSF after 8 weeks: normal. Prednisolone was given for 4 months in total. Control CSF at end of treatment: normal	Cytology
2	11. Feb 22	Max, N176	Dog, Boxer, MN, 6Y	Rapid onset unilateral facial swelling since few days Previous small (1x1 cm) cutaneous lesion on the lip for at least 6 months, not disappeared with antibiotic and NSAID treatment	FNA lip mass: prevalence of granulated mast cells with signs of atypia (poor granulation, anisocytosis/anisokaryosis, binucleation), concurrent increase in eosinophils and rare fibroblasts. FNA LN: mixed population of lymphoid cells and increased numbers of mast cells (~20 mast cells per hpf) showing signs of atypia and forming groups of up to 10 cells. Abdominal ultrasound: no signs of visceral involvement CBC and biochemistry: minimal changes	Metastatic mast cell tumour	Oral prednisone (2mg/kg os die) and misoprostol in preparation for radiotherapy. The dog received fractions of 9Gray (Gy) to the muzzle and neck over 4 consecutive weeks to a total dose of 36 Gy. A partial (almost complete) remission was obtained and maintained for 5 months. The dog died from sudden onset of respiratory distress 177 days (5,9 months) after starting specific treatment and 357 days (11,9 months) after the appearance of the lip lesion.	Cytology
3	15. Feb 22	Rudolph, N196	Dog, Scottish Terrier, M, 8Y	Since 6 months recurrent UTI symptoms: haematuria, pollakiuria. Was treated with antibiotic therapy (2 times amoxicillin clavulanic acid 1 week, 1 time trimetoprim sulfamethoxazole 10 days). Now again pollakiuria and haematuria.	US abdomen: evidence of mass in bladder trigone and enlarged regional lymph nodes. Traumatic catheterization of the bladder mass and cytology examination. No signs of inflammation, presence of a main population of transitional epithelial cells arranged in clusters and showing marked cytological features of atypia (anisocytosis, anisokaryosis, mitotic figures, prominent nucleoli). Cells contain Melamed Wolinska bodies.	Transitional Cell Carcinoma (TCC) / Urothelial carcinoma	Owner refused full staging and decided for palliative treatment (meloxicam 0,1 mg/kg SID and tramadol 1 mg/kg TID). Euthanasia 3 week later due to worsening of clinical conditions.	Cytology
4	17. Feb 22	Bob, N88	Cat, DSH, M, 11Y	In the last few months, appearance of a small subcutaneous mass in the interscapular area. Cat has not	Cytology: mesenchymal proliferation, cells display significant signs of atypia (anisocytosis, anisokaryosis, prominent nucleoli), absence of inflammation. Supportive of soft tissue sarcoma, likely injection site one. Advanced	Soft tissue sarcoma, injection site sarcoma likely	Owner refused full clinical staging. Surgery was performed aiming to obtain the widest margins as possible. Histopatology confirmed the suspicion for injection site sarcoma and showed narrow margins. At 1 month after surgery, no recurrence has	Cytology

				received vaccinations for the last 2y. Mass has recently increased in size in the last few weeks.	diagnostic imaging (CT) recommended to establish the real extent of the mass.		been observed. Close monitoring has been recommended.	
5	18. Feb 22	Lucky, N195	Dog, Labrador Retriever, FN, 5Y	Progressive all four-limb ataxia, staggering, behavioural change for 2 weeks with acute deterioration in the last 2 days. Solid mammary carcinoma surgically removed one year before, which recurred 6 months later and was also removed.	Physical examination: NAD, mild tachypnoea, slightly hyperaemic mucous membranes. Neurological examination: The dog was obtunded, non-ambulatory tetraparetic with decreased postural reactions and increased spinal cord segmental reflexes in all four limbs. It also had obvious cervical hyperesthesia. Thoracic X rays, abdominal ultrasound: minimal changes. MRI: T1-weighted image after contrast administration, focal contrast enhancing lesion in the left temporal lobe. CSF: mild pleocytosis with prevalence of atypical large mononuclear cells (>80%) with marked signs of atypia. Immunocytochemistry: cytokeratin (+), CD18 (-), CD3 (-), CD79a (-) supportive of epithelial origin	Metastatic carcinoma, likely mammary in origin	Neurological signs worsened in the following days and the owners elected for euthanasia. Post-mortem examination was not performed.	Cytology
6	20. Feb 22	Lucy, N214	Dog, Cocker Spaniel, FN, 4Y	One week of lethargy, anorexia, sporadic episodes of vomiting and pale mucous membranes	Haematology: evidence of severe anaemia (HCT: 20%) with regeneration (reticulocytes: $220 \times 10^9/L$). On blood smear examination evidence of marked polychromasia, and moderate numbers of spherocytes (>10 spherocytes per hpf 50x). Mild inflammatory leukogram (WBC: $20 \times 10^9/L$, neutrophils $16 \times 10^9/L$) and spurious thrombocytopenia (due to clumping). Saline agglutination test and Coombs test positive. Biochemistry: mild hyperbilirubinaemia (3 mg/dL). Negative SNAP 4Dx Plus Test for vector borne disease.	Immune mediated haemolytic anaemia (IMHA)	Dog received dexamethasone 0.3mg/kg IV once daily until stable, then changed to oral prednisolone 1mg/kg twice daily by mouth. At follow up visits, the HCT increased gradually and went back to normal in 4 weeks.	Haematology
7	22. Feb 22	Magdalene, N11	Dog, West Highland White Terrier, FN, 5Y	A few days of lethargy, anorexia and weight loss.	Haematology: evidence of moderate leucocytosis ($45 \times 10^9/L$) mostly characterised by atypical mononuclear cells likely lymphoid in origin with large nuclei (3x rbc). Moderate poorly regenerative anaemia (HCT: 23%) and thrombocytopenia ($85 \times 10^9/L$, no clumping). Suggestive of Acute Lymphoid leukaemia (ALL) and myelophthisis. Diagnostic imaging: no other enlarged organs or masses noticed.	T-ALL	Dog conditioned deteriorated very quickly and WBC count increased to 64×10^9 after 72h. Dog was put to sleep as owners refused chemotherapy.	Haematology

					Flow cytometry: atypical cells were positive to CD45, CD3, CD5 and negative to CD20, CD79a supporting a T cell origin.			
8	28.02.22	Billy, N111	Dog, mixed breed, M, 6m	Melena, vomiting, lethargy, anorexia, dehydration. Unvaccinated dog.	Haematology: leukopenia ($2.5 \times 10^9/l$) with neutropenia, left shift and toxic changes. Biochemistry: low glucose: (1,1 mmol/l) In house parvovirus antigen test on fresh faeces: positive	Parvovirus infection	Glucose 50% boli until normal blood glucose level Fluid therapy Amoxiclav 12,5 mg BID IV Maropitant 1 mg/kg SID SC Metoclopramide 1 mg/kg IV over 24 hours Ranitidine 2 mg/kg IV TID Diet: Royal Canin convalescence support through nasopharyngeal tube Dog recovered completely after a few days	Biochemistry/ Infectious diseases
9	11.03.22	Paolo, N321	Dog, mixed breed, MN, 4Y	Anorexia, lethargy, oliguria, painful abdominal palpation	Haematology: mild anaemia Biochemistry: moderate azotaemia (creatinine: 2.3 mg/dL), moderately raised liver enzymes (ALT, AST, ALP, GGT), total bilirubin and fasting bile acids. UA: SG 1.020, wbc and rbc in sediment, proteinuria, glucosuria, culture negative US: enlarged liver, hyperechoic cortex of both kidneys. PCR for Leptospira un urine and blood: positive	Leptospirosis	Fluid therapy Follow-up of urine production Amoxiclav 8,5 mg/kg IV BID Ranitidine 1 mg/kg TID Clinically better after 3 days: normal appetite, normal urine production. Antibiotic therapy was switched to doxycyclin when leptospirosis was confirmed and continued for other 3 weeks.	Biochemistry/ Infectious diseases
10	12. Mrz 22	Roy, N111	Dog, mixed breed, MN, 7Y	Coughing, stiff gait, anorexia, fever	Haematology: leukopenia ($3.1 \times 10^9/L$) with neutropenia, toxic changes and left shift Biochemistry: mild elevation ALP (189 UI/L) urinalysis: normal RX thorax: mild interstitial pattern caudally US abdomen: normal US heart: mild insufficiency of mitral and tricuspidal valve Blood culture (Bactec): positive	Septicemia, underlying cause could not be identified, endocarditis not excluded	Amoxiclav 20 mg/kg TID IV Enrofloxacin 5 mg/kg BID IV Fever and other complaints disappeared after 1 resp. 2 days, oral therapy was continued for 3 weeks. At control visit after 3 weeks the valve insufficiency is still present. cTNI was negative. Endocarditis less probable because there is no change in the cardiac parameters compared to the previous US.	Biochemistry/ Infectious diseases
11	15.03.22	Billie, N844	Dog, Yorkshire Terrier, MN, 7Y	Weight gain despite restricted calories diet, lethargy, weak pulse, bradycardia	Haematology: mild non regenerative anaemia (HCT: 31%) Biochemistry: mild hypercholesteremia, mild elevation of ALT Endocrinology: low total T4 <13 nmol/L TSH: above normal values (1ng/ml)	Hypothyroidism	Levothyroxine 10 µg/kg po BID. Control after 6 weeks: dog is clinically better, no more lethargy. T4 has not increased. Planned monitoring every 6 months	Endocrinology

12	15.03.22	Salma, N198	Dog, Labrador Retriever, FN, 5Y	PU/PD, polyphagia, abdominal distension, enlarged liver	Haematology: mild leucocytosis (neutrophilia without left shift, lymphopenia) Biochemistry: raised ALP (450 IU/L). Urinalysis: USG 1.010, no other abnormalities LDDST: suppression after 4h but high cortisol after 8h. No ultrasound and CT of the head were performed due to financial restrictions	Hyperadrenocorticism, probably pituitary dependent	Owner chooses medical treatment: trilostane 3 mg/kg SID (tablet of 30 mg Vetoryl ®). ACTH-stimulation test was performed after 14 days, 1 month and 3 months. Improvement of the PU/PD and polyphagia, ACTH- stimulation tests showed a correct dosage of trilostane	Endocrinology
13	17.03.22	Norman, N312	Dog, Mixed breed, M, 10Y	PU/PD, BCS 9/9	Haematology: unremarkable Biochemistry: moderate hyperglycaemia (23 mmol/l), no other abnormalities Urinalysis: glucosuria, no ketonuria, culture negative Fructosamine: raised values (500 umol/L)	Diabetes Mellitus	Caninsulin was started at 10 IU BID (0.25 IU/kg), control of blood glucose weekly 6h after injection, adjusting dosage in steps of 15% until normoglycemic Diet: Trovet WRD	Endocrinology