BIOVET®

A DIVISION OF ANTECH®

2025

DIRECTORY

COMPANION ANIMAL AND EQUINE

To reach us

Biovet has 2 laboratories in Quebec
Saint-Hyacinthe and Quebec City
We have the largest customized pickup network providing the transport of samples in Quebec. even in rural areas.

Ask for a pick up or contact Customer Service
Phone: 450 771-7291 or 1-888-824-6838 (Toll free)
Email: **sac@biovet-inc.com**
Fax: 450 771-4158
Address: 4375 Beaudry. Saint-Hyacinthe QC J2S 8W2 | 945 Newton Avenue. Local 126-127. Quebec QC G1P 4M3

Opening Hours
Monday to Friday: 8:00 a.m. to 21:00 p.m.
Saturday: 8:30 a.m. to 14:00 p.m.
Sunday: CLOSED

About Biovet

Biovet offers a full range of veterinary diagnostic services including hematology. biochemistry. microbiology. serology. molecular biology. endocrinology. coagulation and cytology. The analyses are performed on site by qualified technical personnel under the supervision of microbiologists and clinical pathologists certified by the American College of Veterinary Pathologists.

Our primary goal is to provide reliable analysis results in the shortest possible time. To this end. Biovet has set up an efficient and personalized sample collection system that makes it possible to reach a large number of veterinary clinics in Quebec. Your samples are analyzed upon receipt. and the results are transmitted to you by the method of your choice through the implementation of a computerized analysis management system. The Biovet laboratory also runs several internal and external quality controls. which ensure the accuracy of the results.

Biovet is proud to provide you with online access to your results. With Bionet. you can have fast. free and real-time access to your result reports. anytime. anywhere with an internet connection. For more information on the Bionet service. you can contact us at **bionet@biovet-inc.com** or call us at 1-888-824-6838. You can also visit us online at **biovet.ca/en/bionet**.

Animal health is important to us. which is why Biovet specialists (clinical pathologists and microbiologists) are available to answer your questions. Whether it's determining the best test to diagnose a given condition or interpreting the results. our team is here to assist you.

This User's Guidel contains information that is useful when dealing with Biovet. We are proud to be associated with your practice and we work continually on improving our services so that we may always better meet your needs.

The Team at Biovet

Table of Contents

Antech

Smarter Diagnostics. Better Care.™

Biovet is becoming ANTECH™

We're pleased to share that Biovet will become ANTECH™ in 2025, meaning you'll soon have access to a wider portfolio that includes North America's largest reference laboratory network, best-in-class in-house diagnostics from Heska, the industry's most trusted imaging equipment from Sound™, and breakthrough telemedicine from AIS™.

Helping you navigate all of these new and exciting options will be the same Quebec team you've come to know and trust. They will continue providing you with unparalleled support via the same contact points you've always used.

Legend

Samples

	See the sampling materials section below for the abbreviations of the various tubes and others.
	Variety of samples that will be detailed in the test description.

Turnaround Time (TAT)

	Result on the day of receipt
D	Day

Abbreviations

	Analyzes done externally: it is best to contact us prior to submitting the sample to ensure availability of the test. Transport fee are excluded.
Ag	Antigen
Ab	Antibody
ELISA	Enzyme-linked immunosorbent assay
IFA	Immuno-Fluorescent Assay
IHA	Inhibition of Haemagglutination Assay
MFIA	Multiplexed Fluorometric Immunoassay
	New
PCR	Polymerase Chain Reaction
qPCR	Quantitative Polymerase Chain Reaction
SN	Seroneutralization

Sampling Material

Order at www.biovet.ca/online

CODE		PQT	DESCRIPTION – TYPE D'ÉCHANTILLON
TRD-328		10	**Shipping bags for samples** Description: Ziploc™ Shipping bags for samples, with pocket for request form Usage: IMPORTANT. USE ONLY ONE BAG OF SAMPLES PER REQUEST FORM **You need Shipping bags? Ask our delivery man.**
TRD-332		1	**EZTest - Steam** Description: EZTest is a self-contained biological indicator for monitoring sterilization. Usage: Return the EZTest – cycle for Autoclave Quality Assurance Program, see Microbiology section. Do NOT refrigerate. Comment: use the Biovet request form supplied with the kit. You will find the price in the microbiology section.
TRD-319		1	**Shipping Unit** Description: 40-tube box for sampling
TRD-338		20	**Polyfoam box** Description: Polyfoam box for 2 or 4 sampling tubes
TRD-760		1	**One-bottle, blood culture system** Description: bottle for blood cultures. You will find the price in the microbiology section
TRD-344		1	**Sterile container, 60 ml, twist cap** Description: sterile plastic container Usage : Urinanalysis, parasitologies, PCR fecal analysis for horses, Comment: store samples between 4°C and 8°C.
TRD-343		1	**Fecal Containers (30 mL)** Description: 30 mL additive-free faecal container with blue screw cap and spoon. Comment: Use a sterile 60 mL container for equine parasitology.
TRD-327		1	**SAF container *** Description : tube contenant 15 mL de SAF. Usage: Parasitology in cats, dogs and primates ONLY. Comment: DO NOT use for bacteriological or PCR analysis. * Sodium acetate-acetic acid-formalin with the transport environment for a culture.
TRD-325		1	**Swab with AMIES transport medium** Description: Swab and tube with Amies transport medium with or without charcoal. Usage: Aerobic or anaerobic culturee Comment: Keep the swab between 2 and 8 °C. Punch biopsy biopsies can be submitted on a swab in contact with the transport environment for a culture. Punch biopsies can be send on a swab in contact with the transport medium for culture, or in a red-top tube with a few drops of physiological water.

Sampling Material

CODE		PQT	DESCRIPTION – TYPE D'ÉCHANTILLON
TRD-326		1	Nasopharyngeal swab (small animals) Description : Sterile polyester swab, small size to reach narrow areas Usage: aerobic or anaerobic culture or PCR Procedure: For microbiology, once the sample has been taken, dip the swab in AMIES TRD-325 transport medium. Comment: Store samples between 4 and 8°C for aerobic cultures and at room temperature for anaerobic cultures.
TRD-354		1	**Sterile polyester swab (PCR)** Description: sterile polyester swab used ONLY for PCR analysis. Usage: PCR analyses (respiratory diseases) Procédure : once the sample has been collected, place the swab(s) in a TRD-310 preservative-free sterile tube Comment: not suitable for aerobic or anaerobic culture EXCEPT if you add a few drops of physiological water to the tube. Store samples between 4°C and 8°C.
TRD-314		10	**Slide holder** Description: cytology slide holder. Comment: Please do NOT write anything on the blade holders. put your information on the label.
TRD-324		1	**Container pre-filled with formalin (40 mL)**
TRD-323		1	**Container pre-filled with formalin (60 mL)**
TRD-321		1	**Container pre-filled with formalin (90 mL)**
TRD-322		1	**Container pre-filled with formalin (120 mL)**
TRD-360			**Container pre-filled with formalin (480 mL)** Description: The amount of formaldehyde in the specimen container is about half the volume of the container. Procedure: The volume of formaldehyde should be 10 times that of the tissue. See Appendix - Protocol for the Handling and Sending of Large Masses. Comment: contains 10% neutral buffered formalin.
TRD-427	Paquet 	25	**Amber tube (5 mL)** Description : sampling tube with cap – Serum Usage: Vitamin E. See protocol in biochemistry section. Comment : Beware. vitamin E is photosensitive and should not be exposed to light.
TRD-305		1 Max. 10	**Blue tube - Citrated (1.3 mL)** Description: plastic sampling tube with blue screw cap containing sodium citrate, supplied with plastic transfer tube. **– (B) Plasma** Procedure: Whole blood collected in an EDTA tube, stirred at least 10-20 times by the person drawing the blood. The plasma is separated from the blood and placed in a plastic tube. Label the tube "Plasma citraté" in addition to the animal's ID. Comment: Store samples between 4°C and 8°C.

Sampling Material

CODE	PQT	DESCRIPTION – TYPE D'ÉCHANTILLON
TRD-352	100	**Lavander tube (1.3 mL)**
TRD-302	100	**Lavander tube (3 mL)**
TRD-303	100	**Lavander tube (10 mL)** Description : collection tube with lavender cap containing EDTA.
TRD-303	100	**Lavander tube (10 mL)** Description : collection tube with lavender cap containing EDTA.  **– (L) EDTA whole blood** Procedure: Whole blood collected in a tube containing an anticoagulant (EDTA-K2 or EDTA-K3). stirred at least 10-20 times immediately after collection. EDTA is bactericidal (so no blood culture or microbiological test can be added). Be careful to use the correct tube format, as there must be blood at least up to the label. If the anticoagulant/anticoagulant ratio is too high, the lab will note: Volume suboptimal; anticoagulant/blood ratio too high. **– (PL) Plasma EDTA** Procedure: Supernatant of whole blood collected in an EDTA tube, stirred at least 10-20 times immediately after collection. The plasma is separated from the blood and placed in a plastic tube. Label tube "Plasma EDTA" in addition to animal ID. – Other usages: For cytology of body fluids including thoracic, abdominal, synovial fluids, cystic or cavity fluids (except for urine cytology which must be submitted in a red cap tube or sterile Container). Comment: store samples between 4°C and 8°C.
TRD-300	100	**Red top tube (3 mL)**
TRD-310	100	**Red top tube (8 mL)**  Description: anticoagulant-free or additive-free sampling tube. **– (S) Serum :** Procedure: centrifuge it and send us the supernatant or wait and once the blood has coagulated, remove the supernatant from the clot. Comment: store samples between 4°C and 8°C.
TRD-308	100	**SST Tube (3.5 mL)** 
TRD-759	100	**SST Tube (8.5 mL)**  Description: SST sampling tube (Tube with Serum Separator) containing a gel separating red blood cells from the serum after centrifugation. **– (SS) Serum** Usage: SST serum NOT recommended for drug dosing (KBr, Pheno, etc.) Procedure: You can send us the tube as is or centrifuge it. Note: Store samples between 4 and 8°C.

Sampling Material

CODE		PQT	DESCRIPTION – TYPE D'ÉCHANTILLON
TRD-351		100	**Green tube (1.3 mL)** **Description : sampling tube with green cap containing heparin.** **– (G) Heparinized blood** **Procedure: Whole blood collected in a heparinized tube, stirred at least 10-20 times immediately after collection. Can be used for birds. Heparinized whole blood (in green tube) is received, hematology is done first, then centrifuged and whatever biochemistry can be done. Since the red blood cells remain in contact with the plasma, there may be artifactual in vitro glycolysis. Please tell us your priorities for biochemistry.** **Comment : Store samples between 4 and 8°C.**
TRD-359		1	**Braf kit (canine)** Description: Urine sampling kit Comment: use the form and follow the protocol supplied with the kit.
TRD-357		1	**MiDOG kit (swab)** Description: Sampling kit (swab - tongue, feces, ear or skin). Usage: MiDOG microbial DNA sequencing test Comment: use the request form supplied with the kit.
TRD-358		1	**MiDOG kit (urine)** Description: Urine sampling kit. Usage: MiDOG microbial DNA sequencing test Comment: use the request form supplied with the kit.

Companion Animal – Test Offers

Our Profiles and Their Components

CODE	TEST NAME	Complete CBC	Urinalysis	Patho.'s comments	DGGR Lipase	SDMA	Albumin	ALP	ALT	Creatinine	Glucose	Total Proteins	BUN	Globulins	Cholesterol	Calcium	Phosphorus	A/G Ratio	Na/K Ratio	Sodium	Potassium	TCO_2	Gap	Chloride	Amylase	Total Bilirubin	GGT	AST	dir. ind.Bilirubin	Creatine Kinase (CK)	Total or Free T4	Prot./creat. Ratio
HEALTH PROFILES																																
BV1002	Biovet Complete	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
BV1022	Biovet Complete & DGGR Lipase	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
BV1023	Biovet Complete & SDMA	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
BV1012	Biovet Complete & T4	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							•	
BV1025	Biovet Complete & T4 & SDMA	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							•	
BV1024	Biovet Complete & T4 & TSH	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•							•	
BV1011	Ultra Complete	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
BV1015	Health Profile #1	•			•	•	•	•	•	•	•	•	•	•		•		•	•	•	•			•	•	•						
BV1016	Health Profile #2	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•		•	•	•		
BV1017	Health Profile #3	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•		•	•	•		
BV1018	Health Profile #4	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•		•	•	•	T	
BV1019	Health Profile #5	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•		•	•	•	T	•
BV1020	Health Profile #6	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•		•	•	•	•	
BV1001	Chemistry						•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•				
BV1021	Chemistry +	•					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•				
PRE-OP PROFILES																																
BV1026	PM 9*							•	•	•	•	•	•						•	•	•			•								
BV1028	PM 9 +*	•						•	•	•	•	•	•						•	•	•			•								
BV1027	PM 15*						•	•	•	•	•	•	•	•	•	•	•		•	•	•			•	•	•						
BV1029	PM 15 +*	•					•	•	•	•	•	•	•	•	•	•	•		•	•	•			•	•	•						
BV1005	Preanesthesia/Mini-Profile						•	•	•	•	•	•	•	•				•	•	•	•			•								
BV1010	Pre-Op	Ht					•	•	•	•	•	•	•	•				•	•	•	•			•								
BV1009	Pre-Op +	•					•	•	•	•	•	•	•	•				•	•	•	•			•								
RENAL PROFILES																																
BV1004	Renal						•			•	•	•	•	•		•	•	•		•	•	•	•	•								
BV1030	Renal & SDMA					•	•			•	•	•	•	•		•	•	•		•	•	•	•	•								
BV1032	Renal +	•					•			•	•	•	•	•		•	•	•		•	•	•	•	•								
BV1033	Renal + & SDMA	•				•	•			•	•	•	•	•		•	•	•		•	•	•	•	•								
BV1031	Renal Mini-Profile					•				•			•				•															
BV1099	Renal Mini-Profile & Urinalysis		•			•				•			•				•															

Our Profiles and Their Components

CODE	TEST NAME	Hémato. complète	Urologie complète	Interprétation patho.	Lipase DGGR	SDMA	Albumine	ALP	ALT	Créatinine	Glucose	Protéines totales	Urée	Globulines	Cholestérol	Calcium	Phosphore	Rapport A/G	Rapport Na/K	Sodium	Potassium	TCO_2	Gap anionique	Chlore	Amylase	Bilirubine totale	GGT	AST	Bilirubine dir. ind.	Créatine Kinase (CK)	T4 Totale ou libre	Ratio Prot./créat.
GERIATRIC PROFILES																																
BV1008	Geriatric Panel	•					•	•	•	•	•	•	•	•		•	•	•	•	•	•			•							•	
BV1038	Geriatric Panel & SDMA	•				•	•	•	•	•	•	•	•	•		•	•	•	•	•	•			•							•	
BV1035	Geriatric & DGGR Lipase	•			•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•			•							•	
BV1036	Geriatric & Urinalysis	•	•			•	•	•	•	•	•	•	•	•		•	•	•	•	•	•			•							•	
BV1037	Geriatric Ultracomplete	•	•			•	•	•	•	•	•	•	•	•		•	•	•	•	•	•			•							•	•
GASTROINTESTINAL PROFILES																																
BV1007	Chem.- Pancreatic				•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•		
BV1043	Chem.- Pancreatic +	•			•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•		
BV1039	Gastro-Intestinal	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•		
BV1044	Gastro-Intestinal & Parasitology	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•	•		•	•	•		
BV1006	Hepatic						•	•	•		•	•	•	•	•			•	•	•	•			•		•	•	•	•			
BV1045	Hepatic +	•					•	•	•		•	•	•	•	•			•	•	•	•			•		•	•	•	•			
BV1110	Hepatic With Phenobarbital						•	•	•		•	•	•	•	•			•	•	•	•			•		•	•	•	•			
BV1040	Complete Pancreatic	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	
BV1046	Pancreatic Profile & T4	•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	T	
BV1047	Pancreatic Profile & Urinalysis	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	T	
BV1041	Pancreatic Profile & Fiv / Felv	•			•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	T	
BV1042	Vomiting/Anorexia/Diarrhea	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								
BV1048	Vad & Urinalysis	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•								

For these profiles:

Sample: 1.0 mL Serum (S) • Turnaround Time

Complete Hematology or (Ht) hematocrit: add 1.0 mL Whole blood EDTA (L)

Urinalysis: 5.0 mL Fresh urine

+: Profiles include a Complete Hematology

COMPLETE YOUR PROFILES WITH THESE ADD-ONS**	
CADD90	DGGR Lipase
BVAD02	Feline Viral Profile II
CADD260	Fructosamin
CADD350	Keyscreen GI Parasite qPCR
BVAD09	Parasitology
BVAD01	SDMA
CADD190	Total T4
CADD200	TSH (Endogenous)
CADD220	Urinalysis
CADD230	Urinary proteins/creatinine ratio

**To obtain the Add-On price. the clinic must have performed a blood test with Biovet blood analyser or at the Biovet laboratory. If the clinic has performed the blood test with the analyser. the results must be provided as evidence. The blood test and add-on analysis must be for the same animal. The clinic has 72 hours after the blood test to request an Add-On analysis.

OTHER PROFILES

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV1247	**Anemia profile (Feline - PCR)** Includes Anaplasma spp, Bartonella, Cytauxzoon felis, Ehrlichia spp, Hemotropic mycoplasmas (PCR) and FIV/FeLV (ELISA).	2 mL EDTA whole blood **(L)**	2 D
BV1102	**Annual preventive health checkup - canine** Includes Biovet complete profile, T4, SDMA, Heartworm, Lyme, Ehrlichia, Anaplasma, Parasitology.	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)** + 5 g Feces	
BV1104	**Annual preventive health checkup - geriatric feline** Includes Biovet complete profile, T4, SDMA, urinalysis, Parasitology.	1.0 mL EDTA whole blood **(L)** + 1.0 mL serum **(S)** + 5 g Feces + 5mL Urine	
BV1103	**Annual preventive health checkup - Young active feline** Includes Biovet complete Profile + Parasitology + FIV/FeLV	1.0 mL EDTA whole blood **(L)** + 1.0 mL serum **(S)** + 5 g Feces	
	CBC, see **HEMATOLOGY** section		
	Digestive profile (diarrhea) qPCR and **Digestive profile qPCR & parasitology** canine or feline, see **PCR** section		
BV1003	**Electrolytic Profile** Includes Ca, Cl, Gap, K, Na, Phos, Rapport Na/K, TCO_2	1.0 mL Serum **(S)**	
CS86698	**Calcium Profile (Malignancy Profile)** Includes ionized Ca, PTH & PTHrp, Centrifuge the samples within one hour of collection. Label plastic tubes "serum" and "EDTA plasma". Freeze. Fasting recommended to avoid lipemia. Avoid hemolysis. This test is done externally.	1.0 mL Serum **(S)** + 0.5 mL EDTA plasma **(PL)**	7 D
	Respiratory profile canine or feline, see **PCR** section		
CSA401	**Thyroid Profile** Includes T4 (total or free) and TSH (canine)	0.5 mL Serum **(S)**	
COFA THYROID	**Thyroid Profile OFA** Contact the laboratory before sampling. Have to use OFA request form. Includes Free T4 equilibrium dialysis, TSH & TGAA. This test is done externally. Excluding OFA certification.	2.0 mL Serum **(S)**	7 D
CSA260	**Viral Profile II (Feline)** Includes FIV and FeLV.	0.5 mL Serum **(S)** or EDTA plasma **(PL)** or EDTA whole blood **(L)**	
BVAD02	**Add-on Feline Viral Profile II**		
BV1049	**Viral Profile III (Feline)** Includes FIV, FeLV, coronavirus (by IFAT). * Result on the same day for FIV and FeLV but 1 week for coronavirus.	0.5 mL Serum **(S)**	*

CHEMISTRY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT010	**Albumin**	0.3 mL Serum **(S)**	
CT020	**ALP** (Alkaline phosphatase)	0.3 mL Serum **(S)**	
CT030	**ALT**	0.3 mL Serum **(S)**	
BV1114	**Combo ALP-ALT**		
CT040	**Amylase**	0.3 mL Serum **(S)**	

CHEMISTRY			
CODE	**TEST NAME - DESCRIPTION**	**SAMPLE**	**TAT**
CT060	**AST**	0.3 mL Serum **(S)**	
CT225	**Bile Acids** (baseline)	0.3 mL Serum **(S)**	
CT220	**Bile Acids (pre- and post-prandial)** Take the first blood sample after a 12-hour fast. Feed the animal (2 tsp of food if less than 10 lbs and 2 tbsp of food if more than 10 lbs) and take the second sample 2 hours after the meal. Centrifuge. Transfer the serum to another tube. Identify the tubes "pre-prandial" and "post-prandial." Avoid hemolysis. Keep cool.	0.5 mL Serum **(S)**	
	Bile Acids/creatinine Ratio, see **UROLOGIE** section		
CT070	**Bilirubin, Direct**	0.3 mL Serum **(S)**	
CT090	**Bilirubin, Total**	0.3 mL Serum **(S)**	
CT080	**Bilirubin (dir., Indir., Tot.)**	0.3 mL Serum **(S)**	
CT100	**BUN (urea)**	0.3 mL Serum **(S)**	
CT105	**BUN-Creatinine Combo**	0.3 mL Serum **(S)**	
CS86344	**C-reactive Protein (CRP)** Fasting (12 hours) serum; DOGS ONLY. This test is done externally.	1.0 mL Serum **(S)**	7 D
	C Protein, see **Hematology** section		
CT110	**Calcium** (total) Avoid lipemia.	0.3 mL Serum **(S)**	
CS18537	**Calcium, ionized** Fasting is necessary. Avoid hemolysis and lipemia. - Do not open cap Sample requirement for accurate measurement of ionized calcium (iCa2+) is serum that has been anaerobically transferred from the spun SST or RTT (using a needle and syringe to avoid air exposure) into a plain unopened red-top vacutainer. Puncture the stopper with the syringe needle and allow the serum to be transferred under pressure. - Do NOT open this tube prior to testing. - Please boldly label the sample tube as "IONIZED CALCIUM SERUM" and keep frozen or refrigerate. Samples that have been exposed to air may have artifactually decreased (iCa2+) and those transported in SST tubes may have been artifactually increased (iCa2+). † The tube submitted for this test will be used ONLY for this analysis, if you require other tests, please provide another tube.	0.5 mL Serum **(S)**†	3 D
CT120	**Chloride**	0.3 mL Serum **(S)**	
CT125	**Cholesterol**	0.3 mL Serum **(S)**	
	CO_2, see **TCO_2**		
	Cobalamine, see **Folate + cobalamine**		
CT130	**Creatine Kinase (CK)**	0.3 mL Serum **(S)**	
CT135	**Creatinine**	0.3 mL Serum **(S)**	
CT105	**Combo BUN-Creatinine**	0.3 mL Serum **(S)**	

CHEMISTRY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CS16195	**Folate + cobalamine (vitamin B12)** A 12-hour fast is recommended. Avoid hemolysis. Separate the serum from the RBCs and freeze. Protect from light by covering the tube with aluminum foil. Also available: **TLI-Cobalamine-Folate**	1.0 mL Serum **(S)**	3 D
CS16345	**Fructosamine** (canine or feline) Keep cool.	0.5 mL Serum **(S)**	1-2 D
CADD260	**Add-on Fructosamine** (canine or feline)	0.5 mL Serum **(S)**	1-2 D
CT145	**GGT**	0.3 mL Serum **(S)**	
CT011	**Globulins** (Alb & PT) Refrigerate or freeze.	0.3 mL Serum **(S)**	
CT150	**Glucose**	0.3 mL Serum **(S)**	
CT155	**Iron**	0.5 mL serum **(R)**	4 D
CT160	**LDH** (Lactate dehydrogenase)	0.3 mL Serum **(S)**	
CT165	**Lipase, DGGR**	0.3 mL Serum **(S)**	
CADD90	**Add-on DGGR Lipase**	0.3 mL Serum **(S)**	
CT170	**Magnesium**	0.3 mL Serum **(S)**	
CT180	**Phosphorus**	0.3 mL Serum **(S)**	
	PLI (canine or feline), see **Lipase, DGGR**		
CT185	**Potassium** Avoid hemolysis.	0.3 mL Serum **(S)**	
CT240	**Protein electrophoresis**	1.0 mL Serum **(S)**	4 D
CT190	**Total Proteins** Avoid hemolysis and lipemia.	0.3 mL Serum **(S)**	
CT1035	**SDMA** Avoid hemolysis.	0.5 mL serum **(R)**	
BVAD01	**Add-on SDMA**	0.5 mL serum **(R)**	
CT195	**Sodium**	0.3 mL Serum **(S)**	
CT115	**TCO_2** (Bicarbonates) Avoid contact with air. Tightly closed tube.	0.3 mL Serum **(S)**	
CT230	**TLI (canine)**	0.5 mL Serum **(S)**	7 D
CS16800	**TLI (feline)** Fast 12-18 hr.	0.5 mL Serum **(S)**	7 D
CSA160	**TLI-Cobalamine-Folate (canine)**	1.0 mL Serum **(S)**	7 D
CSA275	**TLI-Cobalamine-Folate (Feline)**	1.0 mL Serum **(S)**	7 D
CT205	**Triglycerides** Fast 12-18 h	0.3 mL Serum **(S)**	
	Urea, see **BUN**		
CT210	**Uric acid**	0.3 mL Serum **(S)**	
	Urinary proteins/creatinine ratio, see **UROLOGY** section		
	Vitamine B12, see **Folate + cobalamine**		
BV7080	**Zinc** This test is done externally.	0.5 mL Serum **(S)**	7 D

DRUGS

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CS18702	**Cyclosporine** Refrigerate. Do not freeze. This test is done externally.	0,5 mL EDTA whole blood (L)	7 D
CS18703	**Digoxin** For drug dosages, do not use SST tubes (with separator gel) as they can falsely lower the concentrations. Glass tube preferable.	0.5 mL Serum **(S)**	4 - 6 D
CS18704	**Levetiracetam (Keppra)** Fasting recommended but not necessary. Do NOT take in an SST tube. This test is done externally.	0.5 mL Serum **(S)**	7 D
CS18705	**Phenobarbital** For drug dosages, do not use SST tubes (with separator gel) as they can falsely lower the concentrations. Also available **KBr + Phenobarbital Combo**.	0.5 mL Serum **(S)**	
CS18706	**Potassium bromide (KBr)** For drug dosages, do not use SST tubes (with separator gel) as they can falsely lower the concentrations.	0.5 mL Serum **(S)**	1-2 D
CS18707	**KBr + Phenobarbital Combo** * Result within 24 h for Phenobarbital, but allow 24 to 48 h for KBr.	0.5 mL Serum **(S)**	*
CS18708	**Zonisamide** Fasting recommended but not necessary. Do NOT take in an SST tube. This test is done externally.	0.5 mL Serum **(S)**	7 D

Cytology, see Pathology / Cytology / Histopathology

ENDOCRINOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT435	**ACTH (endogenous)** Fast. Collect blood in an EDTA tube. Centrifuge immediately, separate into a plastic tube and freeze.	1.0 mL EDTA plasma **(PL)**	4 D
CS87151	**Aldosterone** EDTA plasma (ideal sample but can be done on serum), Centrifuge and separate the plasma within 30 minutes of collection. Transfer to a plastic tube. Freeze. This test is done externally.	1.0 mL EDTA plasma **(PL)** transferred to plastic tube	7 D
CT445	**Cortisol**	0.5 mL Serum **(S)**	
CT440	**Cortisol (ACTH stimulation)**	0.5 mL Serum **(S)**	

ENDOCRINOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
	Pre and post Several companies offer different ACTH products. The ACTH- stimulation protocol varies depending on the product used. Synacthen can be used. There are two types of Synacthen: Synacthen Depot (gel) and Synacthen. The dosage of Synacthen Depot is 0.25 - 0.5 mg IM (0.25 mg if less than 15 lbs and 0.5 mg if more than 15 lbs). Cortisol is measured at 0 and 2 (two) hours post synacthen deposition. Synacthen can be used in the same way as cortrosyn (0.25 mg IM or IV). Cortisol is measured at time 0 and 1 (one) hour post synacthen. Cortrosyn (synthetic ACTH) can also be used. Administer 250 µg (1 vial) of Cortrosyn (synthetic ACTH) intramuscularly (or 5 µg / kg up to a maximum of 250 µg). Samples should be taken just before ACTH injection and 1 (one) hour later. The dosage for corticotropin (Bexco, formulation 40 U / ml) is 2.2 IU / kg (max 40 IU) I.M. Cortisol is measured at time 0. 1 and 2 (two) hours post-injection. IDENTIFY THE "PRE" AND "POST" TUBES OR "TIME 0", "TIME 1" AND "TIME 2"		
CDEX3	**Cortisol (dexamethasone suppression test low dose)** Administer 0.1 mg / kg dexamethasone intravenously. Samples should be taken at 0. 4 and 8 hours. In cats, it is better to use a dose of 0.1 mg / kg. IDENTIFY THE "0 HOUR" AND "8 HOURS" TUBES.	0.5 mL Serum **(S)**	
CDEX2	**Cortisol (dexamethasone suppression test high dose) Pre and post**	0.5 mL Serum **(S)**	
	Pre and 2 post Administer 0.01 mg / kg dexamethasone intravenously. Samples should be taken at 0. 4 and 8 hours. In cats, it is better to use a dose of 0.1 mg / kg. IDENTIFY THE "0 HOUR", "4 HOURS" AND "8 HOURS" TUBES.	0.5 mL Serum **(S)**	
CS16295	**Estradiol** Freeze. This test is done externally.	0.5 mL Serum **(S)**	7 D
CT499	**Free T4**	0.3 mL Serum **(S)**	
CSA401	**Thyroid Profile (T4 + TSH)**		
CT460	**Free T4 equilibrium dialysis** (canine & feline) Keep cool.	0.3 mL Serum **(S)**	4 D
CS16350	**Gastrine** Fasting 24 hours. Get a sample the day after. Transfer the serum into a plastic tube. Freeze. Submit with ice packs. May be falsely increased if patient receives Cimetadine. This test is done externally.	0.5 mL Serum **(S)**	7-14 D
CT470	**Insulin and glucose** Animal shoud be fasted prior to sampling. Centrifuge. separate and freeze in a plastic tube. Take blood when the patient is hypoglycemic.	1.0 mL Serum **(S)**	3 D
CS16595	**Parathyroid hormone (PTH) + ionized calcium** Fasting 12 hours. Centrifuge and separate the serum. Freeze in a plastic tube. Avoid hemolysis and lipemia. This test is done externally.	1.0 mL Serum **(S)**	7 D

ENDOCRINOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CS16596	**Parathormone-related peptide (PTH-rp)** Collect blood in an EDTA tube. Centrifuge within 60 minutes of collection. Separate the plasma into a plastic tube. Identify "EDTA plasma," Freeze. Ship with ice packs. Avoid hemolysis and lipemia. Fast is necessary to avoid lipemia. If the sample is non-lipemic. fasting is not necessary. This test is done externally.	1.0 mL EDTA plasma **(PL)** transferred to plastic tube	7 D
CT475	**Progesterone** Do NOT use SST tube. Centrifuge and separate quickly.	0.5 mL Serum **(S)**	
CT9810	**Relaxin** (pregnancy) Canine: A positive test indicates a pregnancy (few false positives). A negative result obtained 30 days after mating should be repeated within a week. False negatives can occur occasionally in small litters. Feline: Preliminary studies report a sensitivity of 100% and a specificity of 91% (9% false positive) for pregnancy when the cat is tested 25 days post-mating.	0.3 mL Serum **(S)**	7 D
CT500	**T4 AA**	0.3 mL Serum **(S)**	7 D
CT480	**Total T3**	0.3 mL Serum **(S)**	7 D
CT495	**Total T4**	0.3 mL Serum **(S)**	
CADD190	**Add-on Total T4**	0.3 mL Serum **(S)**	
CSA401	**Thyroid Profile** (T4 + TSH)	0.3 mL Serum **(S)**	
CS16760	**Testosterone** Keep cool.	1.5 mL Serum **(S)**	3 D
BV7081	**Testosterone stimulation hCG** (2 samples) 1.5 mL of serum each sample. Refrigerate. Submit with ice-packs.	2 Samples of 1.5 mL Serum **(S)**	8 D
CT510	**TSH (endogenous. canine)**	0.3 mL Serum **(S)**	
CADD200	**Add-on TSH**	0.3 mL Serum **(S)**	
CSA401	**Thyroid Profile (T4 + TSH)**	0.3 mL Serum **(S)**	

HEMATOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT330	**CBC (Complete Blood Count)** If possible, submit 2 blood smears, not stained. immediately after collection with EDTA blood. The EDTA tube should be kept cold. Avoid lipemia, sample <48 hours. Includes leukocyte, platelet and erythrocyte counts (Gr, Hb, Ht, CGMH, VGM), differential, microscopic examination, reticulocyte count (if anemia). An evaluation of the blood smear is performed by technicians on each CBC, including a differential check, description of red and white blood cell morphology, confirmation of platelet estimation, and a reticulocyte count if the patient is anemic. If an abnormality or unidentified cells are observed during this evaluation, the blood smear is then submitted to a pathologist for verification.	1.0 mL EDTA whole blood **(L)**	
CT331	**CBC with Pathologist's comments**	1.0 mL EDTA whole blood **(L)**	
BV1050	**CBC with feline Hemotropic mycoplasmas qPCR**	1.0 mL EDTA whole blood **(L)**	

HEMATOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV1051	**CBC without diff** The EDTA tube should be kept cold. Avoid lipemia, sample <48 hours. Includes leukocyte, platelets and erythrocyte counts (Gr, Hb, Ht, CGMH, VGM), reticulocyte count (if anemia).	1.0 mL EDTA whole blood **(L)**	
	***Babesia* (smear)**, see **Parasitology** section		
CREVW	**Blood smear evaluation (pathologist)** Submit a blood smear or whole blood EDTA. Also submit internal analyzer results if available.	Smear or EDTA whole blood **(L)**	
CT315	**Blood typing (canine)** This test is done externally.	1.0 to 3.0 mL EDTA whole blood **(L)**	5 D
CT320	**Blood typing (feline)**	1.0 mL EDTA whole blood **(L)**	
CT325	**Buffy Coat**	1.0 mL EDTA whole blood **(L)**	
CS86149	**C Protein** Plasma centrifuged, separated (in a plastic tube) and refrigerate. Submit with ice-packs. This test is done externally.	1.0 mL Citrated plasma **(B)**	7 D
CT415	**Coagulation (PT, PTT)**	1.0 mL Citrated plasma **(B)**	1-3 D

HEMATOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CSA305	**Coagulation (PT, PTT) with Platelets** For these tests (mainly for PT and PTT), a good plasma sampling and submission method is absolutely essential to obtain reliable results. Coagulation factors can be destroyed by heat or activated by contact with glass surfaces and clot formation in the sample. Reliable results can be obtained if the following guidelines are followed: 1. Do not dose von Willebrand factor in bitch in heat, pregnancy or lactation. 2. For PT, PTT and vWF tests it is essential to collect the blood in a citrate tube (blue top tube). These tubes (as well as plastic tubes) are available at no charge from customer service upon request. 3. A clean puncture of the vein must be performed. Repeatedly puncturing the vein walls or a slow blood flow can activate the coagulation cascade. a. If you use vacutainer tubes, it will be important to completely fill the citrated tube in order to respect the citrate ratio: 1: 9. b. If you use screw-cap tubes and a syringe, it will be important to fill the tube to the top edge of the label to respect the citrate: blood ratio. 4. Less than 15 minutes after collection, centrifuge tubes for 15 minutes at 3000 RPM. Keep the cap on the tube during centrifugation. When separating plasma, it is important not to aspirate red blood cells. If the plasma is hemolyzed or contains clots, the sample should be taken again. At least 0.4 ml of plasma is needed to perform the tests. 5. For separation, the plasma must be collected with a plastic pipette and placed in a plastic tube. Clearly identify the tube with the patient's name, age and time of collection, and indicate "citrated plasma" on the tube to be submitted. If you do not have plastic tubes, you can use a citrated tube previously emptied of its anticoagulant. 6. Freeze sample and send on ice. 7. **For PT and PTT tests, each Patient sample must be accompanied by a Control sample.** The control sample is a sample of citrated plasma taken from a healthy animal of the same species as your patient and handled in the same way as the sample of the sick patient. This sample is analyzed at the same time as the patient's and ensures that sampling, centrifugation and transport did not alter the sample, PT and PTT testing costs include the analysis of the control sample. 8. A lavender tube (whole blood EDTA) is preferably required for platelet counting, but it can also be performed on a green-top tube (whole heparinized blood)	1.0 mL Citrated plasma **(B)** + 1.0 mL EDTA whole blood **(L)**	1-3 D
CT340	**Crossmatch** Submitting blood from donor and recipient.	0.5 mL EDTA whole blood **(L)** or EDTA plasma **(PL)**	3 D
CT540	**Coombs** This test is done externally.	canine: 2.0 mL feline: 1.0 mL EDTA whole blood **(L)**	2 D
CT375	**Hematocrit**	1.0 mL EDTA whole blood **(L)**	
	Hemobartonellosis, see **Hemotropic mycoplasmas**		
CT380	**Hemotropic mycoplasmas** (smear - Feline) Ideally: Blood smear with capillary blood (e.g., ear) done immediately after collection, no anticoagulant. A series of smears (over several days) increases the chances of detection. Keep cool.	1.0 mL EDTA whole blood **(L)**	
	Hemotropic mycoplasmas (PCR), see in **PCR** section		

HEMATOLOGY			
CODE	**TEST NAME - DESCRIPTION**	**SAMPLE**	**TAT**
CT400	**Platelets**	1.0 mL EDTA whole blood **(L)**	
CT410	**PT** (Prothrombin Time) Submit with a control sample. Centrifuge, separated and frozen plasma. Follow procedures for coagulation tests.	1.0 mL Citrated plasma **(B)**	1-3 D
CT395	**PTT** (Partial thromboplastin time) Submit with a control sample. Centrifuged, separated and frozen plasma. Follow procedures for coagulation tests.	1.0 mL Citrated plasma **(B)**	1-3 D
CT425	**Reticulocyte**	1.0 mL EDTA whole blood **(L)**	
CS17123	**Von Willebrand Facteur ELISA** Centrifuged, separated and frozen plasma. No hemolysis. Do not collect during pregnancy or heat in bitches. This test is done externally. See instruction in PT, PTT test above.	1.0 mL Citrated plasma **(B)**	7 D
	Von Willebrand PCR, see **PCR** section		
BV1115	**WBC & diff**	1.0 mL EDTA whole blood **(L)**	

Histopathology, see Pathology / Cytology / Histopathology

MICROBIOLOGY			
CODE	**TEST NAME - DESCRIPTION**	**SAMPLE**	**TAT**
CM070	**Aerobic culture** Refrigerate; sterile container or swab with transport medium (not dry swab). Refer to Appendix 1, if you are hesitating between aerobic or anaerobic culture.	250 µl Urine or 10 µl liquid, tissue, swab, other	1-2 D (urine) 2-5 D (other)
BV1154	**CATB (Aerobic culture + Sensitivity*)** Refrigerate; sterile container or swab with transport medium (not dry swab). Refer to Appendix 1, if you are hesitating between aerobic or anaerobic culture. * Kirby-Bauer method.	250 µl Urine or 10 µl liquid, tissue. swab, other	1-2 D (urine) 2-5 D (other)
BV0240	**Follow-up Aerobic culture + Sensitivity*** Follow -up culture on same source may be ordered within 30 days of original submission of an Aerobic Culture. Indicate order number and date of the original submission on the requisition form. * Kirby-Bauer method		
CM030	**Anaerobic Culture** Sterile container as small as possible for the sample so that there is as little air as possible in the container, or a swab with a solid transport medium. DO NOT refrigerate. It is preferable that the sample be sent to the lab the same day. Anaerobic organisms are sensitive to cold, should be stored at room temperature and not in the fridge. Refer to Appendix 1. if you are hesitating between aerobic or anaerobic culture.	10 µl Urine, liquid, tissue,. swab, other	
BV1242	**Aerobic + anaerobic Culture + Sensitivity** * 2 samples are required 1 for aerobic culture and the other for anaerobic culture**.** Anaerobic organisms are sensitive to cold. and should be kept at room temperature.	2 samples *	

MICROBIOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CEXT	**Antimicrobial susceptibility*** Culture must have been done previously. See Appendix 5: Antibiotic profiles (Sensitivity). * Kirby-Bauer method	Isolate	2 D
BV0239	**Autoclave Quality Assurance Program** Must use EZTest - Steam, Easy-to-use, EZTest is a self-contained biological indicator for monitoring sterilization. EZTest - Steam contains Geobacillus stearothermophilus which will only be destroyed by adequate sterilization. These biological indicators comply with ISO 11138 and EN 866 standards and USP requirements.		3 D
TRD-332	**EZTest Steam** (1 unit)		
CM061	**Blood Culture + Antibiotic sensitivity** Must use One-bottle. Blood culture system. follow the incubation protocol and DO NOT REFRIGERATE. This test detects the growth of aerobic, anaerobic and micro-aerophilic organisms from blood or CSF samples using the blood/CSF culture system. * Preliminary results can come out as quickly as the day after reception, but for a negative result it is necessary to wait 7 days. A preliminary report will be sent as soon as possible.		1-7 D*
TRD-760	**One-bottle. Blood culture system**		
CM225	***Campylobacter jejuni/coli/lari* (culture)** Also available in profile, see **Fecal culture**	1 g Feces	5-10 D
BV1143	***Clostridium perfringens* (culture)** available in profile, see **Fecal culture**		
BV0010	***Clostridium perfringens* (Toxin profile - PCR)**		
CM020	**CMIC (Culture and MIC)** Refrigerate; sterile container or swab with transport medium (not dry swab). To learn more on MIC, see Appendix 6.	250 µl urine or 10 µl Tissue, swab, liquid, other	3 D
BV0241	**Follow-up - CMIC (Culture and MIC)** Follow -up CMIC on same source may be ordered within 2 months of original submission of an CMIC. Indicate order number and date of the original submission on the requisition form.		
	Urology Profile + CMIC. See Urology section		
BV1143	**Fecal culture + sensitivity** Includes aerobic culture. Campylobacter jejuni/coli/lari. Clostridium perfringens, Salmonella spp, and Shigella.	10 g Feces	3-10 D
BV1256	**Feline respiratory profile (Culture) + ATB** Includes: Actinomyces spp., Bordetella bronchiseptic, Chlamydophila felis, Enterobacteria, Mannheimia spp., Moraxella spp., Nocardia, Pasteurella multocida, Pseudomonas aeruginosa, as well as a sensitivity.	Swab or tracheal lavage	2-5 D
CM080	**Fungus (Isolation)** Refrigerate; sterile container.	Skin scraping, swab; other	7 D
	Minimum inhibitory concentration, see **CMIC**		
CM110	**Mycoplasme (culture)**	Tissue; swab	7-10 D

MICROBIOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CM121	***Salmonella* spp. (culture)** Refrigerate; sterile container, available in profile, see Fecal culture. See also Serotyping (PCR section)	Tissue, 10 g feces; other	4 D
CM240	**Ringworm (Fungal culture)** A culture is performed on a selective medium for Dermatophytes, if a typical growth is observed, a confirmation by our PCR test is performed and included in the price.	Skin scraping, hair	7-28 D
CM130 *	**Urine (culture) with *FIRST*ract and MIC** *FIRST*ract is a highly accurate and rapid urine culture technique, will then undergo traditional culture for identification and susceptibility by MIC.	0.5 mL cystocentesi, clean catch or catheterized urine in sterile container or red top tube	2-3 D
ADD210 *	**Add-on Urine (culture) with *FIRST*ract and MIC**		

ONCOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
	Biopsy, voir **Cancer Pathology Service (Biopsy)**		
CT1025	**CADET *BRAF* (canine)** This assay evaluates free-catch urine samples from dogs for the presence of cells harboring the b-raf mutation or specific copy number variations associated with transitional cell carcinoma/urothelial carcinoma/prostatic carcinoma. You must complete the Cadet-Braf request form available on our Website. * Urine must be put in BRAF container within 15 minutes of collection and can be collected over multiple days; call customer service to order the BRAF container).	40 mL Urine *	4 D
CFBXNEO	**Cancer Pathology Service (Biopsy)** Use the histopathology request form and indicate evaluation of Biopsy - oncology. The biopsy is assigned to one of the Cancer Pathology Team Members, 2 additional members of the Team will evaluate the biopsy and provide their opinion. One report is written with the consensus of all 3 Pet Cancer Pathology Team Members.	Biopsy	5 D
CFBXTBR	**Review - Cancer Tumor Board (Biopsy)** A second opinion review of an Antech or other lab biopsy case was performed by three pet cancer specialty pathologists (tumor Board). with one report containing consensus.	Slide	5 D

PARASITOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV0086	***Babesia* (smear)**	1.0 mL EDTA whole blood **(L)**	
CT785	**Baermann**	30 g Feces	5-7 D
CT820	***Giardia* ELISA**	5 g Feces	
CT613	**Heartworm** (Difil test) Keep cool. Also available, **Heartworm-Ac** or **Heartworm-Ag** (**Serology** section).	1.0 mL EDTA whole blood **(L)**	
	Hemobartonellosis (smear), see **Hemotropic mycoplasmas** in **Hematology** section		
	Ova & Parasites, see **Parasitology**		
CT805	**Parasitologie** (canine & feline ONLY) Keep cool. We are using Zinc Sulphate double centrifugation technique.	5 g Feces	
BVAD09	**Add-on Parasitology** (canine & feline ONLY)	5 g Feces	
	Parasitology for other species, see **Exotic animals** section		
	Zinc Sulphate, see **Parasitology**		

PATHOLOGY / CYTOLOGY / HISTOPATHOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CBONE	**Bone marrow (aspiration)** Submit 3 to 6 slides made immediately after collection (unstained) and the rest of the sample into EDTA tube.	Smear + EDTA whole blood **(L)**	
	Cancer Pathology Service (Biopsy), see **Oncologie** section		
CFLUA	**Cytology (fluids/lavage analysis)** Submit the sample in an EDTA tube. Keep refrigerated and submit as soon as possible. Also submit air-dried fluid smears prepared immediately after collection. If the sample appears to be slightly cellular, centrifuge a portion of the sample and smear from the sediment. Mention the method used. Use the cytology and histopathology request and provide as much relevant detail as possible.		
CCYTO	**Cytology (mass/tissue)** (1 to 2 sites) It is recommended to submit 2 to 4 slides per mass. Properly identify the slides with the sample site, patient name and owner. If you need help for technique for sampling and spreading slides, contact us. Use the cytology and histopathology request and provide as much relevant detail as possible.		
CCYT3	**Additional site**		
CFBX	**Histopathology (1 to 4 tissues)** Place the sample in 10% formalin. The formalin volume should be at least 10 times that of the tissue. Use containers with a wide mouth. Hollow organs (e.g., intestines) should be open lengthwise before being placed in formalin to ensure good fixation of the mucosa. For all excisional biopsies, margins will be assessed. If you have a large mass to send, please refer to Appendix 7. Use the cytology and histopathology request and provide as much relevant detail as possible.		3-5 D
CFBX5	**Additional tissue**		

PATHOLOGY / CYTOLOGY / HISTOPATHOLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CFBX	**Histopathology following up a cytology** Note : You must send us the case within 60 days after submitting the first case. It is important to indicate your order number from the previous case. * These tests are performed from Monday to Friday.		
IHC2	**Immunohistochemistry** This test is done externally.		

PCR

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CS14421	***Anaplasma phagocytophilum* qPCR** * One or more ticks placed in an airtight container without additives. Also available in profile, see ***Borrelia spp. + Anaplasma phagocytophilum*** and **Tick borne diseases**	Ticks* or 1.0 mL Whole blood EDTA **(L)**	3-4 D
	Anemia, see **Feline infectious anemia profile**		
BV1129	***Borrelia* spp. + *Anaplasma phagocytophilum* qPCR** * One or more ticks placed in an airtight container without additives. Also available in profile, see **Tick borne diseases**.	Ticks*	3-4 D
CS86320	***Chlamydophila felis* qPCR** * Pharyngeal or conjunctival swab. Collect the sample with a dry cotton swab and put it in a dry tube without transport medium. Keep refrigerated. Also available in profile, see **Respiratory profile (feline).**	Pharyngeal or conjunctival swab	1-2 D
BV1144	**Dermatophytes (Ringworm) qPCR** Samples of hair and/or hair dander (min 10) or culture media with hair. Take the hair and dander from border of lesions in an empty sterile container. In the absence of visible lesions, brush the coat with a toothbrush. The main zoophilic species detected are: Microsporum spp., Microsporum canis, Trichophyton spp (benhamiae, bullosum, equinum, erinacei, mentagrophytes, quinckeanum, simi, verrucosum) and Nannizzia gypsea (essentially geophilic species, formerly known as Microsporum gypseum). These three species or species complexes are now highlighted using a new real-time PCR (qPCR) multiplex. See also **Ringworm (Fungal culture)** in **Microbiology** section.		1-2 D
BV1232	**Digestive profile (diarrhea - canine) qPCR** The profile includes *C. perfringens enterotoxine, Clostridium difficile* toxine A and toxine B, *Campylobacter coli, Campylobacter jejuni, Cirocovirus*, Enteric coronavirus, Cryptosporidium spp., *Giardia duodenalis*, Parvovirus type 2., *Salmonella* spp., and Distemper. For further information, see Appendix 5	1 g Feces	2-3 D
BV1116	**Digestive profile qPCR with parasitology**	1 g Feces	2-3 D
BV1233	**Digestive profile (diarrhea - feline) qPCR** The profile includes C. perfringens enterotoxine, *Clostridium difficile* tox A and tox B, *Campylobacter coli, Campylobacter jejuni, Cryptosporidium* spp., *Coronavirus*, Feline Panleukopenia virus, *Giardia duodenalis, Salmonella* spp., *Rotavirus* A, T*oxoplasma gondii, Tritrichomonas Fœtus*. For further information, see Appendix 5.	1 g Feces	2-3 D
BV1142	**Digestive profile qPCR with parasitology**	1 g Feces	2-3 D
BV1247	**Feline infectious anemia profile qPCR** Includes *Anaplasma spp, Bartonella, Cytauxzoon felis, Ehrlichia spp*, Hemotropic mycoplasma by PCR and VIF/FeLV (ELISA).	2.0 mL EDTA whole blood **(L)**	48 h
	Hemobartonellosis, see **Hemotropic mycoplasmas**		

PCR

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT985	**Hemotropic mycoplasmas (Feline)** Keep cool. Detects and differentiates between Mycoplasma haemofelis and Mycoplasma haemominutum.	0.5 mL EDTA whole blood **(L)**	1-2 D
BV0012	**Influenza A** (canine or feline) pharyngeal or conjunctival swab. Collect the sample with a dry cotton swab and put it in a dry tube without transport medium. Keep refrigerated. Also available in profile, see **Respiratory profile (canine or feline)**.	pharyngeal or conjunctival swab	1-2 D
CT991	**KeyScreen qPCR — Parasites GI** This profile includes the following 20 gastrointestinal parasites and the 2 genetic markers: *Ancylostoma* spp., benzimidazole resistance - *Ancylostoma, Baylisascaris procyonis, Cryptosporidium canis, Cryptosporidium felis, Cytoisospora* spp. (*Isospora*), *Dipylidium caninum, Echinococcus granulosus, Echinococcus multilocularis, Eimeria spp, Giardia duodenalis, Giardia* A and B zoonotic strains, *Neospora caninum, Taenia* spp., *Toxascaris leonina, Toxocara canis, Toxocara cati, Toxocara* spp., *Toxoplasma gondii***, *Trichuris vulpis, Tritrichomonas blagburni*** (*T. foetus*) and *Uncinaria stenophala*. ** These parasites are not detected in dogs.	1 g Feces	1-2 D
CADD350	**Add-on KeyScreen qPCR —Parasite GI**	1 g Feces	1-2 D
CT974	***Leptospira* spp. qPCR (EDTA whole blood)** Refrigerate	1.0 mL EDTA whole blood **(L)**	2-3 D
CT976	***Leptospira* spp. qPCR (urine)** Refrigerate	10 mL Urine	2-3 D
BV7015	**MiDOG® Next generation DNA sequencing Microbial Test** Swab (tongue, feces, ear or skin) or urine (2 mL) Room temperature. Collection kits, instruction and information available on our brochures: **biovet.ca/en/midog or biovet.ca/en/midog-urine**, identification of bacterial and fungi pathogens to guide the design of targeted and accurate therapies. This test is done externally.		5-8 D
BV7008	**Polykystic Kidney disease (PKD)** Oral Sample using interdental brushes. This test is done externally.	1.0 mL Whole blood EDTA **(L)**	14 D
BV1235	**Respiratory profile (canine)** pharyngeal or conjunctival swab. Collect the sample with a dry cotton swab and put it in a dry tube without transport medium. Keep refrigerated. The profile includes Adenovirus-2, Bordetella bronchiseptica, Distemper, Respiratory Coronavirus, Herpesvirus, Influenza A, Mycoplasma canis, Mycoplasma cynos, Parainfluenza,, Pneumovirus and Streptococcus equi ssp zooepidemicus. For the possible addition a sensitivity test, please send us two swabs from the same site. An isolation fee will then be added, in order to isolate the bacteria.	pharyngeal or conjunctival swab	1-2 D
BV1234	**Respiratory profile (feline)** pharyngeal or conjunctival swab. Collect the sample with a dry cotton swab and put it in a dry tube without transport medium. Keep refrigerated. The profile includes, Herpesvirus, Calicivirus, Influenza A, Bordetella bronchiseptica, Chlamydophila felis and Mycoplasma felis. For the possible addition a sensitivity test, please send us two swabs from the same site. An isolation fee will then be added, in order to isolate the bacteria.	pharyngeal or conjunctival swab	1-2 D
	Ringworm, see Dermatophytes		

PCR

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
SALT	***Salmonella* serotyping** Salmonelle spp. culture must have been done previously.	Isolate	5-10 D
BV0018	***Salmonella* spp.** Also available in profile, see **Digestive profile (diarrhea)**.	1 g Feces	2-3 D[1]
BV1231	**Tick borne diseases qPCR (tick)** One or more ticks placed in an airtight container without additives. Detection of Borrelia spp., Anaplasma phagocytophilum, Babesia spp, and Ehrlichia spp.	Ticks	3-4 D
BV1156	**Tick borne diseases qPCR (blood)** Detection of Borrelia spp., Anaplasma phagocytophilum, Babesia spp, and Ehrlichia spp.* * Borrelia spp: available ONLY on tick.	1.0 mL EDTA whole blood **(L)***	3-4 D
CS85819	***Tritrichomonas* Fœtus (feline)** Also available in profile, see **Digestive profile (diarrhea)**.	1 g Feces	2-3 D
BV7010	**Von Willebrand Type 1 (PCR)** Oral Sample using interdental brushes. This test is done externally.	1.0 mL EDTA whole blood **(L)**	14 D
BV7194	**Von Willebrand Type 2 (PCR)** Oral Sample using interdental brushes. This test is done externally.	1.0 mL EDTA whole blood **(L)**	14 D
BV7194	**Von Willebrand Type 3 (PCR)** Oral Sample using interdental brushes. This test is done externally.	1.0 mL EDTA whole blood **(L)**	5-10 D
	Other infectious agents available upon request		
BV1156	**Tick borne diseases qPCR (blood)** Detection of Borrelia spp, Anaplasma phagocytophilum, Babesia spp, and Ehrlichia spp.* * Borrelia spp: available ONLY on tick.	1.0 mL EDTA whole blood **(L)***	3-4 D

SEROLOGY/IMMUNOLOGY/VIROLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
	2M Ab, voir **Masticatory muscle myositis**		
CAC100	**Accuplex®** This is a canine vector-borne disease screening for heartworm, Lyme disease (includes screening for antibodies against two C6 peptides), *Ehrlichia canis,* *and Anaplasma phagocytophilum*.	0.5 mL Serum **(S)**	1-2 j
CT515	**ANA (Antinuclear Antibody)** This test is done externally.	1.0 mL Serum **(S)**	7-14 D
	Anaplasma phagocytophilum - available in profile, see **Accuplex®**		
BV7090	***Babesia canis & B. gibsoni* (IFA)** This test is done externally.	1.0 mL Serum **(S)**	14 D
BV7051	***Bartonella henselae & B. vinsonii*** (Cat Scratch Disease) (IFA) This test is done externally.	1.0 mL Serum **(S)**	14 D

SEROLOGY/IMMUNOLOGY/VIROLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT530	**Brucella Canis - Screen**	0.5 mL Serum **(S)**	4 D ‡
CS16003	**Brucella Canis Kansas agg 2-ME TAT** This test is done externally (KSVDL) for canine EXPORT.	0.5 mL Serum **(S)**	7 D
	Coombs, see **Hematology** section		
CT570	***Ehrlichia canis* (Ab IFA)** This test is done externally.	1.0 mL Serum **(S)**	14 D
	Ehrlichia canis/ewingii - available in profile, see **Accuplex®**		
CT580	**FeLV-Ag-ELISA (screening)**	0.3 mL Serum **(S)** or EDTA whole blood **(L)** or EDTA plasma **(PL)**	
CT585	**FeLV-Ag-IFA**	1.0 mL Whole blood EDTA **(L)**	4 D ‡
CT595	**FIP-Ab- Coronavirus-IFAT** This test is done externally.	1.0 mL Serum **(S)**	2-3 D
CT610	**FIV-Ab-ELISA (screening)**	0.3 mL Serum **(S)** or EDTA whole blood **(L)** or EDTA plasma **(PL)**	
CS16865	**FIV-Ab-Western blot** May be positive if pet vaccinated against FIV. This test is done externally.	1.0 mL Serum **(S)**	7 D
	Heartworm (canine) - available in profile ,see **Accuplex®**		
	Heartworm, Lyme, *Ehrlichia* & *Anaplasma*, see **Accuplex®**		
CT625	**Heartworm Ab-feline**	1.0 mL Serum **(S)**	4 D ‡
CT615	**Heartworm-Ag canine**	1.0 mL Serum **(S)**	
CT620	**Heartworm-Ag feline**	1.0 mL Serum **(S)** or EDTA plasma **(PL)**	
BV7086	**Leptospirose-Ac-MAT (6 serovars)** To check for seroconversion, retest in 2 to 3 weeks. This test is done externally.	1.0 mL Serum **(S)**	7 D
	Lyme disease (canine) - available in profile, see **Accuplex®**		
BV7005	**Myasthenia Gravis** (Anti-acetylcholine receptor Ab) Keep cool. Ship with ice-packs. This test is done externally.	2.0 mL Serum **(S)**	7 D
CS16535	**Masticatory muscle myositis** (Ab 2M) Ship with ice packs. This test is done externally.	2.0 mL Serum **(S)**	7-14 D
CS16560	**Neospora caninum IFA (canine)** This test is done externally.	1.0 mL Serum **(S)**	10 D
CT695	**Parvovirus Ag ELISA** * Airtight container.	Feces *	
CS17108	**Rabies titer (FAVN or RFFIT)** Fill out the specific form for this analysis. Highly hemolyzed and / or highly lipemic samples are discarded. * Usually 1 month. This test is done externally.	2.0 mL Serum **(S)**	30 D
CT715	***Rickettsia rickettsii*** (serology) (Rocky Mountain Spotted Fever) This test is done externally.	1.0 mL Serum **(S)**	14 D

SEROLOGY/IMMUNOLOGY/VIROLOGY

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT720	**Toxoplasmose-IgM & IgG-IFA**	1.0 mL Serum **(S)**	4 D*
BV7203	**Vaccine titer test (canine)** A single sample is used to test vaccines for 3 diseases (Infectious hepatitis. Parvovirus and Distemper).	0.5 mL Serum **(S)**	

*These tests are performed from Monday to Friday.

UROLOGIE

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT227	**Bile Acids/creatinine Ratio** Refrigerate.	1.0 mL Urine	3-5 D
CT830C	**Microalbuminuria** Keep cool.	1.0 mL Urine	1-2 D
CT775	**Protein / Creatinine Ratio (urine)** Keep cool.	2.0 mL Urine	
CADD230	**Add-on Protein / Creatinine Ratio (urine)**	2.0 mL Urine	
CT760	**Urinalysis** (chemical. physical and microscopic) Keep cool.	5.0 mL urine	1 D
BV1013	**Urinalysis with pathologist's comment**	5.0 mL urine	1 D
CADD220	**Add-on Urinalysis**	5.0 mL urine	1 D
CS14540	**Urolith analysis** Submit in a clean container with Royal Canin's form. This test is done externally.	Urolith	14-21 D
BV1153	**Urology Profile + CATB** (bacteriology) Urinalysis. aerobic culture and interpretation * Result within 24 h for urinalysis and interpretation, but for aerobic culture. allow 24 to 48 h.	5.0 mL urine	1 D*
CM133	**Urology Profile + CMIC** (Bacteriology) Urinalysis. aerobic culture. CMIC and interpretation. * Result within 24 h for urinalysis and interpretation, but for aerobic culture. allow 24 to 48 h.	5.0 mL urine	1 D*
CT925	**Urology Profile and Protein/Creatinine Ratio** (chemical, physical and microscopic) Keep cool.	5.0 mL urine	
CT770	**Urinary Cortisol/creatinine ratio** Keep cool.	2.0 mL Urine	

Contact us to learn more about our different programs or to check the availability of tests not listed in this guide.

OTHER SERVICES AND FEES

CODE	TEST NAME - DESCRIPTION		
BVFR03	**Cancellation fees**		
BVFR08	**Emergency fees (RUSH)**		
BVFR06	**Intermediate fees**		
	Quality control for Heska analyzers Please use the appropriate MKT-061 request form	Serum **(S)** *	
BV0242	**Element DC / DCX**	Serum **(S)** *	
BV0242	**Element i / i+**	Serum **(S)** *	
BV0242	**Eurolyser Solo**	Serum **(S)** *	
BV0242	**Eurolyser Cube**	Serum **(S)** *	
BV0242	**Element HT5**	EDTA whole blood **[L]***	
BV0242	**VetABC+** * The minimum quantity required may vary according to the different tests submitted.	EDTA whole blood **[L]***	
CREVW	**Pathologist's comments**		
CREVW	**Pathologist's comments** – on results of your in-house analyzers from Biovet.		
BVFR02	**Sample pool** (max 5)		
	Cooler upon request		

Prices are subject to change without notice.

Exotic Animals

Exotic Animals: Test Offers

Exotic animals: availability of tests by species
These symbols indicate for which species the tests are available.

[N]	New companion animals (NAC): rabbits. mice. hamsters. ferrets and other small mammals
[B]	Birds: including domestic fowls and exotic birds
[R]	Reptiles: turtles. lizards. snakes and other reptiles

Our Exotic Profiles And Their Components

CODE	TEST NAME	Complete CBC	Patho.'s comments	Uric acid	Albumin	ALP	ALT	Creatinine	Glucose	Total Proteins	BUN	Globulins	Cholesterol	Calcium	Phosphorus	A/G Ratio	Na/K Ratio	Sodium	Potassium	TCO_2	Gap	Chloride	Amylase	Total Bilirubin	GGT	AST	dir. ind.Bilirubin	LDH	Creatine Kinase (CK)	Bile acids	Total or Free T4
HEALTH PROFILES																															
BV1157	**AVIAN [B]**	•		•	•				•	•		•	•	•		•										•				•	
BV1160	**AVIAN with CK [B]**	•		•	•				•	•		•	•	•		•										•			•	•	
BV1158	**AVIAN II [B]**	•		•	•	•			•	•	•	•	•	•	•											•		•	•	•	
BV1159	**AVIAN III [B]**	•		•	•	•	•		•	•	•	•	•	•	•										•	•		•	•	•	
BV1173	**AVIAN CHEMISTRY [B]**			•	•				•	•		•	•	•	•											•				•	
BV1215	**AVIAN CHEMISTRY with CK [B]**			•	•				•	•		•	•	•	•											•			•	•	
BV1001	**CHEMISTRY [N]**				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•		•			•		
BV1161	**CHEMISTRY NAC/Rabbit [N]**	•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•									
BV1008	**Éval. GÉRIATRIQUE [N]**	•			•	•	•	•	•	•	•	•		•	•	•	•	•	•			•									•
BV1006	**HEPATIC [N]**				•	•	•		•	•	•	•	•			•								•	•	•	•				
BV1027	**PM 15 Pre-op) [N]**				•	•	•	•	•	•	•	•	•	•	•		•	•	•			•	•	•							
BV1009	**PRE-OP + [N]**	•				•	•	•	•	•	•	•				•	•	•	•			•									
BV1246	**PREANESTHESIA/MINI-PROFILE [N]**				•	•	•	•	•	•	•	•				•	•	•	•			•									
BV1004	**RENAL [N]**				•			•	•	•	•	•		•	•	•		•	•	•	•	•									
BV1167	**REPTILE 1 [R]**	•		•	•				•	•		•		•	•	•										•			•	•	
BV1168	**REPTILE 2 [R]**	•		•	•				•	•		•		•	•	•										•					

For these profiles:

[N] Sample: 1.0 mL serum **(S)** • Turnaround Time

[B] [R] Sample: 1.0 mL Heparinized whole blood **(G) (S)** • Turnaround Time

Complete CBC: Add 1.0 mL Whole blood EDTA **(L)**

COMPLETE YOUR PROFILES WITH THESE ADD-ONS**	
CADD190	Total T4
CADD220	Urinalysis
CADD230	Urinary proteins/creatinine ratio

**To obtain the Add-On price. the clinic must have performed a blood test with Biovet blood analyser or at the Biovet laboratory. If the clinic has performed the blood test with the analyser, the results must be provided as evidence. The blood test and add-on analysis must be for the same animal. The clinic has 72 hours after the blood test to request an Add-On analysis.

CHEMISTRY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT010	**Albumin** **[N-B-R]**	0.3 mL Serum **(S)**	
CT020	**ALP** (Alkaline phosphatase) **[N-B-R]**	0.3 mL Serum **(S)**	
CT030	**ALT** **[N-B-R]**	0.3 mL Serum **(S)**	
CT040	**Amylase** **[N-B]**	0.3 mL Serum **(S)**	
CT060	**AST** **[N-B-R]**	0.3 mL Serum **(S)**	
CT225	**Bile Acids** (baseline) **[B-R]**	0.3 mL Serum **(S)**	
CT070	**Bilirubin. directe** **[N-B-R]**	0.3 mL Serum **(S)**	
CT090	**Bilirubine. total** **[N-B-R]**	0.3 mL Serum **(S)**	
CT100	**BUN** (urea) **[N-B-R]**	0.3 mL Serum **(S)**	
CT110	**Calcium** (total) **[N-B-R]** Avoid lipemia.	0.3 mL Serum **(S)**	
CS18537	**Calcium. ionized** **[N-B]** Fasting is necessary. Avoid hemolysis and lipemia. - Do not open cap Sample requirement for accurate measurement of ionized calcium (iCa2+) is serum that has been anaerobically transferred from the spun SST or RTT (using a needle and syringe to avoid air exposure) into a plain unopened red-top vacutainer. Puncture the stopper with the syringe needle and allow the serum to be transferred under pressure. - Do NOT open this tube prior to testing. - Please boldly label the sample tube as "IONIZED CALCIUM SERUM" and keep frozen or refrigerate. Samples that have been exposed to air may have artifactually decreased (iCa2+) and those transported in SST tubes may have been artifactually increased (iCa2+). † The tube submitted for this test will be used ONLY for this analysis, if you require other tests, please provide another tube.	0.3 mL Serum **(S)** †	3 D
CT120	**Chloride** **[N-B-R]**	0.3 mL Serum **(S)**	
CT125	**Cholesterol** **[N-B-R]**	0.3 mL Serum **(S)**	
	CO_2, see **TCO_2**		
	Cobalamine, see **Folate + cobalamine**		
CT130	**Creatine Kinase (CK)** **[N-B-R]**	0.3 mL Serum **(S)**	
CT135	**Creatinine** **[N-B-R]**	0.3 mL Serum **(S)**	
CS16195	**Folate + cobalamine (vitamine B12)** **[N]** A 12-hour fast is recommended. Avoid hemolysis. Separate the serum from the RBCs and freeze. Protect from light.	1.0 mL serum. **amber tube**	3 D

CHEMISTRY (EXOTIC)			
CODE	**TEST NAME - DESCRIPTION**	**SAMPLE**	**TAT**
CT145	**GGT** **[N-B-R]**	0.3 mL Serum **(S)**	
CT011	**Globulins** (Alb & PT) **[N-B-R]**	0.3 mL Serum **(S)**	
CT150	**Glucose** **[N-B-R]** Avoid hemolysis, quickly separate the serum from the red blood cells.	0.3 mL Serum **(S)**	
CT170	**Magnesium** **[N-B-R]**	0.3 mL Serum **(S)**	
CT180	**Phosphorus** **[N-B-R]**	0.3 mL Serum **(S)**	
CT185	**Potassium** **[N-B-R]**	0.3 mL Serum **(S)**	
CT195	**Sodium** **[N-B-R]**	0.3 mL Serum **(S)**	
CT115	**TCO_2** (Bicarbonates) **[N-B-R]**	0.3 mL Serum **(S)**	
CT190	**Total Proteins** **[N-B-R]** Avoid hemolysis and lipemia.	0.3 mL Serum **(S)**	
CT205	**Triglycerides** **[N-B-R]** Fast 12-18 hr.	0.3 mL Serum **(S)**	
CT210	**Uric acid** **[B]**	0.3 mL Serum **(S)**	
	Vitamine B12, see **Folate + cobalamine**		
BV7080	**Zinc** **[B]** This test is done externally.	0.3 mL Serum **(S)**	7 D

Cytology, see Pathology / Cytology / Histopathology

ENDOCRINOLOGY (EXOTIC)			
CODE	**TEST NAME - DESCRIPTION**	**SAMPLE**	**TAT**
CT470	**Insulin and glucose** **[N]** Animal shoud be fasted prior to sampling. Centrifuge. separate and freeze in a plastic tube. Take blood when the patient is hypoglycemic.	1.0 mL Serum **(S)**	3 D
CT499	**Free T4** **[N-O-R]**	0.3 mL Serum **(S)**	
CT495	**Total T4** **[N-B]**	0.3 mL Serum **(S)**	
CADD190	**Add-on Total T4**		

HEMATOLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV1197	**CBC (Complete Blood Count)** **[N]** If possible. submit 2 blood smears. not stained. immediately after collection with EDTA blood. The EDTA tube should be kept cold. Avoid lipemia. sample <48 hours. Includes leukocyte, platelet and erythrocyte counts (Gr, Hb, Ht, CGMH, VGM). differential, microscopic examination, reticulocyte count (if anemia). An evaluation of the blood smear is performed by technicians on each complete hematology which includes a differential check, description of red and white blood cell morphology, confirmation of platelet count, reticulocyte count if the patient is anemic. If an abnormality or unidentified cells are observed during this evaluation, the blood smear is then submitted to a pathologist for verification.	1.0 mL EDTA whole blood **(L)**	
CAE270	**CBC (Complete Blood Count)** **[B-R]** If possible. submit 2 blood smears, not stained. immediately after collection with EDTA blood. The EDTA tube should be kept cold. Avoid lipemia, sample <48 hours. Includes hematocrit, WBC, thrombocytes, differential, microscopic examination. An evaluation of the blood smear is performed by technicians on each complete hematology that includes a differential check, description of red and white blood cell morphology. If an abnormality or unidentified cells are observed during this evaluation, the blood smear is then submitted to a pathologist for verification.	1.0 mL Heparinized whole blood **(G)**	
CT415	**Coagulation (PT, PTT)** **[N]**	1.0 mL Citrated plasma **(B*)** + 1.0 mL EDTA whole blood **(L)**	1-3 D

HEMATOLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CSA305	**Coagulation (PT. PTT) avec plaquettes** [N] For these tests (mainly for PT and PTT). a good plasma sampling and submission method is absolutely essential to obtain reliable results. Coagulation factors can be destroyed by heat or activated by contact with glass surfaces and clot formation in the sample. Reliable results can be obtained if the following guidelines are followed: 1. For PT. PTT tests it is essential to collect the blood in a citrate tube (blue top tube). These tubes (as well as plastic tubes) are available at no charge from customer service upon request. 2. A clean puncture of the vein must be performed. Repeatedly puncturing the vein walls or a slow blood flow can activate the coagulation cascade. a. If you use vacutainer tubes, it will be important to completely fill the citrated tube in order to respect the citrate ratio: 1: 9. b. If you use screw-cap tubes and a syringe, it will be important to fill the tube to the top edge of the label to respect the citrate: blood ratio. 3. Less than 15 minutes after collection. centrifuge tubes for 15 minutes at 3000 RPM. Keep the cap on the tube during centrifugation. When separating plasma, it is important not to aspirate red blood cells. If the plasma is hemolyzed or contains clots, the sample should be taken again. At least 0.4 ml of plasma is needed to perform the tests. 4. For separation. the plasma must be collected with a plastic pipette and placed in a plastic tube. Clearly identify the tube with the patient's name, age and time of collection, and indicate "citrated plasma" on the tube to be submitted. If you do not have plastic tubes, you can use a citrated tube previously emptied of its anticoagulant. 5. Freeze sample and send on ice. 6. **For PT and PTT tests, each Patient sample must be accompanied by a Control sample**. The control sample is a sample of citrated plasma taken from a healthy animal of the same species as your patient and handled in the same way as the sample of the sick patient. This sample is analyzed at the same time as the patient's and ensures that sampling, centrifugation and transport did not alter the sample. PT and PTT testing costs include the analysis of the control sample. 7. A lavender tube (whole blood EDTA) is preferably required for platelet counting, but it can also be performed on a green-top tube (whole heparinized blood).	1.0 mL Citrated plasma **(B*)** + 1.0 mL EDTA whole blood **(L)**	1-3 D
CT375	**Hematocrit** **[N-B-R]**	1.0 mL EDTA whole blood **(L)**	
CT385	**Hemoglobin** **[N]** Keep cool, avoid lipemia.	1.0 mL EDTA whole blood **(L)**	
CT400	**Platelets** **[N-R]**	1.0 mL EDTA whole blood **(L)**	
CT430	**WBC** **[N-B-R]**	1.0 mL EDTA whole blood **(L)**	

Histopathology, see Pathology / Cytology / Histopathology

MICROBIOLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CM070	**Aerobic culture** **[N-B-R]** Refrigerate; sterile container or swab with transport medium (not dry swab). Refer to Appendix 1, if you are hesitating between aerobic or anaerobic culture.	250 µl urine or 10 **µl** liquid, tissue, swab, other	1 D (urine) 2-5 D (other)
	Antimicrobial susceptibility, see **CATB**		
BV0240	**CATB (Aerobic culture + Sensitivity)*** **[N-O-R]** Refrigerate; sterile container or swab with transport medium (not dry swab). If you don't have 250 µl urine. a culture will be performed without FIRSTract and this will take a longer TAT. Refer to Appendix 1, if you are hesitating between aerobic or anaerobic culture. See also Appendix 5: Antibiotic profiles (Sensitivity). * Kirby-Bauer method.	250 µl urine or 10 **µl** liquid, tissue, swab, other	1 D (Urine) 2-5 D (Others)
ADD210	**Follow-up Aerobic culture + Sensitivity*** Follow-up culture on same source may be ordered within 30 Days of original submission of an Aerobic Culture. Indicate order number and date of the original submission on the requisition form. * Kirby-Bauer method		
CM030	**Anaerobic culture** **[N-O-R]** Refrigerate; sterile container as small as possible for the sample so that there is as little air as possible in the container, or a swab with a solid transport medium. Anaerobic organisms are sensitive to cold and should be kept at room temperature. Refer to Appendix 1, if you are hesitating between aerobic or anaerobic culture.	10 µl urine, liquid, tissue, swab, other	
BV1242	**Aerobic + Anaerobic culture + Sensitivity** * 2 samples are required: 1 for aerobic culture and the other for anaerobic culture.	2 samples *	
CM061	**Blood culture + Antibiotic sensitivity** **[N]** Must use One-bottle. Blood culture system. follow the incubation protocol and DO NOT REFRIGERATE. This test detects the growth of aerobic. anaerobic and micro-aerophilic organisms from blood samples using the blood culture system. * Preliminary results can come out as quickly as the day after reception, but for a negative result it is necessary to wait 7 days. A preliminary report will be sent as soon as possible.		1-7 D*
TRD-760	**One-bottle, Blood culture system**		
CM225	***Campylobacter jejuni/coli/lari* (culture)** **[N-O-R]** Also available in profile, see **Fecal culture**.	1 g Feces	5-10 D
BV1143	***Clostridium perfringens* (culture)** **[N-O-R]** Also available in profile, see **Fecal culture**.	1 g Feces	3-6 D
CM020	**CMIC (Culture and MIC)** **[N-O-R]** Refrigerate; sterile container or swab with transport medium (not dry swab). To learn more on MIC, see Appendix 6	250 µl Urine ou 10 **µl** liquid, tissue, swab, other	48-78 h

MICROBIOLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV0241	**Follow-up - CMIC (Culture and MIC)** Follow -up CMIC on same source may be ordered within 30 Days of original submission of an CMIC. Indicate order number and date of the original submission on the requisition form.		
BV1143	**Fecal culture + sensitivity** **[N-O-R]** Includes aerobic culture, *Campylobacter jejuni/coli/lari, Clostridium perfringens, Salmonella* spp., and *Shigella*.	10 g Feces	3-10 D
CM080	**Fungus (Isolation)** **[N]** Refrigerate; sterile container.	Skin scraping; swab; other	7-10 D
CM110	***Mycoplasma* (culture)** **[N-O]** Also available ***Mycoplasma* spp.**, see **PCR** section	Tissue, swab	7-10 D
CM121	***Salmonella* (culture)** **[N-O-R]** Refrigerate; sterile container Also available in profile, see **Fecal culture** and **Serotyping**, see **PCR** section	Tissue; feces; other	4 D
	Sensitivity, see **CATB**		

PARASITOLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT820	***Giardia* ELISA** **[N-O-R]** Keep cool.	5 g Feces	
	Ova & parasites, see **Parasitology**		
CT805	**Parasitology** **[N-O-R]** This test is done externally.	5 g Feces	5 D
	Zinc Sulfate, see **Parasitology**		

PATHOLOGY / CYTOLOGY / HISTOPATHOLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CFLUA	**Cytology (fluids/lavage analysis)** **[N]** Submit the sample in an EDTA tube. Keep refrigerated and submit as soon as possible. Also submit air-dried fluid smears prepared immediately after collection. If the sample appears to be slightly cellular, centrifuge a portion of the sample and smear from the sediment. Mention the method used. Use the cytology and histopathology request form and provide as much relevant detail as possible.	3	·
CCYTO	**Cytology (mass/tissue)** (1 to 2 sites) **[N-O-R]** It is recommended to submit 2 to 4 slides per mass. Properly identify the slides with the sample site. patient name and owner. If you need help for technique for sampling and spreading slides, contact us. Use the cytology and histopathology request form and provide as much relevant detail as possible.		
CCYT3	**Additional site**		

PATHOLOGY / CYTOLOGY / HISTOPATHOLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CFBX	**Histopathology (1 to 4 tissues)** **[N-O-R]** Place the sample in 10% formalin. The formalin volume should be at least 10 times that of the tissue. Use containers with a wide mouth. Hollow organs (e.g., intestines) should be open lengthwise before being placed in formalin to ensure good fixation of the mucosa. For all excisional biopsies. margins will be assessed. Use the cytology and histopathology request form and provide as much relevant detail as possible.		
CFBX5	**Additional tissue**		

PCR (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV7070	**Bornavirus** **[B]** Fecal swab. feces or 0.2 mL EDTA whole blood **(L)**. This test is done externally		3 D
BV0132	**Bird sexing** **[O]** 3 to 4 feathers or FTA card. Only 3-4 small feathers from the chest or the base of the neck.		5-10 D
BV7021	**Chlamydia-spp-PCR** (anc.C. Psittacci) **[O]** Cloacal swabs. Feces. 2.0 mL EDTA whole blood **(L)** or Heparinized **(G)**. This test is done externally.		2 D
CS86319	***Cryptosporidium* spp. qPCR** **[N-R]**	Feces	2-3 D
BV1144	**Dermatophytes (Ringworm) qPCR** **[N]** Samples of hair and/or hair dander (min 10) or culture media with hair. Take the hair and dander from border of lesions in an empty sterile container. In the absence of visible lesions, brush the coat with a toothbrush. The main zoophilic species detected are: *Microsporum* spp., *Microsporum canis, Trichophyton* spp (*benhamiae, bullosum, equinum, erinacei, mentagrophytes, quinckeanum, simii, verrucosum*) and *Nannizzia gypsea* (known as *Microsporum gypseum*). These three species or species complexes are now highlighted using a new real-time PCR (qPCR) multiplex.		1-2 D
BV1209	**Ferret Digestive profile (diarrhea) qPCR** **[N]** This profile includes detection of Campylobacter jejuni. *Cryptosporidium* spp., *Giardia* spp., *Rotavirus C, Salmonella* spp., *Lawsonia intracellularis, Distemper, Eimeria* spp.	Feces	2-3 D
BV0005	**Guardia spp. qPCR** **[N-B]**	5 g Feces	2-3 D ‡
BV0012	**Influenza A qPCR** **[N]** pharyngeal or conjunctival swab. Collect the sample with a dry cotton swab and put it in a dry tube without transport medium. Keep refrigerated.	pharyngeal or conjunctival swab	1-2 D ‡
BV7089	***Mycoplasmas* PCR (Avian)** **(MG-MS-Mm-Mi)** **[N-B-R]** This test is done externally.	nasal swab	4 D
CS16789	***Mycoplasma* spp qPCR** **[N]** pharyngeal or conjunctival swab. Collect the sample with a dry cotton swab and put it in a dry tube without transport medium. Keep refrigerated.	pharyngeal or conjunctival swab	1-2 D ‡
BV1130	**qPCR parasites profile** **[N]**Includes Cryptosporidium spp. and Giardia spp.	Feces ▲	1-2 D ‡

UROLOGY (EXOTIC)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT775	**Protein/Creatinine Ratio** **[N]**(chemical, physical and microscopic) Keep cool.	5.0 mL urine	
CADD230	**Add-on Urinary prot./creatinine ratio**	2.0 mL urine	
CT760	**Urinalysis** **[N]** (chemical, physical and microscopic) Keep cool.	5.0 mL urine	1 D
BV1013	**Urinalysis with pathologist's comment**	5.0 mL urine	1 D
CADD220	**Add-on Urinalysis**	5.0 mL urine	1 D
CS14540	**Urolith analysis** **[N]** Submit in a clean container with Royal Canin's form. This test is done externally.	Urolith	14-21 D

Contact us to learn more about our different programs or to check the availability of tests not listed in this guide.

OTHER SERVICES AND FEES (EXOTIC)

CODE	TEST NAME - DESCRIPTION
BVFR03	**Cancellation fees**
BVFR08	**Emergency fees (RUSH)**
BVFR06	**Intermediate fees**
CREVW	**Pathologist's comments**
CREVW	**Pathologist's comments** – on results of your in-house analyzers from Biovet.
BVFR02	**Pooling fees** (max. 5 samples)
	Cooler upon request

Prices are subject to change without notice.

Equine

Equine – Tests Offered

CHEMISTRY PROFILES (EQUINE)			
CODE	**TEST NAME - DESCRIPTION**	**SAMPLE**	**TAT**
BV1229	**Basic Health Program** Includes: Biovet complete equine Profile (see below). Wisconsin. * Except for Wisconsin which takes 1 to 2 days.	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)** + 5 g Feces	*
	CBC (complete blood count), see **HEMATOLOGY** section		
BV1137	**Chemistry Profile** Includes: Albumin, ALP, AST, Bilirubin - tot., dir., indir., Ca, Cl, CK, Creatinine, Gap, GGT, Globulins, Glucose, K, Na, P, Total Proteins, A/G Ratio, TCO_2, BUN.	1.0 mL Serum **(S)**	
BV1120	**Complete Biovet Profile** Chemistry Profile (same as above) and CBC, (see HEMATOLOGY section).	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)**	
BV1119	**Complete Biovet Profile with pathologist's comment**		
BV1228	**Complete Health Program** Includes: Biovet complete Profile (see above). Equine infectious anemia (EIA) Ab ELISA. Wisconsin. * It is highly recommended to submit one tube for biochemistry and another for EIA test. ** Except for EIA and Wisconsin for which it takes 1 to 2 days. EIA tests are performed Monday to Friday.	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)*** + 5 g Feces	**
	Digestive profile PCR, see **PCR** section		
	EMS (Metabolic Syndrome profile), see **Endocrinology** section		
BV1125	**Health Profile** Chemistry: AST, CK, Cl, TCO_2, Creatinine, Gap, GGT, K, Na. Total Proteins. Hematology : Hematocrite, Hemoglobin, Erythrocytes. WBC, platelet. Cell morphology.	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)**	
BV1124	**Health Profile plus** Same as Health Profile above, but with fibrinogen	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)**	
BV1133	**Health Program - Performance** Includes: Biovet complete Profile (see above), Equine infectious anemia (EIA) Ab ELISA. * It is highly recommended to submit one tube for biochemistry and another for EIA test. ** Except for EIA for which it takes 1 to 2 days, EIA tests are performed Monday to Friday.	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)***	**
BV1230	**Health Program - Senior** Includes: Biovet complete Profile (see below). Endogenous ACTH, insulin, Equine infectious anemia (EIA) Ab ELISA, Wisconsin. * It is highly recommended to submit one tube for biochemistry and another for EIA test. ** See instruction for ACTH test in endocrinology section. *** Except for EIA and Wisconsin for which it takes 1 to 2 days. up to 3 days for Endogenous ACTH and up to 5 days for insulin. EIA tests are performed Monday to Friday.	1.0 mL EDTA whole blood **(L)** + EDTA plasma **(PL)** ** 1.0 mL Serum **(S)*** + 5 g Feces	***

CHEMISTRY PROFILES (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV1111	**Hepatic Profile with SDH** Albumin. ALP. AST. Bilirubin tot., dir., indir., GGT, Globulins, Glucose, Total Proteins, A/G Ratio, BUN and SDH. * Except for SDH which is done externally.	1.5 mL Serum **(S)**	*
BV1122	**Muscular Profile** Includes: Albumin, AST, CK, Cl, TCO_2, Creatinine, Gap, Glucose, K, Na, Total Proteins, BUN.	1.0 mL Serum **(S)**	
BV1123	**Renal Profile / hydric balance** Includes: Albumine, Ca, Cl, Creatinine. Gap. Globulins. Glucose, K, Na, P, Total Proteins, A/G Ratio., TCO_2, and BUN.	1.0 mL Serum **(S)**	
	Reproductive profile PCR, see **PCR** section		
	Respiratory profile PCR see **PCR** section		

CHEMISTRY PROFILES (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT	PRICE
	Reproductive profile PCR, see **PCR** section			
	Respiratory profile PCR, see **PCR** section			

CHEMISTRY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT010	**Albumin**	0.3 mL Serum **(S)**	
CT020	**ALP** Refrigerate or freeze.	0.3 mL Serum **(S)**	
CT030	**ALT**	0.3 mL Serum **(S)**	
CT060	**AST**	0.3 mL Serum **(S)**	
BV1126	**AST + CK**	0.3 mL Serum **(S)**	
CT225	**Bile acids** (baseline)	0.3 mL Serum **(S)**	
CT080	**Bilirubins (dir., indir., total)**	0.3 mL Serum **(S)**	
CT100	**BUN** (urea)	0.3 mL Serum **(S)**	
CT110	**Calcium** (total) Avoid lipemia.	0.3 mL Serum **(S)**	
CS18537	**Calcium. ionized** Fasting is necessary. Avoid hemolysis and lipemia. - Do not open cap Sample requirement for accurate measurement of ionized calcium (iCa2+) is serum that has been anaerobically transferred from the spun SST or RTT (using a needle and syringe to avoid air exposure) into a plain unopened red-top vacutainer. Puncture the stopper with the syringe needle and allow the serum to be transferred under pressure. - Do NOT open this tube prior to testing. - Please boldly label the sample tube as “IONIZED CALCIUM SERUM” and keep frozen or refrigerate. Samples that have been exposed to air may have artifactually decreased (iCa2+) and those transported in SST tubes may have been artifactually increased (iCa2+). † The tube submitted for this test will be used ONLY for this analysis, if you require other tests. please provide another tube.	0.5 mL Serum **(S)** †	3 D

CHEMISTRY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT120	**Chloride**	0.3 mL Serum **(S)**	
CT125	**Cholesterol**	0.3 mL Serum **(S)**	
	CO_2, see **TCO_2**		
BV7073	**Copper** This test is done externally.	2.0 mL Serum **(S)**	2-3 D
CT130	**Creatine Kinase** (CK)	0.3 mL Serum **(S)**	
CT135	**Creatinine**	0.3 mL Serum **(S)**	
CT145	**GGT**	0.3 mL Serum **(S)**	
CT011	**Globulins** (Alb & PT)	0.5 mL Serum **(S)**	
CT150	**Glucose** Avoid hemolysis, quickly separate the serum from the red blood cells.	0.3 mL Serum **(S)**	
CT155	**Iron (serum)**	0.5 mL Serum **(S)**	4 D
CT160	**LDH**	0.5 mL Serum **(S)**	
BV1127	**Magnesium**	1.0 mL Serum **(S)**	
BV1127	**Na-K-Cl-TCO_2**	0.3 mL Serum **(S)**	
CT180	**Phosphorus**	0.3 mL Serum **(S)**	
CT185	**Potassium**	0.3 mL Serum **(S)**	
BV7040	**SDH**	1.0 mL Serum **(S)**	1 D
CS16730	**Selenium (serum)** This test is done externally.	1.0 mL Serum **(S)**	20 D
CS17505	**Selenium & Vitamin E** Please note that vitamin E is photosensitive and should not be exposed to light. It is imperative to centrifuge the sample as quickly as possible, then transfer it to an amber tube and freeze it or place it on ice in order to send it to us as quickly as possible. This test is done externally.	1.0 mL serum. **amber tube**	20 D
CT195	**Sodium**	0.3 mL Serum **(S)**	
CT115	**TCO_2** (Bicarbonates) Avoid contact with air.	0.3 mL Serum **(S)**	
CT190	**Total Proteins** Avoid hemolysis and lipemia.	0.3 mL Serum **(S)**	
CT205	**Triglycerides** Fast 12 to 6 h.	0.3 mL Serum **(S)**	
CS16016	**Vitamin D** This test is done externally.		20 D
CS16850	**Vitamin E** Please note that vitamin E is photosensitive and should not be exposed to light. It is imperative to centrifuge the sample as quickly as possible, then transfer it to an amber tube and freeze it or place it on ice in order to send it to us as quickly as possible. This test is done externally. Also available as a combo **Selenium & vitamin E.**	1.0 mL serum. **amber tube**	20 D
BV7080	**Zinc** This test is done externally.	0.5 mL Serum **(S)**	7 D

ENDOCRINOLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CL525	**ACTH (endogenous)** Sample is to be sent with an ice pack to be kept cold. Specimen stability is 4 days cold. This one is also run in New York, so TAT should be 3-5 days. Preferred sample: 1.0 mL aprotinin treated EDTA plasma in non-additive transport tube (labeled as AP treated plasma) Acceptable sample: Immediately separated and frozen EDTA plasma without aprotinin is acceptable, but is not preferred.	1.0 mL EDTA plasma **(PL)**	4 D
CT445	**Cortisol**	0.5 mL Serum **(S)**	
CS16300	**Estrone sulfate** Collect sample at least 100 days after mating. This test is done externally.	1.0 mL Serum **(S)**	8 D
CT499	**Free T4**	0.3 mL Serum **(S)**	
BV7033	**Metabolic Syndrome profile - Equine (EMS)** After centrifugation. transfer the serum to a glass or plastic tube. The ACTH assay is only run on EDTA plasma. Collect in EDTA tube. centrifuge within 4 hours of collection. transfer plasma EDTA into plastic tube then freeze. Clearly identify the tubes: "serum" and EDTA plasma". It is recommended to freeze samples. Do not use tubes with additives (i.e., separator gels). Includes: ACTH. insulin baseline. glucose, leptin and T4. This test is done externally.	1.0 mL EDTA whole blood **(L)** + 1.0 mL Serum **(S)**	4 D
CS16635	**PMSG** (Pregnant Mare's Serum Gonadotropin) Refrigerate or freeze. Collect sample between 38 and 120 days post-breeding.	1.0 mL Serum **(S)**	
CL140	**Progesterone** Centrifuge and separate quickly. Do not use SST tube.	0.5 mL Serum **(S)**	
CL545	**Oral sugar test (insulin - 2 samples)** ROUTINE INSTRUCTIONS: Overnight fast (1 flake of hay left in stall overnight and no am feed). Administer 0.15 ml/kg Karo light corn syrup orally (approximately 75 mL). Obtain 60 and 90 minutes after administration. immediately separate serum from red blood cells. Identify the tubes correctly (e.g., post 60 min and post 90 min).	1.0 mL Serum **(S)**	7 D
CS16635	**PMSG** (Pregnant Mare's Serum Gonadotropin) Refrigerate or freeze. Collect sample between 38 and 120 days post-breeding.	1.0 mL Serum **(S)**	
CL140	**Progesterone** Centrifuge and separate quickly. Do not use SST tube.	0.5 mL Serum **(S)**	
CL545	**Oral sugar test (insulin - 2 samples)** ROUTINE INSTRUCTIONS: Overnight fast (1 flake of hay left in stall overnight and no am feed). Administer 0.15 ml/kg Karo light corn syrup orally (approximately 75 mL). Obtain 60 and 90 minutes after administration. immediately separate serum from red blood cells. Identify the tubes correctly (e.g., post 60 min and post 90 min).	1.0 mL Serum **(S)**	7 D

ENDOCRINOLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CL550	**Oral sugar test (insulin - 3 samples)** ROUTINE INSTRUCTIONS: Obtain AM baseline after overnight fast serum sample (1 flake of hay left in stall overnight and no am feed). Administer 0.15 ml/kg Karo light syrup via syringe PO (approximately 75 ml). Obtain 60 and 90 minutes after administration, immediately separate serum from red blood cells. Identify the tubes correctly (e.g., pre, post 60 min and post 90 min).	1.0 mL Serum **(S)**	7 D
CT480	**Total T3**	0.3 mL Serum **(S)**	7 D
CT495	**Total T4**	0.3 mL Serum **(S)**	
CS16760	**Testosterone** (baseline) Keep cool.	0.3 mL Serum **(S)**	8 D
BV7081	**Testosterone stimulation hCG** (2 samples) 1.5 mL of serum for each sample. Refrigerated or frozen. Ship on Ice Pack.	2 samples of 1.5 mL Serum **(S)**	8 D

HEMATOLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT332	**CBC** (Complete Blood count) Differential, erythrocytes, fibrinogen, hematocrit, hemoglobin, erythrocyte indices. WBC, morphology, platelets.	1.0 mL EDTA whole blood **(L)**	
BV1121	**CBC without fibrinogen** Differential. erythrocytes. hematocrit. hemoglobin. erythrocyte indices. WBC. morphology. platelets.	1.0 mL EDTA whole blood **(L)**	
CT365	**Fibrinogen**	1.0 mL EDTA whole blood **(L)**	
CT375	**Hematocrit**	1.0 mL EDTA whole blood **(L)**	
CT430	**WBC (Count)**	1.0 mL EDTA whole blood **(L)**	

HISTOPATHOLOGY / CYTOLOGY (EQUINE)

Code	TEST NAME - DESCRIPTION	SAMPLE	TAT	Price
CFLUA	**Cytology (body fluids)** Submit the sample in an EDTA tube. Keep refrigerated and submit as soon as possible. Also submit air-dried fluid smears prepared immediately after collection. If the sample appears to be slightly cellular, centrifuge a portion of the sample and smear from the sediment. Mention the method used. Use the cytology and histopathology request form and provide as much relevant detail as possible.			$134.25

MICROBIOLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CCYTO	**Cytology (mass/tissue)** (1 to 2 sites) It is recommended to submit 2 to 4 slides per mass. Properly identify the slides with the sample site. patient name and owner. If you need help for technique for sampling and spreading slides, contact us. Use the cytology and histopathology request form and provide as much relevant detail as possible.		
CCYT3	**Additional site**		
CFBX	**Histopathology** (1 to 4 tissues) Place the sample in 10% formalin. The formalin volume should be at least 10 times that of the tissue. Use containers with a wide mouth. Hollow organs (e.g., intestines) should be open lengthwise before being placed in formalin to ensure good fixation of the mucosa. For all excisional biopsies, margins will be assessed. Use the cytology and histopathology request form and provide as much relevant detail as possible.		3-5 D
CFBX5	**Additional tissue (histopathology)**		
CM070	**Aerobic culture** Refrigerate; sterile container or swab with transport medium (not dry swab). Refer to Appendix 1, if you are hesitating between aerobic or anaerobic culture.	500 µl urine or 10 µl liquid. tissue. swab. other	1-2 D (urine) 2-5 D (Other)
BV1154	**CATB (Aerobic culture + sensitivities)** * Refrigerate; sterile container or swab with transport medium (not dry swab). Refer to Appendix 1, if you are hesitating between aerobic or anaerobic culture. * Kirby-Bauer method	250 µl urine or 10 µl liquid. tissue. swab. other	1-2 D (urine) 2-5 D (Other)
BV0240	**Follow-up Aerobic culture + Sensitivity** Follow -up culture on same source may be ordered within 2 months of original submission of an Aerobic Culture. Indicate order number and date of the original submission on the requisition form.		
CM030	**Anaerobic culture** Container as small as possible for the sample so that there is as little air as possible in the container. or a swab with a solid transport medium. DO NOT refrigerate; It is preferable that the sample be sent to the lab the same day. Anaerobic organisms are sensitive to cold, should be stored at room temperature and not in the fridge. Refer to Appendix 1. if you are hesitating between aerobic or anaerobic culture.	500 µl urine or 10 µl liquid. tissue. swab. other	
CEXT	**Antimicrobial susceptibility *** Culture must have been done previously. Refer to See Appendix A: Antibiotic profiles (Equine Sensitivity) * Kirby-Bauer method	Isolate	2 D
BV0239	**Autoclave - Quality Assurance Program** Must use EZTest - Steam. Easy-to-use. EZTest is a self-contained biological indicator for monitoring sterilization. EZTest - Steam contains Geobacillus stearothermophilus which will only be destroyed by adequate sterilization. These biological indicators comply with ISO 11138 and EN 866 standards and USP requirements.		3 D
	EZTest Steam (1 unit)		

MICROBIOLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CM061	**Blood Culture + Antibiotic sensitivity** Must use One-bottle. Blood culture system. follow the incubation protocol and DO NOT REFRIGERATE. This test detects the growth of aerobic, anaerobic and micro-aerophilic organisms from blood or CSF samples using the blood/CSF culture system. * Preliminary results can come out as quickly as the day after reception, but for a negative result it is necessary to wait 7 days. A preliminary report will be sent as soon as possible **One-bottle. Blood culture system**		1-7 D*
CM225	***Campylobacter jejuni/coli/lari* (culture)** Also available in profile, see **Fecal culture**	1 g Feces	5-10 D
BV0232	***Clostridium perfringens* (culture)** Also available in profile, see **Fecal culture**		
BV1143	**Fecal culture + ATB** aerobic culture. *Campylobacter jejuni/coli/lari. Clostridium perfringens Salmonella* spp. and *Shigella*.	10 g Feces	3-10 D
CM121	***Salmonella* spp. (culture)** Refrigerate. sterile container. Also available in profile, see **Fecal culture** and see also **Serotyping** (**PCR** section).	Tissue. 10 g feces. other	4 D

PARASITOLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT785	**Baermann**	30 g Feces	5-7 D
BV7092	**Cutaneous scraping (KOH)** Crusts, hair; no quantity to specify. This test is done externally.		3-4 D
BV7016	**Parasite identification** Fresh parasite or preserved in 70% ethanol. This test is done externally.		1-2 D
BV0006	**Wisconsin**	10 g Feces	1-3 D

PCR (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV1144	**Dermatophytes (Ringworm) qPCR** Samples of hair and/or hair dander (min 10) or culture media with hair. Take the hair and dander from border of lesions in an empty sterile container. In the absence of visible lesions, brush the coat with a toothbrush. The main zoophilic species detected are: *Microsporum canis, Trichophyton spp (benhamiae. bullosum, equinum, erinacei, mentagrophytes, quinckeanum, simii, verrucosum*) and *Nannizzia gypsea* (formerly known as *Microsporum gypseum*). These three species or species complexes are now highlighted using a new real-time PCR (qPCR) multiplex.		1-2 D‡
BV1207	**Digestive (Diarrhea) profile qPCR** 5-10 g feces or Rectal swab in a tightly sealed container. Refrigerate and send on ice. Includes: *Clostridium difficile* (A & B toxins), *Clostridium perfringens* (A toxin), *Coronavirus, Cryptosporidium spp., Lawsonia intracellularis, Neorickettsia risticii* (Potomac Horse Fever), *Rotavirus A, Salmonella* spp.	3	2-3 D‡
	EHV-1 and EHV-4, see **Herpes virus**		

PCR (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CS14394	**Herpes virus Type 1 (EHV-1) qPCR**		1-2 D*
BV0038	**Herpes virus Type 4 (EHV-4) qPCR** Nasal swab. transtracheal lavage fluid. guttural pouch lavage, bronchoalveolar lavage fluid, or respiratory tract tissue. Sample should be sent in a tightly sealed container. Swabs should be submitted without transport media in dry tubes. Refrigerate and send on ice. Available in profile, see **Viral Rhinopneumonia** and **Respiratory profile qPCR**		1-2 D*
CT974	***Leptospira* spp. qPCR (EDTA whole blood)**	2.0 mL EDTA whole blood **(L)**	2-3 D*
CT976	***Leptospira* spp. qPCR (urine)**	10 mL Urine or tissue.	2-3 D*
CS14479	***Neorickettsia risticii* qPCR (Potomac Horse Fever)** or Rectal swab in a tightly sealed container. Refrigerate and send on ice. Available in profile, see **Digestive (Diarrhea) profile qPCR**	5-10 g fece	1-2 D*
CL955	**Reproductive profile PCR** Endometrial swab, cervical swab, semen, placenta, or uterine lavage fluid. Sample should be sent in a tightly sealed container. Swabs should be submitted without transport media in dry tubes. Refrigerate and send on ice. Includes: EVA. EHV-1, *Streptococcus equi* spp, *zooepidemicus, Leptosporosis leptospira interrogans, Trypanosoma equiperdum, Klebsiella pneumonica, E. Coli.*		1-2 D*
BV1236	**Respiratory profile qPCR** Nasal swab, transtracheal lavage fluid, guttural pouch lavage, bronchoalveolar lavage fluid, or respiratory tract tissue. Sample should be sent in a tightly sealed container. Swabs should be submitted without transport media in dry tubes. Refrigerate and send on ice. Includes: EHV-1, EHV-4. Equine Influenza, *Rhodococcus equi*, Equine Rhinitis Virus A & B, *Streptococcus equi* spp, *equi, Streptococcus equi* spp *zooepidemicus*.		1-2 D*
CS14396	***Rhodococcus equi* qPCR** Nasal swab, transtracheal lavage fluid, guttural pouch lavage, bronchoalveolar lavage fluid, or respiratory tract tissue. Sample should be sent in a tightly sealed container. Swabs should be submitted without transport media in dry tubes. Refrigerate and send on ice. Available in profile, see **Respiratory profile qPCR**		1-2 D*
	Ringworm, see Dermatophytes		
CS14416	***Salmonella* spp.** 5-10 g feces or Rectal swab in a tightly sealed container. Refrigerate and send on ice. Available in profile, see **Digestive (Diarrhea) profile qPCR**		1-2 D*
CS86308	***Streptococcus equi* spp *equi* qPCR** Nasal swab. transtracheal lavage fluid, guttural pouch lavage, bronchoalveolar lavage fluid, or respiratory tract tissue. Sample should be sent in a tightly sealed container. Swabs should be submitted without transport media in dry tubes. Refrigerate and send on ice. Available in profile, see **Respiratory profile qPCR**		1-2 D*
BV0109	***Streptococcus equi* spp *zooepidemicus* qPCR** Nasal swab, transtracheal lavage fluid, guttural pouch lavage, bronchoalveolar lavage fluid, or respiratory tract tissue. Sample should be sent in a tightly sealed container. Swabs should be submitted without transport media in dry tubes. Refrigerate and send on ice. Available in profile, see **Respiratory profile qPCR**		1-2 D*

PCR (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
BV1156	**Tick borne diseases qPCR (blood)** One or more ticks placed in an airtight container without additives. Detection of Anaplasma phagocytophilum, Babesia spp, and Ehrlichia spp.* * Borrelia spp: available ONLY on tick.	1.0 mL EDTA whole blood **(L)**	3-4 D‡
BV1231	**Tick borne diseases qPCR (tick)** One or more ticks placed in an airtight container without additives. Detection of Borrelia spp., Anaplasma phagocytophilum, Babesia spp, and Ehrlichia spp.	Ticks	3-4 D‡
BV1260	**Viral Rhinopneumonia (equine - EHV1 + EHV4) qPCR** Nasal swab, transtracheal lavage fluid, guttural pouch lavage, bronchoalveolar lavage fluid, or respiratory tract tissue. Sample should be sent in a tightly sealed container. Swabs should be submitted without transport media in dry tubes. Refrigerate and send on ice. Includes: Herpes virus Type 1 (EHV-1) and Type 4 (EHV-4). Also included in **Respiratory profile**.		1-2 D

SEROLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CL121	**Equine infectious Anemia (EIA) ab ELISA** (Coggins) with electronic certificate GVL, see Appendix 3: Procedure for submitting Equine Infectious Anemia (EIA)	2.0 mL Serum **(S)**	1-2 D‡
	Equine Protozoal Myeloencephalitis, see **EPM**		
BV7027	**EPM Ab S. neurona Western Blot** This test is done externally.	1.0 mL Serum **(S)**	2 D
BV7025	**EPM IFAT Sarcofluor** This test is done externally.	1.0 mL Serum **(S)**	7 D
BV7032	**EPM IFAT Sarcofluor + Neofluor** This test is done externally.	1.0 mL Serum **(S)**	10 D
CL090	**IgG (Foal)**	0.3 mL Serum **(S)**	
BV7088	**Leptospirose (6 serovars) Ac MAT** This test is done externally.	1.0 mL Serum **(S)**	7 D
BV7088	**Nile virus - Ab - IgG - IgM ELISA** This test is done externally.	1.0 mL Serum **(S**	5 D

‡These tests are performed from Monday to Friday.

UROLOGY (EQUINE)

CODE	TEST NAME - DESCRIPTION	SAMPLE	TAT
CT760	**Urinalysis**	5.0 mL Urine	1 D
BV1013	**Urinalysis with pathologist's comment**	5.0 mL Urine	1 D

Contact us to learn more about our different programs or to check the availability of tests not listed in this guide.

OTHER SERVICES AND FEES (EQUINE)

CODE	TEST NAME - DESCRIPTION
BVFRO3	**Cancellation fees**
BVFRO8	**Emergency fees (RUSH)**
BVFRO6	**Intermediate fees**
CREVW	**Pathologist's comments**
	Cooler upon request

Prices are subject to change without notice.

Reagents and Supplies For Analyzers

Terms and Conditions

Shipping charges of $ 30.00 are applicable for orders of material under $500.00.
The order form is available on the site. Send your order to: **order@biovet-inc.com.**

Chemistry

Element DC / DCX / DC5X

- Dry slide technology
- Excellent reproducibility
- 25 individual tests and 6 panels available
- Acurate results in just minutes

INDIVIDUAL TESTS FOR ELEMENT DC/ DCX/ DC5X		
BIOVET #	**PRODUCT NAME**	**PACK**
TRD-624	**Acide urique**	24
TRD-560	**Albumin**	24
TRD-561	**Alkaline Phosphatase**	24
TRD-562	**ALT (GPT)**	24
TRD-625	**Amylase**	24
TRD-564	**AST (GOT)**	24
TRD-620	**Total Bilirubin**	24
TRD-568	**Calcium**	24
TRD-621	**Total Cholesterol**	24
TRD-569	**CK**	24
TRD-571	**Creatinine**	24
TRD-588	**GGT**	24
TRD-589	**Glucose**	24
TRD-596	**LDH**	24
TRD-597	**Lipase**	24
TRD-601	**Magnesium**	24
TRD-603	**Phosphorus**	24
TRD-622	**Total Protein**	24
TRD-623	**Triglycerides**	24
TRD-567	**BUN**	24

Chemistry

PANELS FOR ELEMENT DC / DCX / DC5X		
BIOVET #	PRODUCT NAME	PACK
TRD-600	**Liver Panel (ALB, ALP, ALT, GGT, GLU, TBIL)**	4
TRD-595	**Kidney Panel (ALB, BUN, CA, CREA, PHOS, TP)**	4
TRD-570	**Comprehensive Panel EWRAP - (ALP, BUN, CREA, GLU, TP, TBIL, ALB, PHOS, CA, CHOL, GGT)**	6
TRD-587	**Equine Panel (ALB, AST, BUN, CA, CK, CREA, GGT, GLU, LDH, PHOS, TBIL, TP)**	2
TRD-606	**Plus Panel EWRAP - (LIP, AMY, MG, TRIG, AST, LYTES)**	6
TRD-607	**Pre-Surgical Panel/EWRAP (ALP, ALT,BUN, CREA, GLU, TP)**	12
TRD-577	**Electrolytes (Na, K, Cl) with reference Fluid 1 Bottle**	24

SUPPLIES FOR ELEMENT DC / DCX / DC5X		
BIOVET #	PRODUCT NAME	PACK
LBI-287	**Plain wood applicator**	1000
TRD-566	**Auto Tips, DRI-CHEM 7000 Analyzer**	96
TRD-610	**Slide Cartridge, DRI-CHEM Analyzer**	2
TRD-556	**Centrifuge, DRI-CHEM Analyzer**	1
TRD-633	**Auto Mixing Cups**	50
TRD-565	**Auto Mixing Cups for DCX & DC5X**	50
TRD-574	**DRI-CHEM® Optics Cleaning Swabs (10/bag)**	10
TRD-576	**Electrolyte Reference Fluid, DRI-CHEM Analyzer, (8mL)**	1
TRD-575	**Electrolyte Reference Fluid, DRI-CHEM Analyzer, (8mL)**	6
TRD-602	**Paper, DRI-CHEM Analyzer**	3
TRD-611	**Slide Weight, DRI-CHEM Analyzer**	2
TRD-608	**Sample Racks (0.5 mL and 1.5 mL)**	2
TRD-594	**HESKA Chemistry System Control**	1
TRD-619	**Tip Rack, DRI-CHEM 7000 Analyzer**	1
TRD-598	**Lithium Heparin Tubes (Green),DRI-CHEM Analyzer (0.5mL)**	100
TRD-599	**Lithium Heparin Tubes (Green, DRI-CHEM Analyzer (1.5mL)**	100
TRD-605	**Plain Tubes (Red), DRI-CHEM Analyzer (0.5mL)**	100
TRD-604	**Plain Tubes (Red, DRI-CHEM Analyzer (1.5mL)**	100
TRD-688	**DRI-CHEM O-Ring - Pack 2**	2

Hematology

Vet ABC Plus+

- Provides a 4-part WBC differential
- Requires as little as 10 µL of blood
- Results in 60 seconds
- Higher impedance technology

BIOVET #	PRODUCT NAME
VET ABC PLUS+	
TRD-631	**Hematology Control for Vet ABC+ (1 tube)**
TRD-559	**ABC+ Hematology Device**

Element HT5

Combination laser flow cytometry. impedance and colorimetric technology ensures the most accurate results.

- Provides a 4-part WBC differential
- Requires as little as 10 µL of blood
- Results in 60 seconds

BIOVET #	PRODUCT NAME	PACK
ELEMENT HT5		
TRD-579	**Element HT5 Veterinary Hematology Control – NORMAL**	2 Vials, 3.0 mL
TRD-580	**Element HT5 Veterinary Hematology Control – TRI-LEVEL**	12 vials
TRD-581	**Element HT5 DiffLyse Solution**	300 mL
TRD-582	**Element HT5 Diluent Solution**	2 x 5.5L
TRD-583	**Element HT5 LH Lyse Solution**	90 mL
TRD-584	**Element HT5 Probe Cleaner**	1

Hematology

Element COAG+

- Acurate results in 15 minutes
- Small sample size (100 µL or less)

BIOVET #	PRODUCT NAME	PAC
ELEMENT COAG+		
TRD-698	**Mix PTT/aPTT (Canine & Feline)**	12
TRD-699	**Cleaning strips**	20
TRD-700	**PT Liquid control Level (4 x 4 ml)**	4
TRD-701	**Control PT Re-Calcification**	12

Element COAG

- Acurate results in 15 minutes
- Large 7-inches color touchscreen offers easy navigation
- Small sample size (100 µL or less)

BIOVET #	PRODUCT NAME	PAC
ELEMENT COAG		
TRD-682	**Mix PTT/aPTT (Canine & Feline)**	12
TRD-683	**Equine Fibrinogen Cartridge**	12
TRD-684	**Canine Fibrinogen Cartridge**	6
TRD-685	**Canine Blood Typing Cartridge**	6
TRD-686	**Feline Blood Typing Cartridge**	6

Endocrinology

Element i +

- Makes T4, TSH, and cortisol, Bile Acids and progesterone
- Technology on the cutting edge
- Results in 10 minutes

BIOVET #	PRODUCT NAME	PAC
ELEMENTT I +		
TRD-541	**Element i+ Tips**	96
TRD-542	**Cortisol**	12
TRD-542	**CRP**	
TRD-705	**Nu.Q® (Cancer)**	12
TRD-706	**Nu.Q® Pipette 50 µL**	1
TRD-543	**T4**	12
TRD-689	**TSH**	12
TRD-538	**Progesterone**	12
TRD-706	**T4 Pipettes 100 µl**	3

Element i

- Makes T4. TSH. and cortisol. bile acids and progesterone
- Technology on the cutting edge
- Results in 10 minutes

BIOVET #	PRODUCT NAME	PAC
ELEMENTT I		
TRD-648	**Bile acids**	10
TRD-635	**Cortisol**	10
TRD-637	**T4**	10
TRD-636	**TSH**	10

Electrolytes and Blood Gases

Element POC

- Critical chemistry. metabolic parameters. electrolytes. hematocrit and blood gas
- Results in just 35 seconds
- As little as 100 µL of blood

BIOVET #	PRODUCT NAME	PAC
ELEMENTT I		
TRD-586	**Element POC Test cards**	10
TRD-585	**Element POC Test cards**	25

Others

Eurolyser Solo/Cube

- 3 easy steps use
- Requires only 20 µL sample
- Acurate results in a few minutes

BIOVET N°	PRODUCT NAME	PAC
EUROLYSER SOLO/CUBE		
TRD-612	**cCRP**	16
TRD-613	**Fibrinogen**	16
TRD-638	**Fructosamin**	6
TRD-614	**Fructosamin**	16
TRD-679	**Lactate**	6
TRD-647	**Pancreas specific Lipase test kit**	6
TRD-615	**Pancreas specific Lipase test kit**	16
TRD-641	**Phenobarbital**	6
TRD-680	**Progesterone**	6
TRD-616	**SAA**	6
TRD-690	**SAA Control**	6
TRD-590	**SDMA**	6
TRD-591	**SDMA**	16
TRD-639	**T4 test kit**	6
TRD-617	**T4 test kit**	16

Element AIM

- Artificial intelligence automated fecal and urine
- Allows standardization of operations
- Accurate results in minutes

BIOVET N°	PRODUCT NAME	PAC
ELEMENT AIM		
TRD-692	**Urine/Fecal Cartridge**	30
TRD-696	**Fecal Prep kit**	30

Appendix 1 – Aerobic Or Anaerobic Culture: How To Choose?

We regularly receive questions about what type of culture to choose (aerobic or anaerobic?) and the samples to be submitted. The appropriate selection of samples and the type of culture is crucial for the culture to obtain a significant reuslt.

Anaerobic germs, by definition, come from oxygen-poor, moisture-rich sites. To successfully grow these germs in the laboratory, it is important that samples are not exposed to air and retain moisture.

The conditions in which anaerobic germs are likely to be involved must include:

- Tissue necrosis
- Deep abscesses
- Bite wounds
- Wet pleurisy
- Aspiration pneumonia
- Metrits and pyometers
- Oral diseases
- Joint diseases

Appropriate samples for researching anaerobic germs include:

- Fluids (pleural. peritoneal. joint or cerebrospinal)
- Deep tissues (muscles, liver, etc.)
- Intestinal content

On the other hand. samples that are inappropriate for this type of research include. among others:

- Vaginal swabs
- Airway swabs and aspirations
- Skin swabs or superficial wounds
- Urine (unless taken by bladder puncture)

The following rules must apply for the collection and retention of samples for anaerobic germ research:

- **Fluids:** If they are taken by aspiration with a syringe, the air must be removed from the barrel of the syringe beforehand. The fluids must be placed in sterile tubes without additives and the tubes must be completely filled so as not to leave any air. The tubes must be tightly sealed. The syringe may also be sent to the laboratory after removing the needle.
- **Swab:** Swabs must be placed in an appropriate anaerobic transport medium, such as those available at Biovet.
- In all cases. the samples must be stored between 4 °C and 8 °C and reach the laboratory within 48 hours.

Reference

Purvis T. et Burklund A. Do I choose aerobic or anaerobic culture.

www.ksvdl.org/resources/news/diagnostic_insights/january2019/aeorbic-anaerobic-culture.html

Appendix 2 – Cytology

Sampling techniques

There are two main sampling techniques: capillarity and aspiration. The capillarity technique consists of isolating the mass with one hand (left hand if right-handed and vice versa) and then inserting the needle into the mass or organ with the other hand. Make a quick back-and-forth movement 6-7 times without exiting the mass or organ while staying in the same path. Remove the needle from the mass.

By capillarity

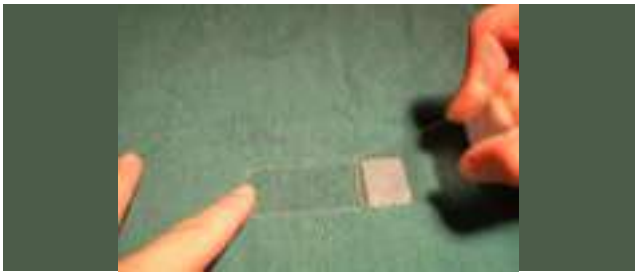
The aspiration technique is much the same as the capillarity technique. but a needle mounted on the syringe is used to collect the cytological material. The mass is isolated with one hand. Then use the other hand to insert the needle. previously mounted on the syringe. into the mass or organ. Negative pressure is applied by pulling the piston into the syringe. Several regions of the mass must be sampled. On the other hand, it is important to avoid sucking in material from the tissue surrounding the mass. When the needle is removed, no more negative pressure should be exerted.

By aspiration:

Spreading techniques

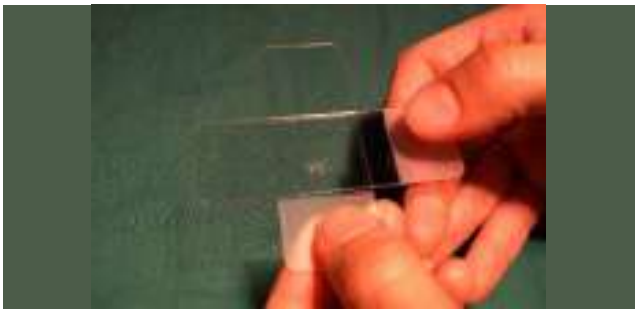
There are two main techniques for spreading the collected cytological material: the blood smear and squash prep techniques. The blood smear spreading technique is usually used when the harvested material is fairly liquid. By making sure there is air in the syringe mounted on the needle containing the collected cytological material, the contents of the needle are expelled on one or two blades. A second blade is held obliquely in relation to the first blade. The blade is retracted onto the cytological material and then quickly expelled to produce a blood smear.

Blood smear



Squash prep

1. The contents of the needle are expelled at one end of the slide.
2. A second slide is affixed to the sample perpendicular to the first slide. **WARNING**: No pressure should be exerted.
3. This second slide is then slid gently and quickly through the first slide.



Appendix 3 – Guide to Diagnosing Diseases Tick-Borne Diseases

Infectious agents transmitted by ticks include Anaplasma spp, Babesia spp, Borrelia burgdorferi, and Ehrlichia spp. Diseases caused by these microorganisms can affect several systems in animals. Clinical signs include fever, anorexia, lethargy, lameness, myalgia, lymphadenopathy, weight loss, petechiae, epistaxis, bruising or uveitis. Laboratory abnormalities may include thrombocytopenia, neutropenia, anemia, morula or inclusion in blood smear, lymphocytosis, hyperglobulinemia or proteinuria (Table 1).

Table 1

DISEASE	CLINICAL SIGN	LABORATORY ABNORMALITIES
Anaplasmosis	Fever. pale mucous membranes. anorexia. cough. respiratory distress	Thrombocytopenia. mild to moderate anaemia. Morula in granulocytes (A. *phagocytophilum*) or platelets (A.*platys*); if observed in the blood smear, it is suggestive of an infection but not always present.
Babesiosis	Pale and/or yellow mucous membranes	Thrombocytopenia. anemia (often severe). Inclusions in red blood cells; if observed in the blood smear, it is suggestive of an infection but not always present.
Ehrlichiose	Epistaxis. petechiae. bruises. pale mucous membranes. lameness. fever	Thrombocytopenia. mild to moderate anaemia, neutropenia, lymphocytosis, hyperglobulinemia, Morula in granulocytes (E. *ewingii*) or monocytes (*E. canis*, E. *chaffeensis*); if observed in the blood smear, it is suggestive of an infection but not always present.
Lyme	Lamery. fever. anorexia. joint distension. myalgia. lymphadenopathy	(Poly-)neutrophilic arthropathy. proteinuria, kidney failure

Conditions for the use of diagnostic methods specific to tick-borne diseases:

- History of a tick attached to the animal
- Thrombocytopenia. neutropenia or anaemia. proteinuria of unknown origin
- Fever. lameness. joint effusion. myalgia. lethargy of unknown origin

Diagnosis should be based on confirmation of exposure to one of the microorganisms by serological testing or confirmation of their presence (by PCR or observation of morula or inclusion in blood smear). the presence of clinical signs suggestive of tick-borne diseases. laboratory results suggestive of the disease (see Table 1) and ultimately a response to treatment.

The presence of Anaplasma or Ehrlichia morula or Babesia inclusions may be noted on a blood smear during the subacute or acute phase, but it is not always possible to observe it during this phase. Alternatively. the use of molecular (PCR) or serological tests each has its advantages and disadvantages. On the one hand. molecular tests are generally more sensitive and specific, but the detection window is more limited. On the other hand, following the production of antibodies, serological tests can confirm exposure from the first weeks after infection up to several weeks or even months after exposure, but cannot confirm an active infection (see Table 2). Thus. the use of PCR can complement serology for the diagnosis of tick-borne diseases.

Appendix 3 – Guide to Diagnosing Diseases
Tick-Borne Diseases

Table 2

AGENT	ADVANTAGE	PCR DISADVANTAGE	PCR SAMPLE	AVANTAGE	SEROLOGY DISADVANTAGE
Anaplasma	Active infection detection	False-negative: • if received antibiotics • if tested too early or too late following the sighting of a tick on the animal • False negatives due		Confirms exposure to false negatives on PCR test	Does not confirm an active infection; often negative at the onset of clinical signs; can remain positive despite effective therapy.
Babesia	Active infection detection	False negatives due to intermittent presence	Sang entier EDTA		False negative so few antibodies produced
Borrelia	Detection in tissues	False-negative: • Hard-to-detect organism in peripheral blood • Few organisms in the affected tissues • If received antibiotics	Synovial liquid	Very sensitive to confirm exposure; some serological tests do not detect post-vaccination antibodies (no cross-reaction). Confirms exposure in case of false negative toPCR	Confirms exposure. but not active infection; becomes positive only 3 to 6 weeks following exposure of a Borrelia-carrying tick; May remain positive several months after treatment.
Ehrlichia	Active infection detection	Faux négatifs: • Si a reçu des antibiotiques -si testé trop tôt ou trop tard suite à l'observation d'une tique sur l'animal; -lors d'infection chronique à Ehrlichia canis	Sang entier EDTA confirme une	Confirms exposure in case of false negative to PCR	Does not confirm an active infection; may remain positive for several months after treatment, cannot be used to verify the response to treatment.

PCR profile for tick-borne diseases

At Biovet. we offer three real-time PCR profiles (qPCR) for tick-borne diseases:

1. Profile on blood: Anaplasma phagocytophilum. Babesia spp and Ehrlichia spp
2. Profile on tick:
   a. 2 diseases: Anaplasma phagocytophilum and Borrelia burgdorferi
   b. 4 diseases: Anaplasma phagocytophilum. Borrelia burgdorferi, Babesia spp and Ehrlichia spp.

Multiplex PCR tests can detect multiple agents in a single reaction with very high sensitivity and specificity. A positive PCR test testifies to the presence of the genome of the organism tested in the sample analyzed. A negative PCR test means that there are no detectable organisms in circulation. either that the animal is not infected (true negative) or that the organism is not present in sufficient quantities to be detectable (e.g., during antibiotic treatment that can decrease the number of organisms). The analytical sensitivity of our multiplex PCR test (qPCR) is excellent with a detection capability of up to 50 genomic copies per reaction. Our test is specific for Anaplasma phagocytophilum and Borrelia burgdorferi. It allows the detection of several species of Babesia, including B.canis, B.microti, B.divergens, B.gibsoni, B.felis and B.odocoilei (the agent of babesiosis of deer). When we obtain a positive result, we can determine the species by sequencing. Finally, the test allows the detection of several species ofEhrlichia including E. canis, E.chaffeensis, E.ewingii and E.muris. As with Babesia, we can also identify the species by sequencing.

Appendix 3 – Guide to Diagnosing Diseases Tick-Borne Diseases

The ticks we have tested so far for these pathogens were carriers of Borrelia burgdorferi, Anaplasma phagocytophilum and Babesia spp in 25%. 10% and 20%of cases respectively. For Babesia, all our positive ticks were positive for B. odocoilei.

Serological profile for tick-borne diseases

Our serological profile for tick-borne diseases can detect antibodies against Anaplasma phagocytophilum, Anaplasma platys, Borrelia burgdorferi, Ehrlichia canis and Ehrlichia ewingii.

A positive serological test indicates the presence of antibodies against the organism tested following exposure but does not necessarily confirm the existence of an active infection. Detectable antibodies usually appear 2-4 weeks after exposure (3-6 weeks in the case of Borrelia burgdorferi) and can persist for months or even years, especially for Anaplasma and Ehrlichia. sometimes regardless of effective therapy.

A negative serological test means that there are no detectable antibodies against this organism. which can occur in the absence of infection or very recent infection (before the antibodies are produced in sufficient quantities to be detectable).

PCR and/or serology?

To make a good choice regarding the diagnostic test (PCR vs. serology). it is necessary to know whether the organism tested has a good chance of circulating during the presentation of the patient. In order to obtain a positive PCR test, the organism (or rather the nucleic acid sequence that is targeted for this organism) must be present in the sample. Since PCR tests are very sensitive and can detect small amounts of organisms, if circulating organisms are present in large enough quantities at the time of clinical signs, then it is very likely that the PCR test detects infection. as is the case for Anaplasma phagocytophilum, Babesia gibsoni, Babesia canis and Ehrlichia canis.

Anaplasma phagocytophilum typically causes acute illness in dogs even before seroconversion. Thus, during acute infection the PCR test to detect these agents is more reliable. On the other hand, if the organism is not present in the aliquot tested or if the patient has received an antibiotic (including Doxycycline) that could decrease the number of copies of the circulating organism, then a PCR test could be negative. A subsequent PCR test (if the animal has not received an antibiotic) or a serological test two to four weeks later could help confirm an infection if the initial PCR was negative. For serological tests for Anaplasma phagocytophilum, these may remain positive for several months.

It is important to know that some tick-borne organisms are not always present in sufficient circulating quantities to be detectable by PCR, especially during chronic infection as is sometimes the case with Babesia spp and Ehrlichia canis. In addition, Borrelia burgdorferi does not circulate in sufficient quantities to be detected in peripheral blood. In humans, synovial fluid can be submitted for PCR detection of B. burgdorferi, but the use of this diagnostic tool in veterinary medicine is less documented. Since clinical signs of Lyme disease do not occur for a few months following exposure to an infected tick, serological tests rather than PCR tests are usually used to confirm exposure to Borrelia burgdorferi. It should be noted, however. that a positive serological test in an endemic region for Borrelia burgdorgferi confirms exposure but not necessarily an active infection, as only 5% of seropositive dogs will eventually develop associated clinical signs, which usually do not appear until 2 to 6 months after exposure.

Although the PCR test is sensitive to Babesia detection, it can be negative intermittently during infection. It may then be advantageous to repeat the PCR test to increase sensitivity or to perform a serological test. It should be noted, however, that during chronic Babesiainfection, some dogs may not have enough antibodies produced to be detectable to serology.

Summary of the pros and cons of PCR and serological tests:
Serological test (antibody detection):

- If positive: Means exposure but not necessarily the disease; in addition, serological tests can remain positive for a long time, even after effective treatment.
- If negative: Means either no exposure or an antibody level too low for detection (e.g., infection. Thus, a negative antibody test does not necessarily mean that there is no infection.

PCR test (detection of the organism):

- If positive: Means an infection
- If negative: Means either no exposure or too few organisms to be detected. Thus, a negative PCR test does not necessarily mean that there is no infection.

So during a chronic disease (more than 4 weeks), a serological test may be sufficient. If it is an acute infection, a PCR test may be more sensitive than a serological test; a serological test performed 2 to 4 weeks later may also be suggested. In some cases, serological tests used in combination with PCR tests may improve diagnosis.

PCR profile on ticks

PCR profile on ticks

Appendix 3 – Guide to Diagnosing Diseases Tick-Borne Diseases

Ticks can also be tested for infectious agents. It is important to know that this does not confirm the disease in the animal. If the tick is positive. it does not necessarily mean that it has infected the animal. Indeed, other factors must be considered including the time of contact of the tick with the animal (in the case of Borrelia, it must remain attached at least 24-48 hours to the animal to transmit the bacteria).

If the test is negative. it means that the risk of disease transmission is very low for this tick. However, this does not rule out any risk of transmission because another tick infected but not observed in the animal (and which has not been tested) could transmit infectious agents.

The PCR tick profile offers theW possibility of testing blood (and ticks found on patients) for multiple agents and to be able to detect co-infections using serology and/or PCR on the animal. Parallel testing of a dog in serology and PCR can substantially increase the detection of an infection with any of the infectious agents, making it easier to diagnose and sometimes even treat. Indeed, the presence of co-infections can sometimes explain the variation in clinical presentation and response to the treatment of tick-borne diseases.

The clinician should always consider the epidemiology (including the prevalence of the disease and the active tick season in the region) and the pathophysiology of each agent to interpret the results. Thus, it is important to know the onset time of clinical signs in relation to the presumed time of infection, to know when and if organisms are circulating in peripheral blood, and whether they are circulating in large enough numbers to be detectable to determine whether serology and/or PCR or an acute or convalescent serological test is more appropriate. It might be prudent to take both serum and whole blood EDTA before antibiotic therapy, which is stored in the freezer (serum) or refrigerator (whole blood). Thus, if only one test is used (PCR or serology) and the test turns out to be negative, then this allows you to request the other test later or even submit another profile later in order to increase the chances of being able to detect the organism or organisms involved.

Recommended samples

PCR

- 1-2 mL of whole blood refrigerated in an EDTA tube
- 1 mL of synovial liquid in an EDTA tube
- a live or dead tick without a fixative (several ticks taken from the same animal can be grouped in the same container)

Serology

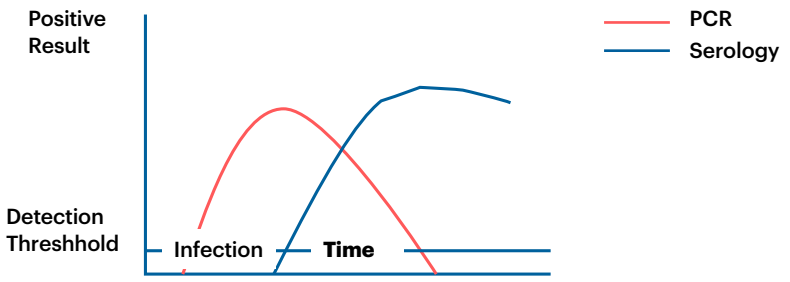
- 1 mL of serum (refrigerated or frozen)

Appendix 4 – Interpretation Grid For Tick-Transmissible Diseases

MALADIE	PRÉVALENCE	CELLULES CIBLES	SIGNES CLINIQUES	ANOMALIES DE LABORATOIRE	PCR	SEROLOGY[3]	CAUSES
Anaplasmosis	0.92%[1]	Morula in granulocytes (A. *phagocytophilum* platelets (A. *platys*); if observed in the blood smear it is suggestive of an infection but not always present.	Pale mucous membranes, fever. anorexia, cough respiratory distress.	Thrombocytopenia, mild to moderate anaemia.	+	+	Active infection
						-	Onset of infection
					-	+	Exposure to *Anaplasma phagocytophilum* or A. *platys*. Does not confirm an active infection unless a false NEGATIVE in PCR (e.g. if received antibiotics).
						-	Does not confirm anaplasmosis
Babésiose	2.9%[2]	Inclusion in red blood cells; if observed in the blood smear it is suggestive of an infection but not always present.	Pale and/or yellow mucous membranes	Thrombocytopenia. anemia (often severe)	+	+	Active infection
						-	Onset of infection
					-	+	Exhibition in *Babesia*. Does not confirm an active infection unless a false NEGATIVE in PCR (e.g. if received antibiotics).
						-	Does not confirm a babesiosis
Ehrlichiose	0.49%[1]	Morula in granulocytes (E. ewingi) or monocytes (E.*canis*. E. chaffensis); if observed in the blood smear it is suggestive of an infection but still not present.	Epistaxis. petechiae. bruises. pale mucous membranes lameness. fever.	Thrombocytopénie, anémie légère à modérée, neutropénie, lymphocytose, hyperglobulinémie	+	+	Active infection
						-	Onset of infection
					-	+	Exhibition in *Ehrlichia canis* or E. *ewingii*. Does not confirm an active infection unless a false NEGATIVE in PCR (e.g. if received antibiotics).
						-	Does not confirm ehrlichiosis
Lyme	4.67%[1]		Case. anorexia fever,- joint distension, lymphadenopat hy myalgia	(Poly-)neutrophilic arthropathy, proteinuria, kidney failure	- *	+	Exhibition in Borrelia burgdorferi. To be interpreted according to the presence of clinical signs or laboratory abnormalities suggestive of this condition after the elimination of other possible causes.
						-	Does not confirm Lyme Disease. Possibility of false NEGATIVE if tested at onset of infection (3-6 weeks post-exposure to a tick carrying Borrelia).

1. Seroprevalence of the disease in Quebec (2020) according to CAPC (https://capcvet.org) June 29. 2020.
2. Molecular Prevalence by JVIM. 2019: 33(5): 2075-2081. doi: 10.1111/jvim.15560. Epub 2019 Jul 23. Prevalence of Babesia spp and clinical characteristics of Babesia vulpes infection in North American dogs.
3. A negative serological test does not confirm the absence of exposure. as sometimes at the onset of infection (2-4 weeks post-infection) a dog may show clinical signs for Anaplasma or Ehrlichia. but may not have enough antibodies detectable to serology.
4. *Since the amount of Borrelia in the blood is very low. a PCR test in the blood is usually negative. It is possible to test PCR on a tick to check if it carries Borrelia or test the synovial liquid.

Kinetics of blood diagnostic tests for tick-borne diseases



Appendix 5 – Antibiotic profiles (Sensitivity - Kirby-Bauer)

ANTIBIOTICS - COMPANION ANIMAL	General	Urine	Ears	Eyes	Rodents	Rabbits	Birds	Reptiles
Amikacin								•
Amoxicillin	•	•	•					
Amoxicillin / Clavulanic Acid	•	•	•	•	✸	✸	•	•
Ampicillin		•						
Azithromycin					•	•	✸	
Bacitracin				•				
Cefovecin	•	•						
Cefpodoxime	•							
Ceftazidime								•
Cephalexin	•	•	•					
Cephazolin		•						
Chloramphenicol	•	•		•	•	•	•	•
Ciprofloxacin				•	•	•	•	✸
Clindamycin	•							•
Doxycycline	•	•	•	•	•	•	•	•
Enrofloxacin	•	•	•		•	•	•	•
Erythromycin (Gram+ only)			•	•				
Florfenicol			•					
Fusidic acid	•		•				✸	
Gentamicin			•		•	•	•	•
Marbofloxacin	•	•	•		•	•	✸	
Metronidazol		•			•	•	✸	✸
Neomycine			•	•				
Nitrofurantoin		•						
Oxacillin (Staph only)	•		•					
Penicillin G (Gram+ only)					•	•		
Polymyxin B (Gram- only)	•		•	•	•	•	•	
Sulphamethoxazole/Trimethoprim	•	•			•	•	•	•
Tetracycline				•				
Ticarcilline (Gram- seulement)			•					
Tobramycin			•	•	✸	✸	✸	✸

✸ = nouveau

OTHER ANTIBIOTICS AVAILABLE
Apramycin
Cefoxitin
Ceftiofur
Cephalotin
Cloxacilline
Gamithromycin
Imipenem
Kanamycin
Lincomcyine
Meropenem
Moxifloxacin
Mupirocin
Norfloxacin
Novobiocin
Ofloxacin
Penicillin / Novobiocin
Piperacillin
Pirlimycin
Pradofloxacin
Rifampicin
Spectinomycin
Streptomycin
Sulbactam / Ampicillin
Sulfamethoxazole
Sulphafurazole / Sulfisoxazole
Tildipirosin
Tilmicosin

Appendix 6 – Minimum Concentration Inhibitory (MCI)

The minimum inhibitory concentration (MIC) is the lowest concentration (ug/mL) of an antibiotic that inhibits bacterial growth. The Sensititre Sensitivity System is an in vitro diagnostic test, based on fluorescence technology, for the analysis of the clinical sensitivity of isolates of non-fastidious bacteria.

The Breakpoint critical concentration method is a broth dilution method for qualitative sensitivity analyses. A critical concentration is by definition the concentration of an antibiotic that inhibits the growth of a sensitive organism. but not a resistant organism. For most antimicrobial agents. 2 concentrations are used: a low concentration (corresponding to the upper limit of the sensitive category) and a high concentration (corresponding to the upper limit of the intermediate category). The MIC reveals to the clinician the exact concentration of the antibiotic required to inhibit bacterial growth. (A precise calculation can be made by your pharmacist.)

The decision to choose one antibiotic over another must also account for several factors, such as: the site of infection. safety for the animal. ease of use. the state of health of the animal. the possible side effects of the drug. the cost, etc. The MIC value of one antibiotic cannot be compared with that of another antibiotic.

S = Sensitive. normally effective at suggested concentration
I = Intermediate. may be effective at higher than recommended doses
R = Resistant. not effective at recommended doses

Antibiotic profiles

		All bacteria in the urine URN614F	All bacteria in the ear * OTIEXT1F	All Enterococcus spp. CMV1ENTF	All Staphylococcus spp. STAF614F	All other (+) Gram bacteria CMV4CDLF	All (-) Gram bacteria CMV5ADLF
Amikacin	AMI	•	•	•	•	•	•
Amoxicillin	AMOX	•					
Amoxicillin / Clavulanic acid	AUG2	•	•		•	•	•
Ampicillin	AMP	•			•	•	•
Azithromycin	AZI					•	
Cefazolin	FAZ	•					•
Cefovecin	FOV	•	•		•	•	•
Cefoxitin	FOX						•
Cefpodoxime	POD	•	•		•	•	•
Ceftiofur	XNL	•					•
Cephalothin	CEP	•	•		•	•	•
Chloramphenicol	CHL	•		•	•		
Clindamycin	CLI		•		•	•	
Colistin	COL		•				
Difloxacin	DIF	•					
Doxycycline	DOX	•		•	•		
Enrofloxacin	ENRO	•	•	•	•	•	•
Erythromycin	ERY			•			
Gentamicin	GEN	•	•	•	•		•
Marbofloxacin	MAR	•	•	•	•	•	•
Minocycline	MIN	•					
Mupirocin	MUP				•		
Neomycin	NEO		•				
Nitrofurantoin	NIT	•		•			
Orbifloxacin	ORB	•					
Oxacillin	OXA+				•	•	
Polymixin B	POL		•				
Pradofloxacin	PRA	•					
Streptomycin	STR			•			
Tetracycline	TET		•			•	
Ticarcillin / Clavulanic acid	TIM2		•				
Trimethoprim / Sulfamethoxazole	SXT	•			•	•	•

* Except Enterococcus and Staphylococcus

Appendix 7 – Protocol for the handling and sending of large masses of animals for veterinary analysis

Here are clear and detailed instructions on how to ensure the safety and efficiency of the process when sending mass that does not fit into standard formalin containers.

Whether you're a veterinarian or a laboratory professional, handling these samples appropriately is essential to prevent health risks

and ensure accurate results.

We invite you to carefully follow the recommendations provided in this appendix for the safe and efficient handling of animal masses. If in doubt, don't hesitate to contact our technical team for further help and advice.

Protocol

1. **In the smallest possible plastic container. place gauze pads or a "pee pad" and soak them with Epredia™ Formalin 10% (ready-to-use formalin). To do this, use about 100 ml, which is equivalent to a small urine collection jar.**
2. **Place the mass inside the prepared container and carefully wrap it in the gauze pads or the "pee pad".**
3. **Close the lid of the container tightly and place it in a closed plastic bag.**
4.

Please note that it is strictly forbidden to send a formaldehyde-filled "Ziploc" style bag. as this constitutes a hazard to handling and transportation. Instead. use an appropriate container and follow the instructions provided to ensure the safety of all involved. Please refer to your preservative's Material Safety Data Sheet for details.

Thank you for your commitment to the safety and quality of veterinary testing.

Appendix A – List of Antibiotics (Sensitivity)

ANTIBIOTICS FOR HORSES	
Amikacin	Gentamicin
Ampicillin	Oxacillin (Staph only)
Apramycin	Penicillin G (Gram+ only)
Ceftiofur	Rifampicin
Chloramphenicol	Spectinomycin
Cloxacillin	Sulphametoxazole/Trimethoprim
Erythromycin	Tetracycline

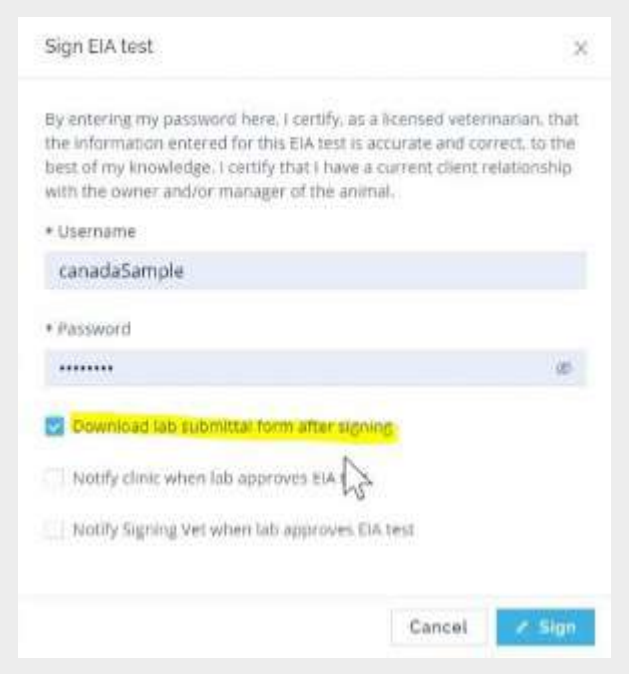
OTHER ANITBIOTICS AVAILABLE	
Amoxicillin	Metronidazole
Amoxicillin / clavulanic acid	Moxifloxacin
Azithromycin	Mupirocin
Bacitracin	Neomycin
Cefalotin	Nitrofurantoin
Cefovecin	Norfloxacin
Cefoxitin	Novobiocin
Cefpodoxime	Ofloxacin
Ceftazidime	Penicillin / Novobiocin
Cephalexin	Piperacillin
Cephazolin	Pirlimycin
Ciprofloxacin	Polymyxin B
Clindamycin	Pradofloxacin
Doxycycline	*Strep*tomycin
Enrofloxacin	Sulbactam / Ampicillin
Florfenicol	Sulfamethoxazole
Fusidic acid	Sulphafurazole / Sulfisoxazole
Gamithromycin	Ticarcillin (Gram- only)
Imipenem	Tildipirosin
Kanamycin	Tilmicosin
Lincomycin	Tobramycin
Marbofloxacin	Tulatromycin
Meropenem	

Appendix B – Procedure For Submitting Equine Infectious Anemia (EIA)

Biovet would like to remind you of the procedure for submitting Equine Infectious Anemia (EIA) tests via the EquusLINK platform:

- Be sure to identify the tubes
- Even though you have the form via the platform, it is important to attach a paper copy to your shipment.

Note that when you sign the application, the form automatically downloads to the screen, so you can print it. Alternatively, in the More menu (at the top right of your screen), you can download the form to print it.



To learn more, watch the EquusLINK video on www.biovet.ca/video-equuslink.

For further information, call 515-817-5703 or visit www.globalvetlink.com.

BIOVET®

A DIVISION OF ANTECH®

biovet.ca