



















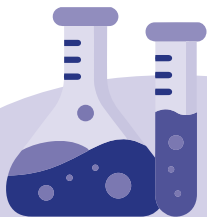
# Price List 2025



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# GENERAL INFORMATION



## GET STARTED

**BattLab** was established in 2005 with the aim of providing veterinary surgeons with a personalised, high-quality diagnostic laboratory service to enable them to make accurate assessments of their patients' health, from disease to optimal health. We offer a wide range of services, including routine clinical pathology investigations, as well as novel gastroenterology, genetics, infectious disease, and allergy panels to ensure that we can cater to all your needs.

## HOW TO SEND SAMPLES

You will need to download a submission form from our website and send it completed along with the sample to our laboratory. If you do not see the test you want on our submission form, do not worry, it is very likely we can still offer it. Check our price list or feel free to give us a call.

There are no contracts to sign and you can use our services on demand and as often as you wish. We will always do our best to provide you with rapid, efficient and high-quality service.

## COURIER SERVICE

We offer a **free national courier service** across mainland UK (excluding the Scottish Highlands). For our local clients, we provide same-day collections and deliveries which enables us send out many results on the same day. Our national courier service offers daily collections with samples delivered to us by 10am the following morning.

You can now **book collections online** through our website or call us on 0247 632 3275. If you prefer, you can download our postage label for free from our website. This will save you the time to write the address on the parcel and the money to ship the sample.





## REPORTING AND CONSULTATION

Reports are sent to our clients via email. We provide same-day turnaround time for many tests such as haematology, biochemistry, endocrinology, and states within 24 hours in the cytology section. Page numbers in the index are incorrect. Please note that in rare cases, turnaround times longer than a day may be affected by unforeseen delays due to the need to export samples to our main laboratory located in Germany. Each report is accompanied by a written comment/interpretation provided by our team of experts. Our pathologists are always available for **further discussions** over the phone. The consultation and interpretation services that we provide are strictly on a professional-to-professional basis. The test protocols and interpretations are based on recommendations from current veterinary literature and our vast experience. Nevertheless, it is crucial to consider test results and advice along with physical examination and other patient information collected by the primary care veterinary surgeon who has the ultimate responsibility for making decisions regarding diagnosis and treatment.

## LABORATORY SUPPLIES

We provide a range of **free laboratory supplies** to our clients on request. These supplies include blood tubes such as EDTA, serum, sodium citrate, and oxalate fluoride, as well as swabs, universals, faecal pots, histology pots, and biohazard bags. If you are a new customer, you can request a starter kit that contains all the necessary laboratory supplies and informative materials by sending us an email at [admin@battlab.com](mailto:admin@battlab.com). For those clients that are outside our local courier run, a shipping fee is applied.

## TERMS AND CONDITIONS

Please visit the link [www.battlab.com/terms-and-conditions](http://www.battlab.com/terms-and-conditions).



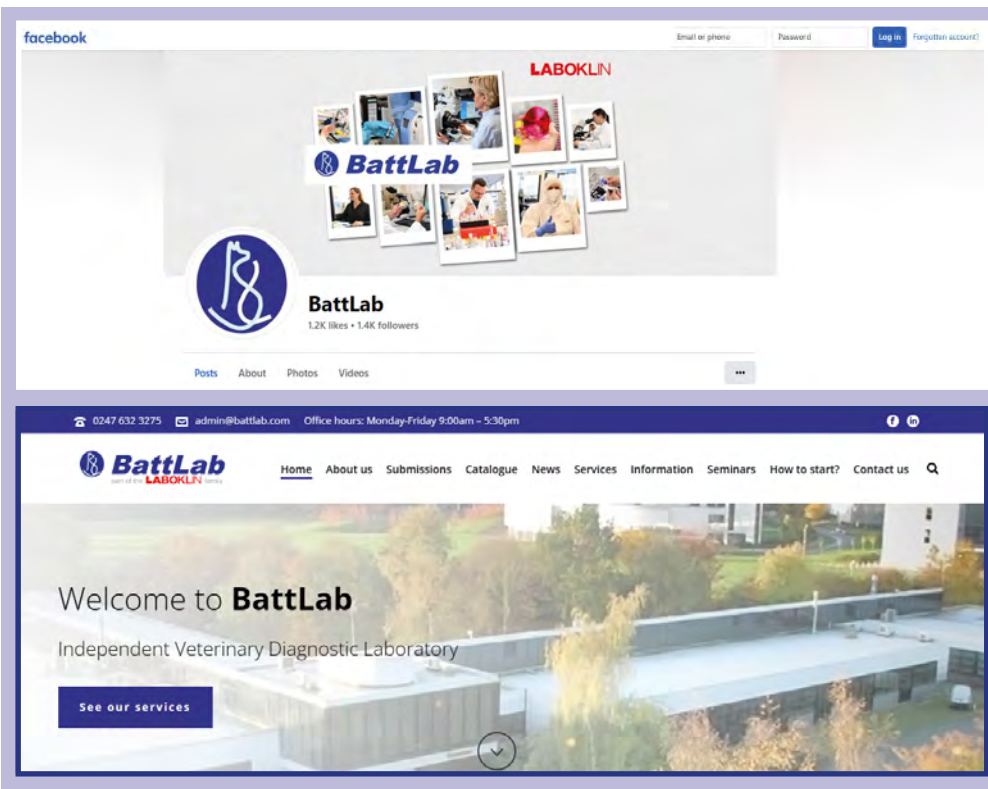
*BattLab is proud of supporting Guide Dogs,  
West Midlands Police dog unit and Vets in the Community*





## ACTIVITIES

At Battlab, we strongly believe that a truly progressive and dynamic laboratory should provide more than just sample testing. To keep you informed about all our latest news, announcements and information, we have various online platforms, including our website, newsletter, Facebook and LinkedIn pages. We encourage you to check them out!



You can easily access our online platforms by scanning the QR code below. Additionally, it can be used to sign up for our monthly newsletter on our website.



In addition to our online presence, we organise free seminars and webinars, give lectures at international conferences and attend veterinary congresses as exhibitors and speakers. Each of these activities has a different focus, but they all share the same aim - to engage the veterinary community in important discussions about disease management and prevention.



# EQUINE PROFILES



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Health screen	FBC, total protein, albumin, globulin, fibrinogen, urea, creatinine, Na, Cl, K, ALP, GGT, AST, CK, glucose, triglycerides	EQ1	EDTA, serum, citrate, Ox-F, blood smear		Same day. Up to 4 days for fibrinogen
<b>UPDATED!</b> Large screening profile	FBC, total protein, albumin, globulin, fibrinogen, urea, creatinine, Na, Cl, K, Ca, ALP, GGT, AST, GLDH, bilirubin, bile acids, CK, glucose, triglycerides, Fe, P, Cu, Zn, Se	EQ2	EDTA, serum, citrate, Ox-F, blood smear	Including trace minerals	Same day. Up to 4 days for fibrinogen and trace minerals
Senior profile	FBC, GGT, GLDH, lipase, bilirubin, triglycerides, glucose, total protein, albumin, globulin, urea, creatinine, P, Ca, Zn, Se, SDMA	EQ3	EDTA, serum, Ox-F		3-5 days for GGT, Zn, Se. Same day for the other parameters
<b>UPDATED!</b> Performance profile	FBC, AST, ALP, GGT, GLDH, LDH, CK, total protein, albumin, globulin, bilirubin, cholesterol, triglycerides, glucose, urea, creatinine, P, Ca, Mg, K, Na, Cl, Fe, SAA.	EQ4	EDTA, serum, Ox-F		3-5 days
Foal profile	FBC, triglycerides, urea, creatinine, total protein, GGT, Na, Ca, Mg, P + serum protein electrophoresis (SPE)	FOAL	EDTA, serum, Ox-F		3-5 days
Mineral profile	Mn, Zn, Se, Cu, Na, K, Ca, Mg, P, Cl, Fe	MINE	Serum		3-5 days
<b>NEW!</b> Iron metabolism profile	Serum iron, ferritin, hepcidin, iron saturation, UIBC, TIBC, SAA	IRMP	Serum		1 week
Equine PPID profile	Insulin, glucose, endogenous ACTH	PPID	Serum, separated chilled EDTA plasma, Ox-F	<ul style="list-style-type: none"> <li>• Serum and EDTA plasma have to be transferred into plain tubes and then kept chilled.</li> <li>• Contact the laboratory for collection with a freezer pack as those samples must arrive chilled.</li> <li>• Insulin samples may be basal (&gt;4h since any hard feed) or following oral carbohydrate challenge (60-75 mins after 0.45mls/kg Karo light syrup or 2h after 1g/kg dextrose powder).</li> </ul>	1-3 days



## EQUINE PROFILES



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Equine metabolic syndrome (EMS) profile	Insulin, glucose, triglycerides, adiponectin	EMS	Serum, Ox-F	Insulin sample may be basal (>4h since any hard feed) or following oral carbohydrate challenge (60-75 mins after 0.45mls/kg Karo light syrup or 2h after 1g/kg dextrose powder).	1-3 days

## FARM ANIMAL PROFILES

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
<b>UPDATED!</b> Large screening profile	FBC, ALP, GGT, bilirubin, cholesterol, triglycerides, glucose, AST, LDH, GLDH, CK, total protein, albumin, globulin, urea, creatinine, Ca, Mg, K, Na, Fe, P, Cu, Zn, Se	BO1	EDTA, serum, Ox-F, blood smear	Including trace minerals	Same day for FBC and most biochemistry parameters. Up to 4 days for GLDH and trace minerals
<b>UPDATED!</b> Ruminant performance profile	FBC, total protein, urea, cholesterol, GLDH, GGT, bilirubin, Ca, P, Mg, Na, K, Cl, B-HBA, NEFA, Cu, Se	RU1	EDTA, serum, Ox-F, blood smear		Same day for FBC. Up to 4 days for other parameters
Downer cow profile	Ca, P, Mg, AST, CK, urea, total protein	BO2	Serum		Same day
Ketosis profile	GLDH, GGT, bilirubin, total protein, $\beta$ -HBA, NEFA, cholesterol, urea	BO3	Serum		3-5 days
Muscular screening	CK, AST, LDH, Na, K, Ca, Cl, P, Mg, Fe	MUSC	Serum		3-5 days
Heavy metal toxicity screening	Arsenic, lead, cadmium, chrome, copper, manganese, mercury, thallium, zinc	HMT1	EDTA, serum, heparin blood		~10 days
Fertility profile	AST, Ca, Na, PO <sub>4</sub> , Mg, $\beta$ -HBA, NEFA	FERT	Serum		3-5 days
Weak calf profile	Total protein, Ca, P, Cu, Fe	WCP	Serum		3-5 days

**All reports (except health screen SAH) include a written interpretation/comment by a veterinary clinical pathologist.**  
Spun gel/serum separation should ideally be performed within 30 minutes of collection. Unseparated serum will result in inaccurate results. If Fluoride/Oxalate tubes are used for glucose measurement, please ensure they are filled to the proper level.



# FARM ANIMAL PROFILES



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Mineral profile 1	Ca, Na, P, Mg, Se, Zn, Cu	RUM1	Serum		3-5 days
Mineral profile 2	Ca, Na, P, Mg, Se, Zn, Cu, Mn, K, Cl, Fe	RUM2	Serum		3-5 days
Porcine profile	FBC, GGT, GLDH, bilirubin, ALT, AST, total protein, CK, urea, creatinine, Ca, P, Na, Mg, K, Se, Zn, Cu	POR1	EDTA, serum, Ox-F, blood smear	Including trace minerals	Same day for FBC and most biochemistry parameters. Up to 5 days for GLDH and trace minerals
Llama/Alpaca profile	FBC, ALP, GGT, GLDH, bilirubin, cholesterol, triglycerides, glucose, AST, CK, total protein, albumin, globulin, urea, creatinine, Ca, P, Na, Mg, K, Fe, Se, Zn, Cu	CAM1	EDTA, serum, Ox-F, blood smear	Including trace minerals	Same day for FBC and most biochemistry parameters. Up to 5 days for GLDH and trace minerals
<b>NEW!</b> Camelid profile	FBC, ALP, GGT, GLDH, bilirubin, cholesterol, triglycerides, glucose, AST, LDH, CK, total protein, albumin, globulin, urea, creatinine, Ca, P, Na, K, Cl, MG, Fr, Cu, Zn, Se	CAM2	EDTA, serum, Ox-F, blood smear	Including trace minerals	Same day for FBC and most biochemistry parameters. Up to 5 days for GLDH and trace minerals

**All reports (except health screen SAH) include a written interpretation/comment by a veterinary clinical pathologist.**  
 Spun gel/serum separation should ideally be performed within 30 minutes of collection. Unseparated serum will result in inaccurate results. If Fluoride/Oxalate tubes are used for glucose measurement, please ensure they are filled to the proper level.





# EQUINE GASTROENTEROLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Baermann lungworm detection	Lungworm larvae	LUNG	Fresh faeces		1 day
Endoparasites	Faecal parasites	ENDO	Fresh faeces		1 day
Faecal egg count (modified McMaster)	Egg count per gram of faeces	FEC	Fresh faeces		2-4 days
Large faecal profile	Bacterial pathogens including Salmonella, mycology, gas producers, endoparasites. PCR: Clostridium perfringens enterotoxin, equine coronavirus, Clostridium difficile toxin A and B.	FEP	Fresh faeces		3-5 days
Small faecal profile	Bacterial pathogens including Salmonella, mycology, endoparasites	GE10	Fresh faeces		2-4 days
Foal faecal profile	Bacterial pathogens including Salmonella, endoparasites including protozoa, strongyloides. PCR: rotavirus A, Clostridium perfringens enterotoxin, Clostridium perfringens netF, Clostridioides difficile toxin A+B.	FFFP	Fresh faeces		2-4 days
Dysbiosis analysis	Key bacteria microbiome quantitative (PCR)	DYSH	Fresh faeces		~ 1 week
Equine endoparasite profile	Endoparasites, faecal egg count (modified McMaster), SAFC	EEPP	Fresh faeces		3-5 days
<b>NEW!</b> Camelid faecal profile	Bacterial pathogens including Salmonella, mycology, gas producers, endoparasites including coccidia, cryptosporidia. PCR: rotavirus, coronavirus.	CAFP	Fresh faeces		3-5 days

For more tests (e.g. endoparasites, bacterial pathogens), please refer to dog/cat and PCR sections



# FARM ANIMAL GASTROENTEROLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Faecal bacterial pathogens	e.g. E. coli, Campylobacter, Salmonella	GE10	Fresh faeces		1-4 days
Bovine faecal profile	Endoparasites, bacteriology incl. Salmonella, mycology, Mycobacteria avium ssp. paratuberculosis (PCR)	FBP	Fresh faeces		Up to 1 week
Calf faecal profile - Small	Rotavirus, coronavirus, Cryptosporidium, K99 (E. coli fimbrial antigen)	FCP	Fresh faeces		Up to 1 week
Calf faecal profile - Large	Bacteriology incl. Salmonella, mycology, endoparasites inc. Cryptosporidium, rotavirus, coronavirus	FCPL	Fresh faeces		Up to 1 week
Piglet faecal profile	Bacteriology incl. Salmonella, mycology, endoparasites, rotavirus, coronavirus, Clostridium perfringens enterotoxin	PFP	Fresh faeces		Up to 1 week
Porcine faecal profile	Bacteriology incl. Salmonella, mycology, Lawsonia intracellularis (PCR)	FPOR	Fresh faeces		Up to 1 week



# HAEMATOTOLOGY



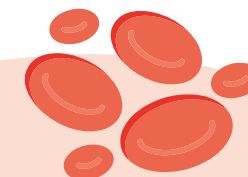
All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Complete blood count	White blood cell count, red blood cell count, platelet count, haemoglobin, HCT, MCV, MCHC, MCH, RDW, leukocyte differential count, morphology assessment, reticulocyte count (when appropriate and/or requested)	FBC1	EDTA, blood smear		Same day
Blood smear examination		FILM	Blood smear	Blood smears submitted without whole blood are examined by highly trained haematology technicians. If a CBC was performed on an in-clinic analyzer, please send results from the analyser along with the blood smears to facilitate interpretation by the pathologist.	Same day
Coombs test (equine)		COO	EDTA	To confirm IMHA	3-5 days
<b>NEW!</b> Iron metabolism profile (equine)	Fe, ferritin, hepcidin, iron saturation, UIBC, TIBC, SAA	IRMP	Serum		1 week
Erythropoietin (EPO)		EPO	Serum, preferably chilled	To investigate erythrocytosis	2 weeks

# COAGULATION

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Coagulation screen	Complete blood count, aPTT and PT	CP1	EDTA, citrate plasma, blood smear	Sample collection and handling as below for citrate sample	Same day
Activated partial thromboplastin time (aPTT) and Prothrombin time (PT)		APT2	Citrate plasma	<ul style="list-style-type: none"> <li>• Fill blood to the line of a citrate tube</li> <li>• Gently invert several times to mix thoroughly</li> <li>• Check for clots and then centrifuge immediately</li> <li>• Transfer plasma into a plain tube and label "citrated plasma"</li> <li>• Freeze or keep chilled</li> </ul>	Same day



# COAGULATION



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Activated partial thromboplastin time (aPTT)		APTT	Citrate plasma	Sample collection and handling as above	Same day
Prothrombin time (PT)		PT	Citrate plasma	Sample collection and handling as above	Same day
D-dimers		DDIM	Citrate plasma	Sample collection and handling as above	2-3 days
DIC profile	Complete blood count, PT, aPTT, D-dimers, fibrinogen	DIC	EDTA, citrate plasma, blood smear	Sample collection and handling for citrate sample as above	Same day for FBC, PT and aPTT. 2-3 days for D-dimers and fibrinogen
Fibrinogen		FIB	Citrate plasma	Sample collection and handling as above	2-4 days
Coagulation factors			Frozen citrated plasma	Please contact the laboratory!	

# CLINICAL CHEMISTRY



All tests include full reporting unless otherwise stated

Profiles	Code	Sample	Comments	Turnaround
Single biochemistry test: total protein, albumin, globulin, urea, creatinine, Na, Cl, K, P, Ca, ALP, GGT, ALT, AST, total bilirubin, cholesterol, triglycerides, amylase, DGGR lipase, CK, glucose, etc.		Serum, Ox-F for glucose		Same day
Biochemistry tests added to profile (same as above)		Serum, Ox-F for glucose		Same day
Alpha fetoprotein (AFP)	AFP	Serum		1 week
Bile acids	BA	Serum		Same day
Cholesterol (HDL)	CHOH	Serum		2-4 days
Cholesterol (LDL)	COHL	Serum		2-4 days
Copper	COPR	Serum		2-4 days
Folate / Folic acid	FOL	Serum		Run Mon/Wed/Fri
Fructosamine	FRU	Serum		Same day
Glutathione peroxidase	GLPX	Whole EDTA or heparin		2-4 days
GLDH	GLDH	Serum		2-4 days
Haptoglobin	HAP	Serum		2-4 days
Alpha-hydroxybutyrate dehydrogenase ( $\alpha$ HBDH)	HBDH	Serum		2-4 days
Ionised calcium	CA+	Serum	<ul style="list-style-type: none"> <li>Collect into a plain serum tube (no gel) ensuring the tube is completely filled without any air bubbles</li> <li>Allow blood to clot (~15-20 min), centrifuge and transfer serum into a plain airtight tube, completely filling it (NO air)</li> </ul>	2 days
Iron	IRON	Serum		2-4 days
LDH	LDH	Serum		2-4 days
Lead	LEAD	Whole EDTA, heparin		1 week
Magnesium	MAG	Serum		Same day
Manganese	MANG	Serum		2-4 days



# CLINICAL CHEMISTRY



All tests include full reporting unless otherwise stated

Profiles	Code	Sample	Comments	Turnaround
Selenium	SEL	Serum		2-4 days
SDMA	SDMA	Serum		Same day
Serum Amyloid A (SAA)	SAA	Serum		2-4 days
Serum electrolytes 1	ELE1	Serum	Sodium, Potassium, Chloride, Na/K ratio	Same day
Serum electrolytes 2	ELEC	Serum	Sodium, Potassium, Chloride, Na/K ratio, Calcium, Phosphorus	Same day
Uric acid	UA	Serum		Same day
Vitamin A	VITA	Serum		1 week
Vitamin B12 (Cobalamin)	B12	Serum		Run Mon/Wed/Fri
Vitamin D3 (25 OH)	VITD	Serum		
Vitamin E	VITE	Serum		1 week
Other vitamins		Serum	Contact the laboratory	



## ENDOCRINOLOGY - THYROID



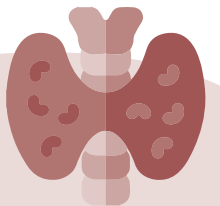
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Profiles	Includes	Code	Sample	Comments	Turnaround
Total T4		K9T4/ T4	Serum	No gel tubes	Same day
Total T4, urea, creatinine		T4UC	Serum	No gel tubes	Same day
Total T4, TSH		T4SH	Serum	No gel tubes.	Same day
TSH		CTSH/ TSH	Serum	No gel tubes	Same day

## ENDOCRINOLOGY - ADRENAL/PITUITARY

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Cortisol		COR	Serum	No gel tubes. Used as a screening test for hypoadrenocorticism	Same day
Endogenous ACTH		ACTH	Frozen separated EDTA plasma	<p>No gel tubes. Help differentiating between pituitary dependent hyperadrenocorticism and adrenal neoplasia. In horses, it is a diagnostic indicator of pituitary pars intermedia dysfunction (PPID)</p> <ul style="list-style-type: none"> <li>Collect fasted blood sample into a plastic chilled EDTA tube (no glass tubes)</li> <li>Centrifuge immediately</li> <li>Transfer plasma into a chilled plastic plain tube</li> <li>Freeze immediately</li> <li>Sample MUST arrive frozen</li> </ul>	2-4 days

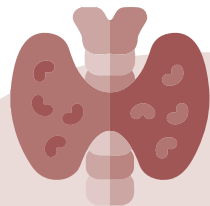


# ENDOCRINOLOGY - ADRENAL/PITUITARY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Dexamethasone suppression test (overnight method - horses)		ADR4	Pre and 2 post serum	<p>No gel tubes. Used to help diagnose pituitary pars intermedia dysfunction</p> <ul style="list-style-type: none"> <li>Collect fasted baseline serum sample between 4pm and 6pm</li> <li>Inject 40ug/Kg dexamethasone intramuscularly</li> <li>Collect at noon the next day post-dexamethasone sample</li> <li>Label tubes appropriately</li> </ul>	Same day
Urine cortisol:creatinine ratio		UCCR	Urine	Used as a screening test for hyperadrenocorticism.	3-4 days
Equine PPID profile (insulin, glucose, endogenous ACTH)		PPID	Frozen serum + frozen separated EDTA plasma + Ox-F	<ul style="list-style-type: none"> <li>Serum and EDTA plasma have to be transferred into plain tubes and then kept chilled.</li> <li>Contact the laboratory for advise on sending samples that must arrive chilled or frozen.</li> <li>Insulin samples may be basal (&gt;4h since any hard fee) or following oral carbohydrate challenge (60-75 mins after 0.45mls/kg Karo light syrup or 2h after 1g/kg dextrose powder)</li> </ul>	1-3 days
Equine metabolic syndrome profile (insulin, glucose, triglycerides, adiponectin)		EMS	Frozen serum + Ox-F	Insulin sample may be basal (>4h since any hard feed) or following oral carbohydrate challenge (60-75 mins after 0.45mls/kg Karo light syrup or 2h after 1g/kg dextrose powder)	1-3 days



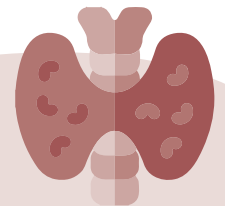


# ENDOCRINOLOGY - REPRODUCTION



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Anti-Mullerian hormone (AMH)		AMH	Serum	No gel tubes. Used as a cryptorchid test to detect testicular tissue. It may also be to identify granulosa cell tumours (GCTs).	Up to 10 days
<b>NEW!</b> Inhibin-B		INIB	Serum	No gel tubes. Equine granulosa cell tumours diagnosis.	Up to 2 weeks
Oestrone sulphate		OESH	Serum	No gel tubes. Pregnancy test for horses (from day 110 and until 1 week prior to birth) May be used in horse and ponies more than three years of age (not donkeys) to assess for cryptorchidism.	~1 week
Pregnant mare serum gonadotrophin (PMSG)		PMSG	Serum	No gel tubes. Pregnancy test for horses (from day 45 to 110)	~1 week
Progesterone		PRO	Serum	No gel tubes. May be used to assess corpus luteum sufficiency in early pregnancy	Same day
Dynamic testosterone test (Rig test)		TESS	Pre and post serum	No gel tubes. Used to detect presence of testicular tissue. EQUINE Collect fasted baseline serum sample Inject 6000 IU hCG intravenously Collect a post-hCG sample 30-120 minutes Label tubes appropriately	3-4 days
Bovine pregnancy-associated glycoproteins (PAGs)		PAG	Serum	No gel tubes. Pregnancy test for cattle, sheep, goat (from day 28 after conception)	3-4 days

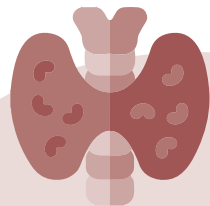


# ENDOCRINOLOGY - OTHER



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Insulin (add glucose - add £7)		INS	Serum (insulin), Ox-F for glucose	Resting (basal) insulin concentrations: A single blood sample is collected with the horse in the fed state (hay or pasture, but not grain), and plasma/serum insulin concentrations are measured to detect resting hyperinsulinemia	Up to 1 week
Parathyroid hormone (PTH) (add ionised calcium - £30)		PTH	Frozen EDTA plasma only (PTH), serum (iCa)	<p>For evaluation of suspected hyperparathyroidism.</p> <ul style="list-style-type: none"> <li>Collect fasted blood sample into a plastic chilled EDTA tube (no glass tubes, avoid haemolysis and lipemia)</li> <li>Gently invert several times to mix thoroughly</li> <li>Centrifuge immediately</li> <li>Transfer plasma into a chilled plastic plain tube (mix well again if using an EDTA tube)</li> <li>Freeze immediately</li> <li>Sample MUST arrive frozen</li> </ul> <p>Ionised calcium should be measured concurrently</p> <ul style="list-style-type: none"> <li>Collect into a plain serum tube (no gel) ensuring the tube is completely filled without any air bubbles</li> <li>Allow blood to clot (~15-20 min), centrifuge and transfer serum into a plain airtight tube, completely filling it (NO air)</li> </ul>	Up to 10 days
Parathyroid hormone related peptide (PTHrp) (add ionised calcium - £30)		PTHrP	Frozen EDTA plasma only (PTHrp), serum (iCa)	<p>For evaluation of suspected hypercalcaemia of malignancy.</p> <ul style="list-style-type: none"> <li>Collect fasted blood sample into a plastic chilled EDTA tube (no glass tubes, avoid haemolysis and lipemia)</li> <li>Gently invert several times to mix thoroughly</li> <li>Centrifuge immediately</li> <li>Transfer plasma into a chilled plastic plain tube</li> <li>Freeze immediately</li> <li>Sample MUST arrive frozen</li> </ul> <p>Ionised calcium should be measured concurrently</p> <ul style="list-style-type: none"> <li>Collect into a plain serum tube (no gel) ensuring the tube is completely filled without any air bubbles</li> <li>Allow blood to clot (~15-20 min), centrifuge and transfer serum into a plain airtight tube, completely filling it (NO air)</li> </ul>	Up to 10 days



# URINALYSIS



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Standard urinalysis	Sediment examination (unstained preparation examined by an experienced technician), specific gravity, protein, glucose, ketones, pH (meter), heme, bilirubin	UR1	5 ml urine, plain		Same day
Standard urinalysis with urine protein:-creatinine ratio	UR1 plus UPCR	UR2	5 ml urine, plain		Same day
Standard urinalysis with aerobic bacterial culture and sensitivity	UR1 plus CUL1 (Aerobic bacterial culture and antibiotic sensitivities)	UR3	5 ml urine, plain and boric acid	Fill tube to the black arrow mark to avoid high boric acid concentration	Same day. 1-5 days for culture
Comprehensive urinalysis	UR1 plus UPCR and CUL1 (Aerobic bacterial culture and antibiotic sensitivities)	UR4	5 ml urine, plain and boric acid	Fill tube to the black arrow mark to avoid high boric acid concentration	Same day. 1-5 days for culture
Urine culture and sensitivity	Aerobic bacterial culture and antibiotic sensitivities	CUL1	5 ml urine, boric acid	Fill tube to the black arrow mark to avoid high boric acid concentration	1-5 days
Urine protein:-creatinine ratio (UPC)		UPCR	Minimum of 1 ml urine in plain tube		Same day
Urine cortisol:-creatinine ratio		UCCR	5 ml urine, plain		2-4 days
Urine cytology	Cytological examination of urine. Performed by a clinical pathologist on stained smears obtained by sediment preparation or cytocentrifugation. Recommended if suspicion for neoplasia	CYTU	5 ml urine, plain and EDTA tubes, air-dried urine sediment slides		Same day
Urine cytology (when added to a UR profile)	as above	CYU+	as above		Same day
Urine protein electrophoresis		UPE	Minimum of 1 ml urine in plain tube	Bence Jones protein confirmatory test available upon request (+£120 - 1 week turnaround time)	3-4 days



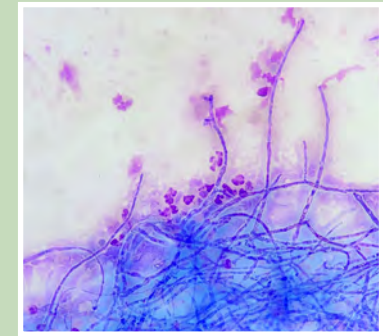
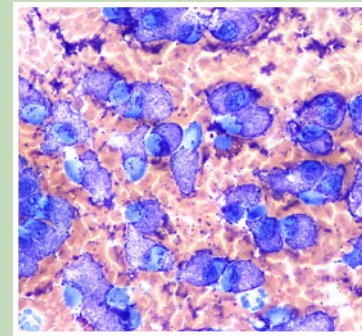
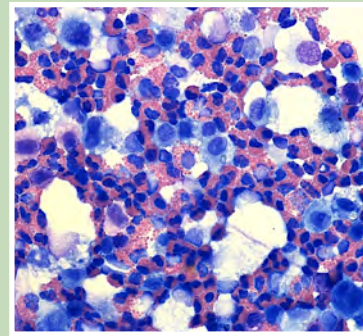
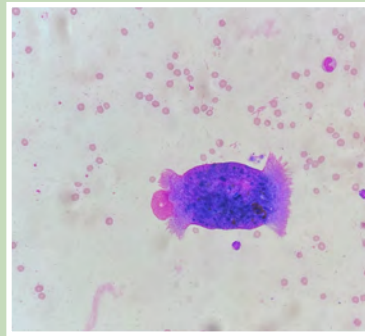
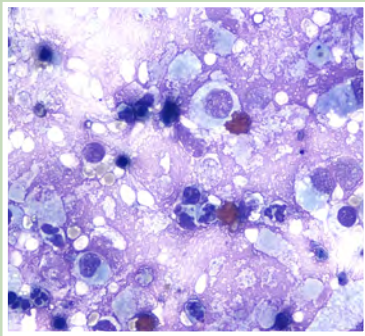
# URINALYSIS



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Fractional excretion	Can be performed for Sodium, Chloride, Potassium, Calcium or Phosphorus	FRAC	Serum and urine		2-4 days
Calculus analysis		CALC	Dry calculus	Separate composition of shell and core and calculus is available upon request (+£10).	1 day





Batt Laboratories offers a comprehensive cytology service for all domestic species provided by experienced clinical pathologists.

Cytology is a rapid, simple, safe and cost-effective diagnostic method for the diagnosis of a spectrum of inflammatory and neoplastic diseases.

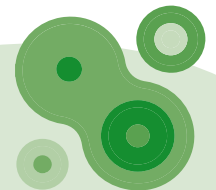
The turnaround time for all our cytology submissions is typically within 24 hours of receipt of the sample. Our clinical pathologists are also readily available to discuss results and to give further advice. Samples may be submitted as air-dried smears or fluid for processing.

Here are a few tips you should find helpful when submitting samples for cytology:

- **Clinical history and location** are vitally important in interpreting cytology samples. Submission forms should include a brief clinical history, site of collection and appearance of the lesion/organ sampled. Slides should have frosted ends to enable them to be appropriately labelled (patient name, site of aspiration) - this is particularly relevant when submitting samples from multiple lesions.
- **Exposure to formalin** of any kind renders samples un-readable using the traditional Romanowsky stain - cytology samples should therefore be sent in a sealed bag, separate from any biopsy specimens in formalin.

- When submitting **fluid samples** of any kind, it is best to provide both EDTA and plain tubes samples, as well as one or two air-dried direct smears.
- In cases where **bacterial culture** of a fluid may be required, a separate sample (in a plain tube) must be provided.
- **Bone marrow aspirates** should always be submitted with a concurrent EDTA blood sample (or no longer than 24h difference between sampling times). Bone marrow interpretation is frequently not possible in the absence of concurrent peripheral blood evaluation,

**... Please don't hesitate to call for clarification of our assays and services, including sampling protocols or to discuss any additional requirements.**



# CYTOLOGY/HISTOLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Cytology (FNA/smears) 1-2 sites		CYT	Air dried smears	Up to 2 sites from the same animal and up to 6 slides.	Up to 1 day
Cytology (FNA/smears) 3-4 sites		CYT3	Air dried smears	3 to 4 sites from the same animal and up to 12 slides	Up to 1 day
Cytology (FNA/smears) 5-6 sites		CYT5	Air dried smears	5 to 6 sites from the same animal and up to 18 slides	Up to 1 day
Cytology (fluid filled masses)		CYTF	Fluid	Submit fluid in both EDTA and plain tubes + 1-2 direct smears	Up to 1 day
Cytology (cavitary effusions)	Including cytology, total protein, albumin, globulin (cholesterol and triglyceride when appropriate)	EFF	Fluid + air dried smears	Submit fluid in both EDTA and plain tubes + 1-2 direct smears	Up to 1 day
Cytology (CSF)	Including cytology, total protein, total nucleated cell count, total red blood cell count	CCSF	Fluid + air dried smears	Submit fluid in EDTA and/or plain tubes	Up to 1 day
Cytology (synovial fluid)		SYN1	Fluid + air dried smears	Submit fluid in EDTA tube + 1-2 direct smears. Up to 2 sites	Up to 1 day
Cytology (synovial fluid)		SYN2	Fluid + air dried smears	Submit fluid in EDTA tube + 1-2 direct smears. 3 or more sites.	Up to 1 day
Cytology (urine)		CYTU	Urine	Submit 5ml fresh urine sample in plain and EDTA tubes	Up to 1 day
Cytology (bronchoalveolar lavage/tracheal wash)		BAL	bronchoalveolar lavage/tracheal wash	Submit fluid in both EDTA and plain tubes + 1-2 direct or sediment smears	Up to 1 day
Bone marrow cytology		BM1	Air dried smears + EDTA tube	Submit concurrent EDTA sample of peripheral blood (haematology + £25)	Up to 1 day
Histopathology		HI1	Tissue in formalin	Up to 4 tissues or anatomic sites from the same animal, less than 4cm in size.	3-4 days
Histopathology (multiple or large sites)		HI2	Tissue in formalin	5 or more tissues or anatomic sites from the same animal or lesions over 4cm in size	3-4 days

**PLEASE NOTE:** Any and all cytology slides should be packaged and submitted separately from histology samples as any exposure to formalin fumes can markedly alter cell morphology potentially rendering the sample non-diagnostic. **DO NOT** add formalin to any fluid samples being submitted for cytology. Turnaround time for histopathology may be longer than 4 days if the sample require further fixation or decalcification.



- We identify both aerobic and anaerobic bacteria, if needed by **Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometer (MALDI-TOF)**. This technology generates characteristic mass spectral fingerprints, that are unique signatures for each microorganism and are this ideal for an accurate microbial identification at the genus and species level.
- **Extensive antibiotic sensitivity panels** tailored on the isolated bacteria. These are performed with microdilution technology providing **minimum inhibitory concentration (MIC)** for selected antibiotics based on Clinical and Laboratory Standards Institute (CLSI) guidelines and European Committee on Antimicrobial Susceptibility Testing (EUCAST). This quantitative method of susceptibility testing helps determine which class of antibiotic is most effective. This information can lead to an appropriate choice of an antibiotic that will increase chances of treatment success and help in the fight to reduce antibiotic resistance.
- **Fungal cultures** including Dermatophytes.
- **Serology and PCR tests** for selected bacteria and fungi.





All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Aerobic culture	Aerobic bacterial cultures, systemic and topical (where appropriate) antibiotic sensitivities	CUL1	Charcoal swab		1-5 days
Aerobic culture additional site	Aerobic bacterial cultures, systemic and topical (where appropriate) antibiotic sensitivities	CU1+	Charcoal swab	Unless otherwise stated on the submission form, if more than 1 swab is submitted, these will be tested separately.	1-5 days
Aerobic and anaerobic culture	Aerobic and anaerobic bacterial cultures, yeasts culture, systemic and topical (where appropriate) antibiotic sensitivities	CUL2	Charcoal swab		1-5 days. Up to 10 days for anaerobic
Aerobic and anaerobic culture additional site	Aerobic and anaerobic bacterial cultures, yeasts culture, systemic and topical (where appropriate) antibiotic sensitivities	CU2+	Charcoal swab	Unless otherwise stated on the submission form, if more than 1 swab is submitted, these will be tested separately.	1-5 days. Up to 10 days for anaerobic
Blood culture	Aerobic and anaerobic bacterial cultures, systemic antibiotic sensitivities	BC&C	Culture media jar supplied upon request	5-10 mls of blood depending on animal size	Up to 14 days
Environmental culture (qualitative)	Aerobic bacterial cultures	CULS	Charcoal swab, contact plate, dry swab *	MRSA culture if Staphylococcus aureus is identified (* Wet the dry swab in sterile saline/ PBS solution and swab the area. £15 per each additional swab)	1-5 days
Environmental culture extended (up to 2 sites)	Aerobic bacterial cultures, Salmonella culture, Campylobacter culture	CUL+	Charcoal swab, contact plate, dry swab *, for further enquiries please contact the lab	MRSA culture if Staphylococcus aureus is identified (* Wet the dry swab in sterile saline/ PBS solution and swab the area. £20 per each additional swab)	1-5 days
Faecal bacterial pathogens	Aerobic bacterial cultures, Salmonella culture, Campylobacter culture	GE10	Fresh faeces	All species	1-5 days
Nocardia, Actinomyces culture		NAC	Charcoal swab		Up to 2 weeks
Urine culture and sensitivity	Aerobic bacterial culture and antibiotic sensitivities	CUL1	5 ml urine, boric acid	Fill tube to the black arrow mark to avoid high boric acid concentration	1-5 days





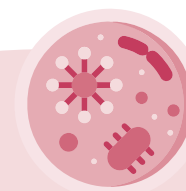
# DERMATOLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Fungal culture		FUNG	Skin scraping, plucked hairs, skin/ear swab		3-5 days
Dermatophytes culture		DERC	Skin scraping, plucked hairs	May take 2-4 weeks for growth	Up to 4 weeks
Dermatophytes PCR	PCR detection of <i>M. canis</i> , <i>M. gypseum</i> , <i>M. persicolor</i> , <i>T. mentagrophytes</i> , <i>T. equinu</i> , <i>Trichophyton</i> species of <i>Arthroderma benhamiae</i> , <i>Trichophyton equinum</i> , <i>Trichophyton verrucosum</i> , <i>Trichophyton erinacei</i>	DERP	Skin scraping, plucked hairs	Species differentiation possible in positive cases (+£40)	3-5 days
Skin microscopy (scraping)/trichogram/ear microscopy		DER1	Skin scraping, hairs, dry ear swab	Per site and up to 2 slides	Same day
Skin microscopy (scraping) and Dermatophytes culture		DER2	Skin scraping, plucked hairs, skin swab, ear swab		Same day. Up to 4 weeks for Dermatophytes
<b>UPDATED!</b> Skin microscopy (scraping)/ear microscopy, fungal and bacterial culture		DER3	Skin scraping, plucked hairs, skin swab, ear swab	All the samples are cultured separately	Same day. 1-5 days for bacterial culture
<b>UPDATED!</b> Skin microscopy (scraping)/ear microscopy, fungal and bacterial culture and Dermatophytes culture		DER4	Skin scraping, plucked hairs, skin swab, ear swab	All the samples are cultured separately	Same day. 1-5 days for bacterial culture. Up to 4 weeks for Dermatophytes

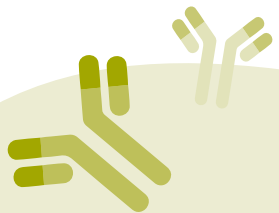
**NOTES:** Please avoid submitting skin scrapings with oil, if possible. Charcoal swabs should be used for microbiology culture unless otherwise indicated. Culture results are accompanied by MALDI-TOF identification when appropriate or when specifically requested. Sensitivity panels are tailored according to species, site and organism isolated and are included in the cost of the culture test. If specific antibiotics are required, please indicate this clearly in the clinical information box. These will be performed, where possible. An extra charge will be applied.





All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Coombs test		COO	EDTA	To confirm IMHA	3-5 days
IgA		IGA	Serum		3-4 days
IgG		IGGC	Serum		3-4 days
IgM		IGM	Serum		3-4 days
Serum protein electrophoresis		SPE	Serum	Capillary electrophoresis	3-4 days
Urine protein electrophoresis		UPE	Urine	Gel electrophoresis	3-4 days



# THERAPEUTIC DRUG MONITORING AND TOXICOLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Colchicine		COLC	1ml urine		4-5 days
Cortisol		COR	Serum	No gel tubes, see endocrinology - adrenal section for tests to monitor hyperadrenocorticism	Same day
Digoxin		DIG	At least 0.5 ml serum	No gel tubes. After a minimum of 3-5 days of treatment 6-8 hours post-pill	2 days
Heavy metal toxicity screen		HMTS	Serum, EDTA, urine, fresh tissue, feed sample		~1 week
Mycotoxin panel		TOX6	Stomach content, feed sample	Screening for aflatoxins, zearalenone, vomitoxin	~1 week
Cadmium		CADM	Serum		~1 week
Cobalt		COB	Serum		~1 week
Lead		LEAD	Whole EDTA or heparin		~1 week
Thallium		TALL	Urine		~1 week
Doping profile		DOPP		Please contact the laboratory!	
Antiphlogistics profile		ANTP		Please contact the laboratory!	
Sedative profile		dopp		Please contact the laboratory!	

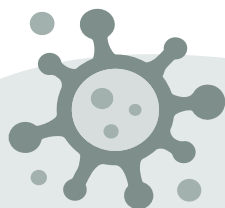


# INFECTIOUS DISEASES – ANTIGEN/ANTIBODY TESTING – EQUINE



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Anaplasma phagocytophilum antibodies		SANA	Serum	ELISA	2-4 days
Anoplocephala perfoliata antibodies (tape worm)		ANOP	Serum	ELISA	1 week
Babesia antibodies (IFAT)		SBGE	Serum	IFAT	2-4 days
Babesia antibodies (ELISA)		BABE	Serum	ELISA	3-5 days
Babesia antibodies (complement fixation)		BACF	Serum	CFTs	1 week
Bornavirus antibodies		SBOR	Serum	IFAT	Up to 10 days
Borrelia antibodies (IgM + IgG)		BOR	Serum	IFAT	2-4 days
Borrelia antibodies (Western blot)		SBWB	Serum	Western blot	1 week
Burkholderia mallei antibodies (Glanders)		SGLA	Serum	CFT	1 week
<b>NEW!</b> Corynebacterium pseudotuberculosis antibodies		COPA	Serum	ELISA. Llama, Alpaca	1 week
<b>NEW!</b> Fasciola hepatica antibodies		FAHE	Serum	ELISA	1 week
Herpesvirus 1 and 4 antibodies, equine		EH14	Serum	ELISA	3-5 days
Infectious anemia antibodies (Coggins), equine		EIAC	Serum	IFAT	1 week
Infectious anemia antibodies (ELISA), equine		EIAE	Serum	ELISA	2-4 days
Influenza A virus antibodies		SEIV	Serum	HAH	1 week
<b>NEW!</b> Larval cyathostominosis		LACY	Serum	ELISA	Up to 2 weeks
Leptospira antibodies		LEP	Serum	MAT	2-4 days
Listeria antibodies		SLIS	Serum	IFAT	2-4 days
Rotavirus antigens		ROTA	Faeces	EIA	2-4 days
Salmonella abortus equi antibodies		SSAE	Serum	Slow agglutination	1 week
Salmonella antibodies		SALA	Serum	MAT	2-4 days
Streptococcus equi antibody (strangles)		SEA	Serum	ELISA. Quantitative	1 week
Clostridium antibodies (tetanus)		TET	Serum	ICA	Up to 2 weeks
Theileria equi		THEI	Serum	ELISA	1 week



## INFECTIOUS DISEASES – ANTIGEN/ANTIBODY TESTING – EQUINE



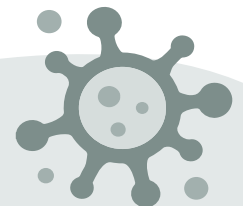
All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Tick-borne encephalitis antibodies (IgG)		TBEE	Serum, CSF	ELISA	3-5 days
Tick-borne encephalitis antibodies (IgM)		TBEM	Serum	ELISA	3-5 days
Trypanosoma equiperdum (Dourine) antibodies		SDOU	Serum	CFTs	1 week
Trypanosoma evansi		TREV	Serum	CATT	2-4 days
Viral arteritis antibodies, equine		SEVA	Serum	VNT	1 week
West Nile virus antibodies (IgG + IgM)		WNVE	Serum	ELISA	3-5 days

## INFECTIOUS DISEASES – ANTIGEN/ANTIBODY TESTING – FARM ANIMALS

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Actinobacillus pleuropneumoniae antibodies		SAPP	Serum	ELISA	1 week
Anaplasma phagocytophilum antibodies		SANA	Serum	IFAT	2-4 days
Aspergillus antibody		ASPS	Serum	MAT	2-4 days
Aujeszky's disease antibodies (pseudorabies)		AUDI	Serum	VNT	2-4 days
Babesia antigens (microscopic)		BABA	Blood smear, EDTA		2-4 days
Bornavirus antibodies		SBOR	Serum	IFAT	Up to 10 days
Borrelia antibodies (IgM + IgG)		BOR	Serum	ELISA	2-4 days
Brucella antibodies		BBRU	Serum	ELISA	3-5 days
BVD Virus antibodies		SBVD	Serum, milk	ELISA	1 week
Arthritis encephalitis virus (Maedi-Visna) antibodies, caprine		SCAE	Serum	ELISA	1 week
Chlamydia antibodies		CHB	Serum	IFAT	2-4 days

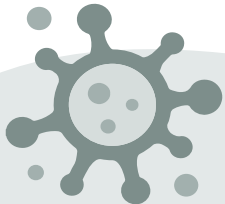


# INFECTIOUS DISEASES – ANTIGEN/ANTIBODY TESTING – FARM ANIMALS



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Corynebacterium pseudotuberculosis antibodies		COPA	Serum	ELISA	1 week
Coxiella burnetii antibodies		SCOX	Serum	IFAT	2-4 days
Fasciola hepatica antibodies		SFAS	Serum, milk	EIA	1 week
Herpesvirus 1 (IBR) gB, bovine		BHVB	Serum	ELISA	1 week
Herpesvirus 1 (IBR) gE, bovine		BHVE	Serum	ELISA	1 week
Leptospira antibodies		LEP	Serum	MAT	2-4 days
Listeria antibodies		SLIS	Serum	IFAT	2-4 days
Maedi-Visna antibodies		MVIS	Serum	ELISA	1 week
Mycoplasma hyopneumoniae antibodies		SMYP	Serum	ELISA	1 week
Neospora caninum antibodies (IgM + IgG)		NEOB	Serum	ELISA	1 week
Ostertagia ostertagi antibodies		OSOS	Milk, bulk tank milk	ELISA	1 week
Paratuberculosis antibodies (Johne's disease)		SPT	Serum, milk	ELISA	1 week
Porcine reproductive and respiratory syndrome virus antibodies		PRRS	Serum	ELISA	1 week
Toxoplasma antibodies (IgG + IgM)		TOX	Serum	ELISA	Up to 2 days



# INFECTIOUS DISEASES - PCR - EQUINE



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Anaplasma phagocytophilum		ANAP	EDTA, tick		3-5 days
Babesia species		BABP	EDTA, tick		3-5 days
Bornavirus		XBVE	EDTA, CSF, aqueous humour		3-5 days
Borrelia species		BORA	Synovial fluid/synovium, tick, CSF, skin		3-5 days
Coronavirus (EcoV)		XCVE	Faeces		3-5 days
<b>NEW!</b> Dermatophilus congolensis		DERC	Skin, scab tissue		3-5 days
Dermatophytes		DERP	Plucked hair from the active border of lesions	Species differentiation available	3-5 days
<b>NEW!</b> Hepacivirus		HEPA	Serum, EDTA, liver		3-5 days
Herpesvirus 1 (EHV-1), equine		XA01	Dry swab, CSF, aborted material, EDTA	Including differentiation of neuro-pathogenic variant	3-5 days
Herpesvirus 2 (EHV-2), equine		XA02	Dry swab		3-5 days
Herpesvirus 3 (EHV-3), equine		XH03	Dry swab, tissue		3-5 days
Herpesvirus 4 (EHV-4), equine		XA04	Dry swab, EDTA		3-5 days
Herpesvirus 5 (EHV-5), equine		XA05	Dry swab, EDTA		3-5 days
Influenza A virus, equine		XEIA	Dry swab		3-5 days
Lawsonia intracellularis		XLAW	Faeces		3-5 days
Leptospira species		LEPP	Urine and EDTA, aborted material, aqueous humor		3-5 days
Listeria monocytogenes		XLMC	EDTA, aborted material		3-5 days
<b>NEW!</b> Papillomavirus (EcPV)		XBP1	Skin		3-5 days
Papillomavirus (sarcoïd), bovine		XBP	Scab, hairs, tissue		3-5 days
Parvovirus (EqPV-H)		PARE	EDTA, serum		3-5 days
Rhodococcus equi (R. Hoagii)		XRHO	Dry swab, faeces		3-5 days
<b>NEW!</b> Rotavirus A		XROT	Faeces		3-5 days



## INFECTIOUS DISEASES - PCR - EQUINE



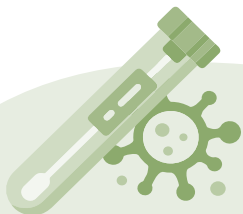
All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Salmonella species		XSAL	Faeces		1-3 days
Streptococcus equi (strangles)		XSES	Swab, lymph node		3-5 days
Streptococcus equi/ zooepidemicus		XSEE	Swab, lymph node		3-5 days
Taylorella equigenitalis		XTAY	Swab, semen		3-5 days
Tick-borne Encephalitis virus (TBEV)		XTBE	CSF, tick, serum		3-5 days
Viral arteritis virus, equine		XEVA	Dry swab, EDTA, semen		3-5 days
West Nile virus		XWNV	EDTA, CSF		3-5 days

## INFECTIOUS DISEASES - PCR - FARM ANIMALS

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Actinobacillus pleuropneumoniae, porcine		XAPP	Swab, nasal lavage fluid		2 weeks
Anaplasma ovis / Mycoplasma ovis		XAOM	EDTA		3-5 days
Anaplasma phagocytophilum		ANAP	EDTA, tick		3-5 days
Babesia species		BABP	EDTA, tick	It also determines Cytauxzoon sp, Theileria sp, and include species differentiation	3-5 days
Blue tongue virus (BTV)		XBLU	EDTA blood		3-5 days
Bordetella bronchiseptica		XBB	Swab		1-3 days



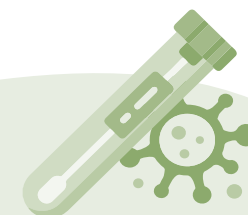


# INFECTIOUS DISEASES – PCR – FARM ANIMALS



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Bornavirus		XBVE	EDTA, CSF		3-5 days
Borrelia species		BORA	Synovial fluid/synovium, tick, CSF, skin		3-5 days
Brachyspira pilosicoli / hyodysenteriae		XBRA	Faeces		3-5 days
Chlamydia species		CHP	Swab, faeces		1-3 days
Coronavirus, bovine		BCV	Faeces, swab		1-3 days
Coxiella burnetii		XCOX	Swab, faeces, aborted material, milk, skin		3-5 days
Cryptosporidium		XCRY	Faeces, gastric lavage fluid		1-3 days
Dermatophilus congolensis		DERC	Skin, scab tissue		3-5 days
Dermatophytes		DERP	Plucked hair from the active border of lesions, skin scab	Species differentiation available	3-5 days
Herpesvirus 1 (BHV-1), bovine		XBHP	Swab		3-5 days
Histophilus somni		HISN	Swab, nasal lavage fluid		3-5 days
Influenza A virus		XIA	Swab, nasal lavage fluid		3-5 days
Lawsonia intracellularis		XLAW	Faeces		3-5 days
Leptospira species		LEPP	Urine and EDTA, milk, semen, aborted material		3-5 days
Listeria monocytogenes		XLMC	EDTA, aborted material		3-5 days
Mannheimia haemolytica		MMGM	Swab, nasal lavage fluid		3-5 days
Mycobacterium paratuberculosis		XMPT	Faeces		3-5 days
Mycoplasma bovis		XMB	Swab, nasal lavage fluid, milk, synovial fluid		3-5 days
Mycoplasma haemolamae		XMHL	EDTA	llama, alpaca	1-3 days
Mycoplasma hyopneumoniae		XMHP	Swab, nasal lavage fluid		3-5 days
Mycoplasma suis		XMS	EDTA		3-5 days
Neospora caninum		NEOP	Aborted material		3-5 days



## INFECTIOUS DISEASES – PCR – FARM ANIMALS



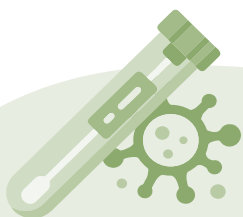
All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Parainfluenza virus 3, bovine		XBP3	Swab, nasal lavage fluid		3-5 days
Pasteurella multocida		XPAM	Swab, nasal lavage fluid		3-5 days
Circovirus 2, porcine		XMS	Swab, EDTA, aborted material		3-5 days
Coronavirus (TGE), porcine		XTGE	Faeces		3-5 days
Parvovirus (PPV), porcine		XPPV	Swab, EDTA, aborted material		3-5 days
Reproductive and respiratory syndrome virus, porcine		XPRR	Swab, nasal lavage fluid, EDTA, semen, aborted material	Includes differentiation EU/NA/HP-NA	3-5 days
Respiratory syncytial virus, bovine		XBRS	Swab, nasal lavage fluid		3-5 days
<b>NEW!</b> Rotavirus A		XROT	Faeces		3-5 days
Toxoplasma gondii		TOXP	Aborted material		3-5 days
Tritrichomonas foetus		TRIC	Swab, preputial lavage		3-5 days
Viral diarrhoea virus - mucosal disease, bovine		XBVD	EDTA, milk, faeces, aborted material		3-5 days

## INFECTIOUS DISEASES – PCR PROFILES – EQUINE

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Equine anaemia profile	Anaplasma phagocytophilum, piroplasmida (Babesia, Theileria species)	XEEA	EDTA		3-5 days
Equine eye profile	Herpesvirus 2 and 5	XEEP	Ocular/conjunctival swabs		3-5 days
<b>UPDATED!</b> Equine respiratory profile 1	Herpesvirus 1 and 4	XER1	Plain swab		3-5 days



## INFECTIOUS DISEASES – PCR PROFILES – EQUINE



All tests include full reporting unless otherwise stated

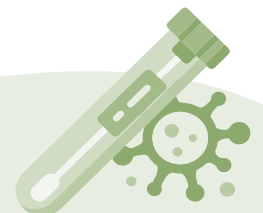
Profiles	Includes	Code	Sample	Comments	Turnaround
<b>UPDATED!</b> Equine respiratory profile 2	Herpesvirus 1 and 4, Streptococcus equi equi / zooepidemicus	XER2	Plain swab		3-5 days
<b>UPDATED!</b> Equine respiratory profile 3	Herpesvirus 1, 4, Streptococcus equi/ zooepidemicus, influenza A virus	XER3	Plain swab		3-5 days
<b>UPDATED!</b> Equine respiratory profile 4	Herpesvirus 1, 4, influenza A virus, equine coronavirus, Streptococcus equi	XER4	Plain swab		3-5 days
Equine respiratory profile - Foal	Herpesvirus 1 and 4, influenza A virus, Rhodococcus equi/hoagii (incl vapA)	XERF	Swab, nasal flush, tracheal wash, BAL fluids		3-5 days
Camelid abortion profile	Leptospira, Toxoplasma gondii, Chlamydia	CABP	Aborted material, plain swab		3-5 days
<b>UPDATED!</b> Equine abortion profile	Herpesvirus 1 and 4, equine viral arteritis, Leptospira species, Listeria monocytogenes	XEAP	Swab, aborted material		3-5 days
Uveitis profile	Leptospira Ab, PCR: Leptospira, Herpesvirus 1	UVEI	Aqueous humor		3-5 days
Foal diarrhoea profile	Coronavirus, Lawsonia intracellularis, Rhodococcus hoagii, inc vapA	XFD	Faeces		3-5 days
<b>NEW!</b> Skin profile	Dermatophytes, Dermatophilus congolensis	XSP	Skin		3-5 days
<b>NEW!</b> Hepatotropic viruses	Equine parvovirus, hepacivirus	XHV	Serum, EDTA, liver		3-5 days

More PCR profiles available upon request

## INFECTIOUS DISEASES – PCR PROFILES – FARM ANIMALS

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Bovine abortion profile	Bacteriology, PCR: Neospora caninum, Coxiella burnetii, Chlamydia species, BVDV	XBAP	Aborted material, plain swab		3-5 days
Bovine respiratory profile 1	Bacteriology, PCR: BRSV, BPIV-3, Mycoplasma bovis	XBRP	Plain swab, nasal flush fluid		3-5 days

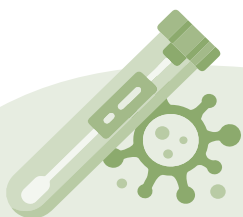


# INFECTIOUS DISEASES – PCR PROFILES – FARM ANIMALS



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Bovine respiratory profile 2	PCR: Mannheimia haemolytica, Pasteurella multocida, Histophilus somni	XBR2	Plain swab, nasal flush fluid		3-5 days
<b>NEW!</b> Bovine respiratory profile 3	PCR: BRSV, BPIV-3, BCov, Mannheimia haemolytica, Pasteurella multocida, Histophilus somni, Mycoplasma bovis	XNBR3	Plain swab, nasal flush fluid		3-5 days
Camelid abortion PCR profile	PCR: Leptospira species, Toxoplasma gondii, Chlamydia species	XCAP	Aborted material, plain swab		3-5 days
Mastitis PCR profile	PCR assays for 16 mastitis pathogens (including Mycoplasma, yeast, Prototheca species) and $\beta$ -lactamase-gene (no sensitivities)	XMAS	Milk		3-5 days
Small ruminant abortion profile	Bacteriology, PCR: Chlamydia species, Coxiella burnetii	XSRA	Aborted material, plain swab		3-5 days
Porcine respiratory profile	Bacteriology, PCR: M. hyopneumoniae, APP, PRRSV, influenza AV, P. multocida (toxin producing)	XPRP	Nasal lavage and/or swab plus bacterial swab		3-5 days
Porcine reproduction profile	PCR: PPV, PRRSV, PCV-2, Leptospira species, Chlamydia species	XPRE	Aborted material, plain swab		3-5 days



# ALLERGY TESTING AT BATTLAB



- In horses, atopic dermatitis is known as an allergy to pollen, dust mites and/or moulds.
- Allergic patients have high concentrations of IgE directed against environmental or food allergens.
- When allergy is suspected, we recommend performing serology testing (ELISA in horse) starting with **ALLERGY SCREENING PANEL** that includes pollen, mites, moulds, flea saliva.
- In case of **positive allergy screening panel**, we offer two further panels, based on the environment the patient lives in:

- For indoor housing, we recommend **PERENNIAL ALLERGY PANEL**, which includes:

#### Horse:

- ✓ Moulds: *Alternaria alternata*, *Aspergillus fumigatus*, *Aspergillus niger*, *Cladosporium* sp., *Epicoccum* sp., *Helminthosporium sativum*, *Penicillium* sp., *Fusarium* spp., *Ustilago* sp., *Rhizopus* sp.
- ✓ Mites: *Dermatophagoides farinae*, *Dermatophagoides pteronyssinus*, *Acarus siro*, *Tyrophagus putrescentiae*, *Glycophagus domesticus*, *Lepidoglyphus destructor*.

- For outdoor housing, we recommend **SEASONAL ALLERGY PANEL**, which includes:

#### Horse:

- ✓ Pollen: 6-grass mix (Orchard grass, Perennial ryegrass, Timothy grass, Meadow fescue, Kentucky blue grass, Velvet grass); Rye, Mugwort, Lamb's quarter/goosefoot, English plantain, Nettle, Sorrel, Dandelion, Rape, Ragweed, Hazel, Alder, Poplar, Birch, Beech, Willow.



# ALLERGOLOGY - EQUINE



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Screening test	Mites, pollens, moulds, flea	EALB	3 ml serum		3-5 days
Seasonal (outdoor) panel	Grasses, weeds, tree pollen	EALS	1 ml serum		3-5 days
Perennial (indoor) panel	Moulds, mites	EALP	1 ml serum		3-5 days
Feathers/hairs/epithelia	Cat, dog, rabbit, guinea pig, parrot, feather mix	EFHE	1 ml serum		Up to 10 days
Insect panel	Simulium, Culex, Tabanus, Musca, Culicoides	EINS	1 ml serum		~1 week
Equine food allergies	IgE and IgG against wheat, barley, oats, corn, molasses, soy, yeast and alfalfa	EFAE	1 ml serum		Up to 10 days



## GENETIC TESTS EQUINES



Tests below are commonly requested tests for genetic disease but many more are available. Please contact the laboratory if you do not see what you are looking for.  
Sample material: 0.5 - 1 ml EDTA-blood, mane/tail hair.

Test	Code	Breed
Coat colour / coat structure		All breeds
Dwarfism	8458	Miniature Horse, Shetland Pony
Equine malignant hyperthermia (EMH)	8160	All breeds
Hoof wall separation disease (HWSD)	8464	Connemara Pony
Polysaccharide storage myopathy type 1	PSSM	All breeds
Skeletal atavism	8854	Miniature Horse, Shetland Pony

## GENETIC TESTS LARGE ANIMALS

All tests include full reporting unless otherwise stated

Test	Code	Breed
Please contact the laboratory		





<b>A</b>	
Abortion profile bovine PCR .....	35
Abortion profile camelid PCR.....	35, 36
Abortion profile equine PCR.....	35
Abortion profile small ruminant PCR.....	36
ACTH.....	15
Actinobacillus pleuropneumoniae antibodies .....	29
Actinobacillus pleuropneumoniae, porcine.....	32
Allergy food equine.....	38
Allergy insect panel.....	38
Allergy perennial panel.....	38
Allergy screening test.....	38
Allergy seasonal panel.....	38
Alpha fetoprotein (AFP) .....	13
Alpha-hydroxybutyrate dehydrogenase ( $\alpha$ HBDH).....	13
Anaplasma ovis / Mycoplasma ovis.....	32
Anaplasma phagocytophilum .....	31, 32
Anaplasma phagocytophilum antibodies .....	28, 29
Anoplocephala perfoliata antibodies (tape worm).....	28
Anti-Mullerian hormone (AMH).....	17
Antiphlogistics profile.....	27
aPTT .....	12
aPTT,PT .....	11
Arthritis encephalitis virus (Maedi-Visna) antibodies, caprine.....	29
Aspergillus antibody .....	29
Aujeszky's disease antibodies (pseudorabies).....	29
<b>B</b>	
Babesia antibodies (complement fixation).....	28
Babesia antibodies (ELISA).....	28
Babesia antibodies (IFAT).....	28
Babesia antigens (microscopic).....	29
Babesia species.....	31, 32
Baermann test.....	9
Bile acids.....	13
Biochemistry single add-on test.....	13
Biochemistry single add-on to profile.....	13
Blood count full.....	11
Blood smear .....	11
Blue tongue virus (BTV).....	32
Bordetella bronchiseptica .....	32
Bornavirus .....	31, 33
Bornavirus antibodies.....	28, 29
Borrelia antibodies (IgM + IgG) .....	28, 29
Borrelia antibodies (Western blot).....	28
Borrelia species .....	31, 33
Brachyspira pilosicoli / hyodysenteriae.....	33
Brucella antibodies .....	29
Burkholderia mallei antibodies (Glanders).....	28
BVD Virus antibodies.....	29
<b>C</b>	
Cadmium.....	27
Calculus (stone) analysis.....	20
Chlamydia antibodies.....	29
Chlamydia species.....	33
Cholesterol (HDL).....	13
Cholesterol (LDL) .....	13
Circovirus 2, porcine .....	34
Clostridium antibodies (tetanus).....	28
Coagulation screen.....	11
Cobalt .....	27
Colchicine.....	27
Coombs test.....	11, 26
Copper.....	13
Coronavirus, bovine.....	33
Coronavirus (ECoV).....	31
Coronavirus (TGE), porcine.....	34
Cortisol.....	15, 27
Corynebacterium pseudotuberculosis antibodies .....	28, 30
Coxiella burnetii.....	33
Coxiella burnetii antibodies.....	30
Cryptosporidium.....	33
Culture aerobic and anaerobic.....	24
Culture aerobic only .....	24
Culture and sensitivity urine .....	19
Culture blood .....	24
Culture dermatophytes.....	25
Culture environmental.....	24
Culture fecal pathogens.....	24
Culture fungal.....	25
Culture Nocardia.....	24
Culture urine.....	24
Cytology.....	22
Cytology BAL.....	22
Cytology Bone marrow.....	22
Cytology CSF.....	22
Cytology effusion.....	22
Cytology fluid.....	22
Cytology prostate .....	22
Cytology sinovial fluid.....	22
Cytology urine.....	19
<b>D</b>	
D-dimers .....	12
Dermatophilus congolensis.....	31, 33
Dermatophytes .....	31, 33
Dermatophytes PCR .....	25
Dexa suppression test.....	16
Diarrhoea profile foal PCR.....	35
DIC profile .....	12
Digoxin.....	27
Doping profile.....	27
Downer cow blood profile.....	7
Dynamic testosterone test (Rig test).....	17
Dysbiosis PCR.....	9
<b>E</b>	
Egg count .....	9
Endoparasites profile equine .....	9
Equine anaemia profile.....	34
Erythropoietin.....	11
Extensive blood profile camelid .....	8
Extensive blood profile equine .....	6
Extensive blood profile farm animals .....	7
Extensive blood profile llama/alpaca .....	8
Extensive urinalysis.....	19
Eye profile equine PCR.....	34
<b>F</b>	
Fasciola hepatica antibodies.....	28, 30
Feathers/hairs/epithelia .....	38
Fecal pathogens.....	10
Fecal profile bovine .....	10
Fecal profile calf .....	10
Fecal profile camelid.....	9
Fecal profile equine .....	9
Fecal profile foal.....	9
Fecal profile piglet.....	10
Fecal profile porcine.....	10
Fertility blood profile.....	7
Fibrinogen .....	12
Folate / Folic acid.....	13
Fractional excretion .....	20
Fructosamine.....	13
<b>G</b>	
General blood profile equine .....	6
General blood profile foal.....	6
General blood profile porcine.....	8
Genetic tests.....	39
GLDH.....	13
Glutathione peroxidase.....	13
<b>H</b>	
Haptoglobin.....	13
Heavy metal toxicity blood profile.....	7
Heavy metal toxicity screen .....	27
Hepacivirus.....	31
Hepatotropic viruses PCR.....	35
Herpesvirus 1 and 4 antibodies, equine .....	28
Herpesvirus 1 (BHV-1), bovine .....	33
Herpesvirus 1 (EHV-1), equine .....	31
Herpesvirus 1 (IBR) gB, bovine .....	30
Herpesvirus 1 (IBR) gE, bovine .....	30
Herpesvirus 2 (EHV-2), equine.....	31







Herpesvirus 3 (EHV-3), equine ..... 31  
 Herpesvirus 4 (EHV-4), equine ..... 31  
 Herpesvirus 5 (EHV-5), equine ..... 31  
 Histology ..... 22  
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 Influenza A virus antibodies..... 28  
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 Inhibin-B..... 17  
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 Ionised calcium..... 13  
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 Iron blood profile..... 6  
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## K

Ketosis blood profile ..... 7

## L

Larval cyathostomiasis ..... 28  
 Lawsonia intracellularis..... 31, 33  
 LDH..... 13  
 Lead..... 13, 27  
 Leptospira antibodies..... 28, 30  
 Leptospira species..... 31, 33  
 Listeria antibodies..... 28, 30  
 Listeria monocytogenes..... 31, 33

## M

Maedi-Visna antibodies..... 30  
 Magnesium ..... 13  
 Manganese ..... 13  
 Mannheimia haemolytica ..... 33

Mastitis profile PCR..... 36  
 Metabolic syndrome profile equine..... 7, 16  
 Mineral blood profile ..... 6  
 Mineral profile blood profile ..... 8  
 Muscular blood profile ..... 7  
 Mycobacterium paratuberculosis..... 33  
 Mycoplasma bovis ..... 33  
 Mycoplasma haemolamae..... 33  
 Mycoplasma hyopneumoniae ..... 33  
 Mycoplasma hyopneumoniae antibodies ..... 30  
 Mycoplasma suis ..... 33  
 Mycotoxin panel..... 27

## N

Neospora caninum ..... 33  
 Neospora caninum antibodies (IgM + IgG)..... 30

## O

Oestrone sulphate..... 17  
 Ostertagia ostertagi antibodies..... 30  
 Other vitamins..... 14

## P

PAGs bovine..... 17  
 Papillomavirus (EcPV) ..... 31  
 Papillomavirus (sarcoïd), bovine..... 31  
 Parainfluenza virus 3, bovine..... 34  
 Parasitology ..... 9  
 Paratuberculosis antibodies (Johne's disease).... 30  
 Parvovirus (EqPV-H) ..... 31  
 Parvovirus (PPV), porcine..... 34  
 Pasteurella multocida..... 34  
 Performance blood profile ..... 6  
 Porcine reproductive and  
 respiratory syndrome virus antibodies..... 30  
 PPID blood profile equine ..... 6  
 PPID Profile equine..... 16  
 Pregnant mare serum gonadotrophin (PMSG)..... 17  
 Progesterone..... 17  
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## R

Reproduction profile porcine PCR..... 36  
 Reproductive and respiratory syndrome virus,  
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 Respiratory profile bovine PCR ..... 35  
 Respiratory profile equine PCR..... 34  
 Respiratory profile foal PCR..... 35  
 Respiratory profile porcine PCR ..... 36  
 Respiratory syncytial virus, bovine..... 34  
 Rhodococcus equi (R. Hoagii) ..... 31  
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 Rotavirus antigens ..... 28  
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## S

Salmonella abortus equi antibodies ..... 28  
 Salmonella antibodies..... 28  
 Salmonella species..... 32  
 SDMA..... 14  
 Sedative profile..... 27  
 Selenium ..... 14  
 Senior blood profile equine ..... 6  
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 Serum electrolytes 2 ..... 14  
 Serum protein electrophoresis ..... 26  
 Skin profile ..... 25  
 Skin profile PCR ..... 35  
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 Streptococcus equi antibody (strangles) ..... 28  
 Streptococcus equi (strangles) ..... 32  
 Streptococcus equi/zoepidemicus ..... 32

## T

T4 ..... 15  
 Taylorella equigenitalis..... 32

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 Tick-borne encephalitis antibodies (IgG)..... 29  
 Tick-borne encephalitis antibodies (IgM) ..... 29  
 Tick-borne Encephalitis virus (TBEV) ..... 32  
 Toxoplasma antibodies (IgG + IgM)..... 30  
 Toxoplasma gondii ..... 34  
 Tritrichomonas foetus..... 34  
 Trypanosoma equiperdum  
 (Dourine) antibodies..... 29  
 Trypanosoma evansi ..... 29  
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 Uric acid ..... 14  
 Urine cortisol:creatinine ratio..... 16, 19  
 Urine protein electrophoresis..... 26  
 Uveitis profile PCR ..... 35

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Viral arteritis antibodies, equine ..... 29  
 Viral arteritis virus, equine..... 32  
 Viral diarrhoea virus - mucosal disease, bovine. 34  
 Vitamin A ..... 14  
 Vitamin B12 (Cobalamin) ..... 14  
 Vitamin D3 (25 OH) ..... 14  
 Vitamin E..... 14

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Weak calf blood profile ..... 7  
 West Nile virus ..... 32  
 West Nile virus antibodies (IgG + IgM)..... 29



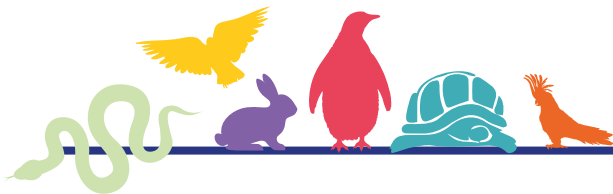


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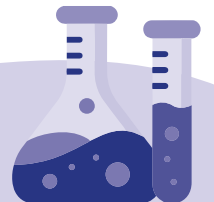




## PRICE LIST DOGS AND CATS



## PRICE LIST EXOTICS AND SMALL MAMMALS



# Why **BattLab** ?

## **DEDICATED VETERINARY LABORATORY**

Diagnostic testing for veterinarians since 2005.

## **EXTENSIVE RANGE OF SERVICES**

Haematology, clinical chemistry, serology, endocrinology, microbiology, cytopathology, histopathology, allergy diagnostics, PCR and genetics.

## **QUALITY**

State of the art analysers, internal and external quality control systems, results validated by a clinical pathologist with the addition of comments tailored to the clinical case.

## **COURIER SERVICE**

Free local courier service in the Midlands.  
Free UK national courier service for the mainland.

## **RAPID TURNAROUND TIME**

Same day results for selected tests from the time of arrival at BattLab.

## **PROFESSIONAL ADVICE**

Experienced clinical pathologists available to give advice and discuss difficult clinical cases by phone and email.

## **CONTINUING PROFESSIONAL EDUCATION**

Providing free seminars, as well as attending and presenting at congresses in the UK and internationally.

## **RESEARCH/INNOVATION**

Providing support and collaboration to research laboratories and Universities.

## **SPECIAL PRICES AND DISCOUNTS**

## **BASED ON MONTHLY SPENDING**

