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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 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, cytology, calculus analysis, selected ELISA and PCR testing. 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. 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.



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







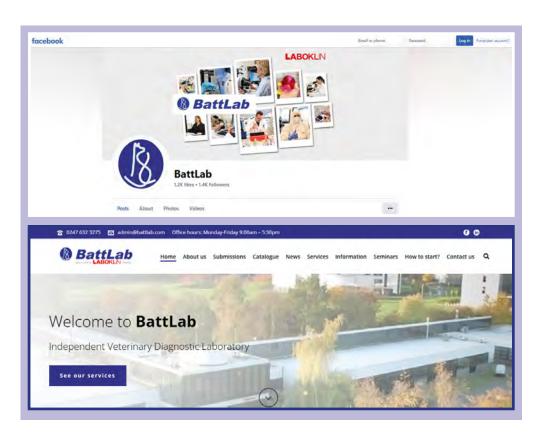


GENERAL INFORMATION



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.







SMALL ANIMAL PROFILES



	on ting unless otherwise stated				
Profiles	Includes	Code	Sample	Comments	Turnaround
Canine 1	FBC, total protein, albumin, globulin, urea, creatinine, Na, Cl, K, ALP, ALT, total bilirubin, glucose	CAN1	EDTA, serum, Ox-F and blood smear	General health screen	Same day
Canine 2	FBC, total protein, albumin, globulin, urea, creatinine, Na, Cl, K, Ca, P, ALP, ALT, total bilirubin, glucose, GGT, AST, bile acids, cholesterol, triglycerides, DGGR lipase, CK	CAN2	EDTA, serum, Ox-F and blood smear	Extensive health screen	Same day
Canine 3	CANINE 2 plus TLI, folate and vit B12	CAN3	EDTA, serum, Ox-F and blood smear	Comprehensive profile for systemic, metabolic and gastrointestinal disease	Same day. TLI, folate and vit B12 are run Mon/Wed/ Fri
Canine 4	CANINE 2 plus total T4	CAN4	EDTA, serum, Ox-F and blood smear	Senior profile	Same day
Canine 5	CANINE 2 plus URINE 2 (Sediment microscopy, biochemistry, SG, protein:creatinine ratio)	CAN5	EDTA, serum, Ox-F, blood smear and urine	PU/PD, urinary tract disease	Same day
Canine 6	CANINE 2 plus Leishmania (ELISA), serum protein electro- phoresis (SPE) and urinary protein:creatinine ratio (UPC)	CAN6	EDTA, serum, Ox-F, blood smear and urine	Comprehensive profile for diagnosis/ monitoring Leishmania cases	Same day. Up to 5 days for SPE and Leishmania ELISA
Canine inflammatory profile	FBC, albumin, globulin, CRP	INFD	EDTA, serum		Same day
Feline 1	FBC, total protein, albumin, globulin, urea, creatinine, Na, Cl, K, Ca, ALP, ALT, total bilirubin, glucose	FEL1	EDTA, serum, Ox-F and blood smear	General health screen	Same day
Feline 2	FBC, total protein, albumin, globulin, urea, creatinine, Na, Cl, K, Ca, P, ALP, ALT, total bilirubin, glucose, GGT, AST, bile acids, cholesterol, triglycerides, DGGR lipase, CK	FEL2	EDTA, serum, Ox-F and blood smear	Extensive health screen	Same day
Feline 3	Feline 2 plus FeLV and FIV ELISA	FEL3	EDTA, serum, Ox-F and blood smear	Systemic, metabolic disease, screen for FeLV/FIV	Same day
Feline 4	FELINE 2 plus serum protein electrophoresis (SPE) and FCoV antibodies	FEL4	EDTA, serum, Ox-F and blood smear	Comprehensive profile for suspected FIP cases	Same day. Up to 5 days for SPE and FCoV antibodies



SMALL ANIMAL PROFILES



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Profiles	Includes	Code	Sample	Comments	Turnaround		
Feline 5	FELINE 2 plus folate and vit B12	FEL5	EDTA, serum, Ox-F and blood smear	Comprehensive profile for systemic, metabolic and gastrointestinal disease	Same day. Folate and vit B12 are run Mon/Wed/Fri		
Feline 6	FELINE 2 plus total T4	FEL6	EDTA, serum, Ox-F and blood smear	Senior profile	Same day		
Feline 7	FELINE 2 plus URINE 2 (sediment microscopy, biochemistry, SG, protein:creatinine ratio) and Mg	FEL7	EDTA, serum, Ox-F, blood smear and urine	PU/PD, urinary tract disease	Same day		
Feline inflammatory profile	FBC, albumin, globulin, SAA	INFF	EDTA, serum		Same day. Up to 5 days for SAA		
Health screen	FBC (cell counts only), total protein, albumin, globulin, urea, creatinine, ALP, ALT, total bilirubin, glucose	SAH	EDTA, serum, Ox-F	Health check, preanaesthetic screen. NO interpretation and NO blood smear examination provided.	Same day		
NEW! Geriatric Profile	SAH +T4	SAHG	EDTA, serum, Ox-F	NO interpretation and NO blood smear examination provided.	Same day		
Small liver and kidney screen	Total protein, albumin, globulin, urea, creatinine, ALP, ALT, bile acids, total bilirubin	LKS	Serum		Same day		
Liver profile	Total protein, albumin, globulin, urea, ALP, GGT, ALT, AST, total bilirubin, bile acids, cholesterol, glucose	LIVP	Serum, Ox-F		Same day		
Kidney profile	Total protein, albumin, globulin, urea, creatinine, cholesterol, Na, Cl, K, P, Ca, glucose, USG, UPC	KID	Serum, Ox-F, urine		Same day		
Pre surgical profile	FBC, ALT, ALP, total protein, albumin, globulin, urea, creatinine, PT, aPTT	SURG	EDTA, serum, citrate plasma, blood smear		Same day		
Diabetes mellitus check	Glucose, fructosamine, K, USG, urine glucose	DIAB	Serum, Ox-F, urine		Same day		
Pancreatitis profile	FBC, DGGR lipase, PLI, triglycerides, cholesterol, ALT, ALP, total bilirubin, total protein, albumin, globulin, Na, Cl, K, Ca, glucose	PANC	EDTA, serum, Ox-F, blood smear		Same day		



SMALL ANIMAL PROFILES - ADD-ONS



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Canine T4		KT4+	Serum	Canine	Same day
Feline T4		T4+	Serum	Feline	Same day
NEW! Vitamin B12		B12+	Serum	Canine/Feline	Same day
TSH		TSH+	Serum	Canine/Feline	Same day
SDMA		SDM+	Serum	Canine/Feline	Same day
Fructosamine		FRU+	Serum	Canine/Feline	Same day
PLI (Pancreatic lipase immunoreactivity)		FPL+/ CPL+	Serum	Canine/Feline	Same day
CRP (C reactive protein)		CRP+	Serum	Canine	Same day
Cortisol		COR+	Serum	Canine/Feline	Same day

These reduced charges apply when the tests above are added to a small animal profile.



CANINE/FELINE GASTROENTEROLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Gastro 1	FBC, TP, albumin, globulin, urea, creatinine, Na, Cl, K, P, Ca, ALP, GGT, ALT, AST, bilirubin, bile acids, cholesterol, triglycerides, DGGR lipase, CK, glucose, TLI, folate, vit B12	GE1	EDTA, Serum, Ox-F and blood smear	Canine only	Same day. TLI, folate and vit B12 are run Mon/ Wed/Fri
Gastro 2	Canine TLI, folate and vit B12	GE2	Serum	Canine only	Run Mon/Wed/Fri
Gastro 3	Canine TLI	GE3	Serum	Canine only	Run Mon/Wed/Fri
Gastro 4	Folate and vit B12	GE4	Serum	Canine only	Run Mon/Wed/Fri
Gastro 5	FBC, TP, albumin, globulin, urea, creatinine, Na, Cl, K, P, Ca, ALP, GGT, ALT, AST, bilirubin, bile acids, cholesterol, triglycerides, DGGR lipase, CK, glucose, folate, vit B12	GE5	EDTA, serum, Ox-F and blood smear	Feline only	Same day. Folate and vit B12 are run Mon/Wed/Fri
Gastro 6	Feline TLI, folate, vit B12	GE6	Serum	Feline only	Folate and vit B12 are run Mon/Wed/ Fri. Feline TLI run once a week
Gastro 7	Feline TLI	GE7	Serum	Feline only	Run once a week
Gastro 8	Folate and vit B12	GE8	Serum	Feline only	Run Mon/Wed/Fri
Gastro 9 *	Faecal parasites and bacterial pathogens	GE9	Fresh faeces	All species	1-4 days
Gastro 10 *	Faecal bacterial pathogens (e.g. E. coli, Campylobacter, Salmonella)	GE10	Fresh faeces	All species	1-4 days
Gastro 12	Faecal pathogenic E. coli (EPEC, VTEC/STEC,, ETEC)	GE12	Fresh faeces	Canine/Feline	up to 2 weeks
Gastro 13	Autologous E. coli vaccine	GE13	Fresh faeces	Long-term management of pathogenic E. coli. Written prescription is required to proceed with the request.	On demand
Gastro 18 *	Faecal parasites, bacterial pathogen culture and Giardia antigen test	GE18	Fresh faeces	Canine/Feline	Same day for Giardia. 2-4 days for other results
PLI	Pancreatic specific lipase	CPLI/ FPLI	Serum	Canine/Feline	Same day
Vitamin B12 (Cobalamin)	B12	B12	Serum	Canine/Feline	Run Mon/Wed/Fri

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^{*} Sensitivity testing will be performed in very selected cases and when appropriate (always when Salmonella is cultured and/or when Campylobacter growth is persistent)

CANINE/FELINE GASTROENTEROLOGY



All tests include full reporting unless otherwise stated

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Profiles	Includes	Code	Sample	Comments	Turnaround	
Folate / Folic acid	FOL	FOL	Serum	Canine/Feline	Run Mon/Wed/Fri	
Juvenile diarrhoea profile *	Faecal parasites, bacterial pathogen culture (E. coli, Campylobacter, Salmonella), Parvovirus antigen	GE16	Fresh faeces	Canine/Feline	Same day for Parvo- virus. 1-3 days for other results	
Occult blood test		occ	Fresh faeces	The patient must be fed a diet free from red meat, blood, liver, kidneys, fish with dark meat, tomatoes, cauliflower, horseradish, turnips, melon, banana, and soy beans for 4 days prior to sampling in order to avoid false positive results. Iron tablets should also be avoided prior to testing.	2-4 days	
Endoparasites	Faecal parasites	ENDO	Fresh faeces	All species	1 day	
Baermann lungworm detection	Lungworm larvae	LUNG	3 day pooled faeces		1 day	
Endoparasites and Giardia antigen	Faecal parasites plus Giardia antigen test	GE17	Fresh faeces		Giardia same day. 1 day for parasitology	
Cryptosporidia antigen		CRYE	Fresh faeces	EIA. PCR also available in the dedicated section.	3-5 days	
Giardia antigen		GIA	Fresh faeces or 3 day pooled faeces	ICG. PCR also available in the dedicated section.	Same day	
Parvovirus antigen		PARV	Fresh faeces	Canine/Feline ICG. PCR and serology also available in the dedicated sections	Same day	
Clostridium difficile toxin A and B		CDAB	Fresh faeces	ELISA	2-4 days	
Clostridium perfringens enterotoxin		CLP	Fresh faeces	ELISA	1-3 days	
Yersinia and Campylobacter		YECA	Fresh faeces	MALDI-TOF	Up to 28 days	
Rotavirus antigen		ROTA	Fresh faeces	EIA	2-4 days	
Pancreas elastase		ELAS	Fresh faeces	Canine only	3-5 days	

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* Sensitivity testing will be performed in very selected cases and when appropriate (always when Salmonella is cultured and/or when Campylobacter growth is persistent)

CANINE/FELINE GASTROENTEROLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround	
Microscopical nutritive digestion		MNDI	Fresh faeces		2-4 days	
Alpha 1 antitrypsin		ANTI	Fresh faeces		7-10 days	
Calprotectin		CALP	Fresh faeces		2-4 days	
Secretory IgA		SEIG	Fresh faeces		3-5 days	
Bile acids (cholegenic diarrhoea)		BADI	Fresh faeces		7-10 days	
NEW! Zonulin		ZNL	Fresh faeces		7-10 days	
Dysbiosis analysis	Key bacteria microbiome quantitative (PCR)	DYSA	Fresh faeces		~ 1 week	
Dysbiosis profile (dog)	Key bacteria microbiome quantitative (PCR), mycology, calprotectin, alpha 1 antitrypsin, sIgA, pancreatic elastase, endoparasites	DYSD	Fresh faeces		~ 1 week	
Dysbiosis profile (cat)	Key bacteria microbiome quantitative (PCR), mycology, calprotectin, alpha 1 antitrypsin, sIgA, microscopic nutritive digestion, endoparasites	DYSC	Fresh faeces		~ 1 week	
Faecal egg count (modified McMaster)	Egg count per gram of faeces	FEC	Fresh faeces		2-4 days	
Coronavirus PCR		CORP (dog), FIPP (cat)	Fresh faeces		1-3 days	
Cryptosporidia PCR		XCRY	Fresh faeces		1-3 days	
Giardia species PCR		GIAP	Fresh faeces or 3 day pooled faeces		1-3 days	
Parvovirus (CPV/FPV) PCR		PARP	Fresh faeces		1-3 days	
Salmonella species PCR		XSAL	Fresh faeces		1-3 days	
Tritrichomonas PCR		TRIC	3 day pooled faeces (keep at room temperature)		1-3 days	

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Other PCRs also available (see dedicated PCR section)



HAEMATOLOGY/COAGULATION



All tests include full reporting unless otherwise stated

Profiles	Includes		Sample	Comments	Turnaround
Complete blood count	WBC, RBC, PLT, Hb, HCT, MCV, MCHC, 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 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		coo	EDTA	To confirm IMHA. Canine/Feline	Same day canine only. 2-4 days feline
NEW! Iron metabolism profile	Serum iron, ferritin, hepcidin, iron saturation, UIBC, TIBC, CRP (dog), SAA (cat)	IRMP	Serum		1 week
Erythropoietin (EPO)		EPO	Serum, preferably chilled	To investigate erythrocytosis	2 weeks

COAGULATION

Profiles	Includes	Code	Sample	Comments	Turnaround	£ Excl. VAT
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 thromboplastintTime (aPTT) and Prothrombin time (PT)		APT2	Citrate plasma	 Fill blood to the line of a citrate tube Gently invert several times to mix thoroughly Centrifuge immediately Transfer plasma into a plain tube and label "citrated plasma" Freeze or keep chilled 	Same day	



COAGULATION



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		COAG	Frozen citrated plasma	Please contact the laboratory!		
Von Willebrand antigen		VONW	Citrate plasma	Sample collection and handling as above	Up to 2 weeks	
Von Willebrand disease type I DNA test		VW1	EDTA or buccal swabs	Barbet (French Water Dog), Bernese Mountain Dog, Cavapoo, Cockapoo (English), Cockapoo (American), Coton de Tulear, Doberman, Drentsche Patrijschond, German Pinscher, Goldendoodle, Irish Red and White Setter, Irish Setter (Red Setter), Kerry Blue Terrier, Kromfohrländer, Labradoodle, Manchester Terrier, Miniature Poodle, Papillon (Continental Toy Spaniel), Pembroke Welsh Corgi, Poodle, Stabyhound (Stabijhoun), Standard Poodle, Toy Poodle.	2-3 weeks	
Von Willebrand disease type II DNA test		VW2	EDTA or buccal swabs	German Wirehaired Pointer, German Shorthair Pointer	2-3 weeks	
Von Willebrand disease type III DNA test		VW3	EDTA or buccal swabs	Scottish Terrier, Shetland Sheepdog, Dutch Kooiker (Kooikerhondje)	2-3 weeks	



CLINICAL CHEMISTRY



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 1 glycoprotein (AGP)	AGP	Serum		2-4 days
Alpha fetoprotein (AFP)	AFP	Serum		1 week
Beta hydroxybutyrate	ВНВ	Serum		2-4 days
Bile acids	ВА	Serum		Same day
Bile acids stimulation test	BA1	Serum	Pre: Collect after a 12 hour fast Post: Collect 2 hours after feeding a small meal (~2-3 tablespoons)	Same day
Brain natriuretic peptide (Nt-proBNP)	BNP	Frozen serum	Serum should be fresh (<24h) and separated	Same day
Cadmium	CADM	Serum		1 week
Canine prostate specific esterase (CPSE)	CPSE	Serum	Canine only	2-4 days
Cobalt	СОВ	Serum		1 week
Cholesterol (HDL)	СНОН	Serum		2-4 days
Cholesterol (LDL)	COHL	Serum		2-4 days
Cholinesterase	CHOL	Serum		2-4 days
Copper	COPR	Serum		2-4 days
C reactive protein (CRP)	CRP	Serum	Canine only	Same day
Cystatin C	CYSC	Serum		2-4 days
FGF23	XFGF	Serum		~1 week
Folate / Folic acid	FOL	Serum		Run Mon/Wed/Fri
Free fatty acids (NEFA)	NEFA	Serum		2-4 days



CLINICAL CHEMISTRY



Profiles	Code	Sample	Comments	Turnaround
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 (αHBDH)	HBDH	Serum		2-4 days
Indoxyl sulphate	INDO	Serum		1 week
Ionised calcium	CA+	Serum	 Collect into a plain serum tube (no gel) ensuring the tube is completely filled without any air bubbles Allow blood to clot (~15-20 min), centrifuge and transfer serum into a plain airtight tube, completely filling it (NO air) 	2-3 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
Nu.Q	NUQ	EDTA plasma	Sample has to be fasted (>4h) and arrive to the laboratory cooled.	~ 1 week
Pancreatic specific lipase	CPLI/ FPLI	Serum	Canine/Feline	Same day
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



CLINICAL CHEMISTRY



Profiles		Sample	Comments	Turnaround
Taurine	TAU	1 ml chilled EDTA plasma	Cannot run on haemolysed samples	up to 2 weeks
Thallium	TALL	Urine		1 week
Thymidine kinase	THMK	Frozen serum		up to 2 weeks
TLI (canine)	GE3	Serum	Canine only	Run Mon/Wed/Fri
TLI (feline)	GE7	Serum	Feline only	Run once a week
Troponin I	TROP	Frozen Serum	No gel tubes	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	Serum taken after overnight fast should not be exposed to sunlight	1-2 weeks
Vitamin E	VITE	Serum		1 week
Other vitamins		Serum	Contact the laboratory	
Zinc	ZN	Serum	Zinc free serum tubes	2-4 days



ENDOCRINOLOGY - THYROID



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. For diagnosing and monitoring canine hypothyroidism. For monitoring purposes: 1) Soloxine, Leventa, Thyroxyl: collect sample 4-6 hours post pill 2) Thyforon: collect peak sample 3 hours post pill	Same day
TSH		CTSH/ TSH	Serum	No gel tubes	Same day
NEW! Reverse T3		RT3	Serum	No gel tubes. To investigate non-thyroidal illness syndrome (NTIS) in dogs.	1 week
Free T4 by equilibrium dialysis (fT4)		FT4D	Serum	No gel tubes	3 days
T4AA, T3AA, TGAA - autoantibodies (dog)		THYA	Serum (>2ml)	No gel tubes, to confirm immune mediated lymphocytic thyroiditis	~2 weeks (for all results)
TGAA - thyroglobulin autoantibodies (dog)		TGAA	Serum	No gel tubes, to confirm immune mediated lymphocytic thyroiditis	3-5 days
T4, fT4, T3, fT3, TSH, T4AA, T3AA, TGAA (dog)		T4CP	Serum (>2ml)	No gel tubes, complete canine thyroid panel	~2 weeks (for all results)
NEW! Thyroid monitoring extensive (cat)	Crea, T4, TSH, SDMA, troponin I, ALT, ALP.	THME	Serum (>2ml)	No gel tubes. For monitoring purposes.	3-5 days
NEW! Hypothyroidism/ non-thyroidal illness (dog)	T4, fT4, reverse T3, TSH, cholesterol.	NTID	Serum (>2ml)	No gel tubes. To investigate non-thyroidal illness syndrome (NTIS) vs hypothyroidism in dogs.	~2 weeks (for all results)



ENDOCRINOLOGY - ADRENAL/PITUITARY



All tests include full reporting unless otherwise stated

Profiles	Code	Sample	Comments	Turnaround
ACTH stimulation test (2 measurements)	ADR1	Pre and post serum	No gel tubes. Used to help diagnose spontaneous hyperadrenocorticism, spontaneous hypoadrenocorticism and iatrogenic hyperadrenocorticism. Collect fasted baseline serum sample Inject 125 µg of synthetic ACTH intravenously or intramuscularly if patient is <5kg. Otherwise use 250 µg. Studies showed that similar results can be obtained also by injecting 5 µg/kg of synthetic ACTH. For horses, give 1 U/kg IM of ACTH gel. Collect a 60 minute post-ACTH sample (2h for horses) Label tubes appropriately (Take sample 4-6 hours post-pill if monitoring response to Vetoryl/Trilostane)	Same day
ACTH stimulation test (3 measurements)	ADRC	Pre and post serum	No gel tubes. Hyperadrenocorticism is rare in cats. The ACTH stimulation test has low sensitivity for detection of this disease. A low dose dexamethasone suppression test is comparatively superior for diagnosing feline hyperadrenocorticism. • Collect fasted baseline serum sample • Inject 125 µg of synthetic ACTH intravenously (250µg may be used in cats over 5kg). • Collect 60- and 90-minute post-ACTH samples • Label tubes appropriately	Same day
Cortisol	COR	Serum	No gel tubes. Used as a screening test for hypoadrenocorticism or pre-trilostane dosing for monitoring hyperadrenocorticism	Same day
Endogenous ACTH	ACTH	Frozen separated EDTA plasma	No gel tubes. Help differentiating between pituitary dependend hyperadrenocorticism and adrenal neoplasia. In horses, it is a diagnostic indicator of pituitary pars intermedia dysfunction (PPID) • Collect fasted blood sample into a plastic chilled EDTA tube (no glass tubes) • Centrifuge immediately • Transfer plasma into a chilled plastic plain tube • Freeze immediately • Sample MUST arrive frozen	2-4 days



Endocrinology 18

ENDOCRINOLOGY - ADRENAL/PITUITARY



Profiles	Code	Sample	Comments	Turnaround
Low dose dexamethasone suppression test	ADR2	Pre and 2 post serum	No gel tubes. Used to help diagnose spontaneous hyperadrenocorticism. Collect fasted baseline serum sample Canine: Inject 0.015 mg/kg dexamethasone intravenously Feline: Inject 0.1 mg/kg dexamethasone intravenously Collect a 4 and 8 hour post-dexamethasone sample Label tubes appropriately	Same day
High dose dexamethasone suppression test	ADR3	Pre and 2 post serum	No gel tubes. Used only once a diagnosis of hyperadrenocorticism has been made. This test helps to differentiate between pituitary dependent hyperadrenocorticism and adrenal neoplasia. Collect fasted baseline serum sample Canine: Inject 0.1 mg/kg dexamethasone intravenously Feline: Inject 1.0 mg/kg dexamethasone intravenously Collect a 4- and 8-hour post-dexamethasone sample Label tubes appropriately	Same day
Dexamethasone suppression test (over- night method - horses)	ADR4	Pre and 2 post serum	No gel tubes. Used to help diagnose pituitary pars intermedia dysfunction Collect fasted baseline serum sample between 4pm and 6pm Inject 40ug/Kg dexamethasone intramuscular Collect at noon the next day post-dexamethasone sample Label tubes appropriately	Same day
Urine cortisol:creatinine ratio	UCCR	Urine	Used as a screening test for hyperadrenocorticism. Clean, cystocentesis collected sample is preferred	3-4 days
Aldosterone (baseline)	ALD1	Serum	No gel tubes. For suspected hyperaldosteronism	~1 week
Dynamic aldosterone test	ALD2	Pre and post serum	No gel tubes. For suspected hyperaldosteronism. Performed as per an ACTH stimulation test	~1 week
Dynamic 17-Hydroxypro- gesterone test (SHAP)	SHAP	Pre and post serum	No gel tubes. To aid in the diagnosis of "atypical" hyperadrenocorticism. Performed as per an ACTH stimulation test	~1 week
Combined aldosterone and renin	CALR	Serum + frozen separated EDTA plasma	No gel tubes. To aid in the diagnosis of hyperaldosteronism (Conn's Disease)	Up to 2 weeks



ENDOCRINOLOGY - OTHER



All tests include full reporting unless otherwise stated

Profiles	Code	Sample	Comments	Turnaround
Insulin (add glucose - add £7)	INS	Serum (insulin), Ox-F for glucose	No gel tubes. For suspected insulinoma, measurement of contemporaneous glucose is required for interpretation. Concurrent measurement of glucose is strongly recommended to correctly interpret the insulin result	Up to 1 week
Insulin antibodies	INSA	Serum	No gel tubes. Investigations of increased insulin requirements for diabetics	Up to 2 weeks
Insulin-like growth factor (IGF-1)	IGF	Serum	No gel tubes. For suspected acromegaly or dwarfism.	Up to 1 week
Parathyroid hormone (PTH) (add ionised calcium - £30)	PTH	Frozen EDTA plasma only (PTH), serum (iCa)	For evaluation of suspected hyperparathyroidism. Collect fasted blood sample into a plastic chilled EDTA tube (no glass tubes, avoid haemolysis and lipemia) Gently invert several times to mix thoroughly Centrifuge immediately Transfer plasma into a chilled plastic plain tube (mix well again if using an EDTA tube) Freeze immediately Sample MUST arrive frozen lonised calcium should be measured concurrently Collect into a plain serum tube (no gel) ensuring the tube is completely filled without any air bubbles Allow blood to clot (~15-20 min), centrifuge and transfer serum into a plain airtight tube, completely filling it (NO air)	Up to 10 days
Parathyroid hormone related peptide (PTHrp) (add ionised calcium - £30)	PTHR	Frozen EDTA plasma only (PTHrp), serum (iCa)	For evaluation of suspected hypercalcaemia of malignancy. Collect fasted blood sample into a plastic chilled EDTA tube (no glass tubes, avoid haemolysis and lipemia) Gently invert several times to mix thoroughly Centrifuge immediately Transfer plasma into a chilled plastic plain tube Freeze immediately Sample MUST arrive frozen Ionised calcium should be measured concurrently Collect into a plain serum tube (no gel) ensuring the tube is completely filled without any air bubbles Allow blood to clot (~15-20 min), centrifuge and transfer serum into a plain airtight tube, completely filling it (NO air)	Up to 10 days



Endocrinology 20

ENDOCRINOLOGY - OTHER



Profiles	Code	Sample	Comments	Turnaround
Parathyroid hormone (PTH) + Parathyroid hormone related peptide (PTHrp) (add ionised calcium - £30)	PTH+	Frozen EDTA plasma only (PTHrp), serum (iCa)	For evaluation of hypercalcaemia of unknown origin. Collect fasted blood sample into a plastic chilled EDTA tube (no glass tubes, avoid haemolysis and lipemia) Gently invert several times to mix thoroughly Centrifuge immediately Transfer plasma into a chilled plastic plain tube Freeze immediately Sample MUST arrive frozen lonised calcium should be measured concurrently Collect into a plain serum tube (no gel) ensuring the tube is completely filled without any air bubbles Allow blood to clot (~15-20 min), centrifuge and transfer serum into a plain airtight tube, completely filling it (NO air)	Up to 10 days
Vitamin D3 (25 OH)	VITD	Serum	Protect from light	Up to 2 weeks
Salivary cortisol	SAL1	Saliva	Please contact the laboratory	
Salivary cortisol stimulation test	SAL2	2x Saliva (pre- and post-ACTH samples)	Please contact the laboratory	



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	Fresh urine in plain tube preferred. If not possible please use boric acid tube filled to the correct amount	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 sensitivitaes)	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
Microalbumin		MIAB	Minimum of 1 ml urine in plain tube		3-5 days
Urine cortisol:creatinine ratio		UCCR	5 ml urine, plain		2-4 days
Urine cytology	Cytological examination of urine or prostatic washes. 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
SDMA	Symmetric dimethylarginine	SDMA	Serum		Same day



Urinalysis 22

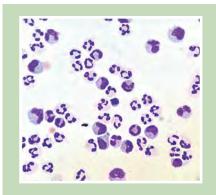
URINALYSIS

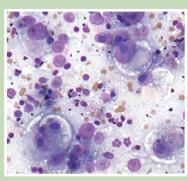


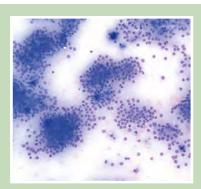
Profiles	Includes	Code	Sample	Comments	Turnaround
Indoxyl sulphate		INDO	Serum	Fasted sample	~1 week
FGF23	Fibroblast growth factor 23	XFGF	Serum		~1 week
Fractional excretion	Can be performed for Sodium, Chloride, Potassium, Calcium or Phosphorus	FRAC	Serum and urine		2-4 days
Calculus analysis		CALC	Dry calculus	Separate composition of shell and core of calculus is available upon request for stones >10mm (+£10).	1 day
BRAF mutation	For confirmation of canine transitional cell carcinoma (TCC)	BRAF	Preferred sample: 1ml urine sediment. Also accepted: prestai- ned smears, air dried smears, 5-10mls plain urine, tissue in formalin	Detection of V595 mutation. Please be aware this mutation is found in a large percentage (but not all) canine TCCs	Up to 1 week
NEW! BRAF 2 CNA	For confirmation of canine transitional cell carcinoma (TCC)	BRA+	Preferred sample: 1ml urine sediment. Also accepted: prestai- ned smears, air dried smears, 5-10mls plain urine, tissue in formalin	Detection of copy number alterations (CNAs) 13/19 and 36/19. To be requested after negative BRAF mutation analysis to increase sensitivity.	up to 10 days

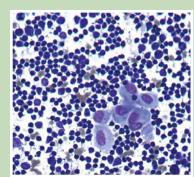


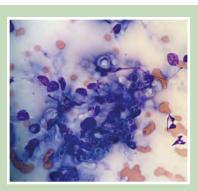












Batt Laboratories offers a comprehensive cytology service for all domestic species provided by experienced clinical pathologists.

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



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/prostatic wash)		CYTU	Urine/prostatic lavage	Submit 5ml fresh urine sample/ prostatic wash in plain and EDTA tubes	Up to 1 day
Cytology (broncoalveolar lavage/ transtracheal wash)		BAL	Broncoalveolar lavage/ transtracheal 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



CYTOLOGY/HISTOLOGY



Profiles	Includes	Code	Sample	Comments	Turnaround
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
Flow cytometry (immunophenotyping leukaemia)	For confirmation and immunophenotyping of leukaemia	FLO1	Fresh EDTA blood	Include fresh blood smear	2-3 days
Flow cytometry (immunophenotyping lymphoma)	For confirmation and immunophenotyping of lymphoma	FLO2	Cells suspended in fixative solution (for solid lesions/lymphoma).	As fixative solution, use serum sample from the same patient. Sample has to be fresh and reach the laboratory within 24h. Cytology sample (if from a lymph node or other organ) should also be submitted.	2-3 days
PARR (clonality testing for lymphoma)	For confirmation of lymphoma	PARR	Prestained smears, air dried smears, fluid, tissue in formalin	Following cytology/histology	Up to 1 week
Immunohistochemistry	1 marker	ICC1	Tissue in formalin	Following histology	Up to 2 weeks
	2 markers	ICC2	Tissue in formalin	Following histology	Up to 2 weeks
	3 markers	ICC3	Tissue in formalin	Following histology	Up to 2 weeks
	4 markers	ICC4	Tissue in formalin	Following histology	Up to 2 weeks
	5 markers	ICC5	Tissue in formalin	Following histology	Up to 2 weeks
	6 markers	ICC6	Tissue in formalin	Following histology	Up to 2 weeks
Immunohistochemistry (mast cell tumour)	cKit and Ki67	МСТ	Tissue in formalin	Following histology	Up to 2 weeks
	ckit	KIT	Tissue in formalin	Following histology	Up to 2 weeks
	ki67	KI67	Tissue in formalin	Following histology	Up to 2 weeks
NEW! C-kit mutation		KITM	Tissue in formalin	Following histology	Up to 2 weeks



CYTOLOGY/HISTOLOGY



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround	
Further cyto/ histochemical stains				Following cytology/histology		
BRAF mutation	For confirmation of canine transitional cell carcinoma (TCC)	BRAF	Preferred sample: 1ml urine sediment. Also accepted: prestained smears, air dried smears, 5-10mls plain urine, tissue in formalin	Detection of V595 mutation. Please be aware this mutation is found in a large percentage (but not all) canine TCCs	Up to 1 week	
NEW! BRAF 2 CNA	For confirmation of canine transitional cell carcinoma (TCC)	BRA+	Preferred sample: 1ml urine sediment. Also accepted: prestained smears, air dried smears, 5-10mls plain urine, tissue in formalin	Detection of copy number alterations (CNAs) 13/19 and 36/19. To be requested after negative BRAF mutation analysis to increase sensitivity.	Up to 10 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.

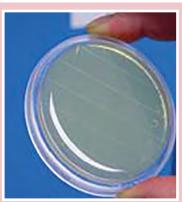


MICROBIOLOGY AT BATTLAB



- We identify both aerobic and anaerobic bacteria, if needed by Matrix-Assisted Laser Desorption/Ionization Timeof-Flight Mass Spectrometer (MALDI-TOF). This technology generates characteristic mass spectral fingerprints, that are unique signatures for each microoorganism 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.











MICROBIOLOGY



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	1-5mls of blood required, depending on animal's size	Up to 14 days
Environmental culture (qualitative) (up to 2 sites)	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 M. canis, M. gypseum, M. persicolor, T mentagrophytes, T. equinu, Trichophyton species of Arthroderma benhamiae, Trichophyton equinum, Trichophyton verrucosum, Trichophyton erinacei	DERP	Skin scraping, plucked hairs	Species differentiation possible in positive cases (+£40)	3-5 days	
Demodex PCR	Semi-quantitative real-time PCR for D. canis, D. injai, D. cornei, D. cati, D. gatoi, D. felis	XDEM	Skin scraping		3-5 days	
Sarcoptes antibody		SAR	SAR	Canine only	2-4 days	
Sarcoptes PCR	Real-time PCR for Sarcoptes scabei var. canis	XSAR	Skin scraping		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	
UPDATED! Skin microscopy (scraping)/ ear microscopy, fungal and bacterial culture		DER3	Skin scraping, plucked hairs, skin swab, ear swab	Samples from different sites of collection will be cultured separately	Same day. 1-5 days for bacterial and fungal culture	
UPDATED! Skin microscopy (scraping)/ ear microscopy, fungal and bacterial culture and Derma- tophytes culture		DER4	Skin scraping, plucked hairs, skin swab, ear swab	Samples from different sites of collection will be cultured separately	Same day. 1-5 days for bacterial and fungal culture. Up to 4 weeks for Dermatophytes	

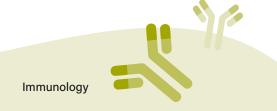
NOTES: Please avoid submitting skin scrapings with oil, if possible. Charcoal swabs should be used for microbiology culture unless otherwise indicated. Culture results are accompanied by MALDI-TOF identification when appropriate or when specifically requested. Sensitivity panels are tailored according 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.



IMMUNOLOGY



Profiles	Includes	Code	Sample	Comments	Turnaround
Acetylcholine receptor antibody		ARA	1-2 ml serum	To aid in the diagnosis of myasthenia gravis. Collect serum sample PRIOR to initiation of corticosteroid o r other immunosuppressive therapy.	3-4 days
Anti nuclear antibody test (ANA)		ANA	1-2 ml serum	To aid in the diagnosis of autoimmune disease (eg. SLE). Collect serum sample PRIOR to initiation of corticosteroid or other immunosuppressive therapy.	3-4 days
Coombs test		coo	EDTA	To confirm IMHA. Canine/Feline	Same day canine only. 2-4 days feline
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
Muscle fibre antibody type 2M		MASM	1-2 ml serum	To aid in the diagnosis of masticatory muscle myositis. Collect serum sample PRIOR to initiation of corticosteroid or other immunosuppressive therapy.	2 - 3 weeks
Rheumatoid factor		RF	Serum	To aid in the diagnosis of immune-mediated disease (eg. rheumatoid arthritis). Collect serum sample PRIOR to initiation of corticosteroid or other immunosuppressive therapy.	3-4 days



THERAPEUTIC DRUG MONITORING AND TOXICOLOGY



Profiles	Includes	Code	Sample	Comments	Turnaround	
Phenobarbital		PHE	At least 0.5 ml serum	No gel tubes. To be checked after a minimum of 2-3 weeks of treatment or dose changing. Peak: 4-8 hours post-pill Trough: Immediately prior to next dose (usually 12h) First monitoring requires peak and trough sampling. Further monitoring requires one sample only, collected any time of the day.	Same day	
Phenobarbital peak and trough samples		PHE1	At least 0.5 ml serum	As above	Same day	
Potassium Bromide		KBR	At least 0.5 ml serum	No gel tubes. To be checked after a minimum of 120 days of treatment, unless loading dose given. Peak: there is no peak collection time due to the long half-life of bromide Trough: immediately prior to next dose	2 days	
Cyclosporin		CYCL	1ml EDTA	No gel tubes. Peak: 2-4 hours post-pill Trough: 12 hours following the last dose	3-4 days	
lpha-Chloralose		CHLO	Serum, urine		4-5 days	
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	
Levetiracetam (Keppra)		KEP	At least 1 ml EDTA plasma	No gel tubes. Collect at trough directly before next dose	3-4 days	
Amiodarone		AMIO	Serum		~1 week	
Zonisamide		ZONI	Serum		~1 week	



THERAPEUTIC DRUG MONITORING AND TOXICOLOGY



Profiles	Includes	Code	Sample	Comments	Turnaround	
Extensive toxicology screen		TOX1	Heparin blood, urine, fresh tissue, contaminated material, stomach content.	Screening for 30,000 drugs and toxins including antiarrhythmics, analgesics, anticonvusivants, antidepressants, antihistamines, barbiturates, benzodiazepines, toxins, NSAIDs, phenothiazines, caffeine, chocolate, ketamine.	~1 week	
Heavy metal toxicity screen		HMTS	Serum, EDTA, urine, fresh tissue, feed sample.		~1 week	
Ethylene glycol		ТОХ3	Heparin blood, urine, fresh tissue, contaminated material, stomach content		~1 week	
Vitamin K1 / K1 epoxide		TOX4	Heparin blood		~1 week	
Anti-coagulant panel		TOX2	Heparin blood, urine, fresh tissue, conta- minated material, stomach content	Screening for Warfarin and coumarin derivates	~1 week	
Convulsant panel		TOX5	Stomach content, feed sample	Screening for strychinine, tremorgenic mycotoxins, bromethalin.	~1 week	
Mycotoxin panel		TOX6	Stomach content, feed sample	Screening for aflatoxins, zearalenone, vomitoxin.	~1 week	
Methylxanthines		ТОХ7	Heparin blood, urine, fresh tissue, contaminated material, stomach content.	Screening for caffeine, theobromine, dimethylxanthine.	~1 week	
Drugs of abuse		TOX8	At least 10 ml urine	Screening for Codeine, Amphetamine, Cocaine, Heroin, Methadone, Cannabis, MDMA, Morphine, Buprenorphine.	~1 week	



THERAPEUTIC DRUG MONITORING AND TOXICOLOGY



Profiles	Includes	Code	Sample	Comments	Turnaround	
Metaldehyde, Strych- nine, Methiocarb		TOX9	Heparin blood, urine, fresh tissue, conta- minated material, stomach content		~1 week	
Xylitol		TO10	Ox-F, urine		~1 week	
Cadmium		CADM	Serum		~1 week	
Cobalt		СОВ	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 - CANINE/FELINE



Profiles	Includes	Code	Sample	Comments	Turnaround
CAV, CDV, CPV - vaccine status (gold standard), canine		ADP2	Serum	VNT, HAI	1 week
FCV, FHV, FPV - vaccine status (gold standard), feline		CHP1	Serum	VNT, HAI	1 week
CAV, CDV, CPV (vaccine status), canine		ADP1	Serum	IFAT	2-4 days
CAV, CDV, CPV, Lepto (vaccine status), canine		ADP	Serum	IFAT, MAT (Leptospira)	2-4 days
FCV, FHV, FPV (vaccine status), feline		CHPS	Serum	IFAT	2-4 days
Adenovirus (CAV) antibodies, canine		CAV	Serum	IFAT	2-4 days
Anaplasma phagocytophilum antibodies		SANA	Serum	Dog (ELISA) Cat (IFAT)	2-4 days
Angiostrongylus vasorum (lungworm) antigen		LWA	Serum	ELISA	Same day
Aspergillus antibodies		ASPS	Serum	MAT	2-4 days
Aujeszky virus (pseudorabies) antibodies		AUVI	Serum	VNT	1 week
Babesia antibodies		BAB	Serum	Dog (ELISA) Cat (IFAT)	2-4 days
Bartonella henselae antibodies		BARB	Serum	IFAT	2-4 days
Bornavirus antibodies		SBOR	Serum	IFAT	2 weeks
Borrelia antibodies (IgM + IgG)		BOR	Serum	ELISA	2-4 days
Borrelia antibodies (Western blot)		SBWB	Serum	Western blot	1 week
Brucella canis antibodies		BRUC	Serum	RSAT + ELISA	10 days
Calicivirus (FCV) antibodies, feline		FCA	Serum	IFAT	2-4 days
Chlamydia antibodies		СНВ	Serum	IFAT	2-4 days
Clostridium antibodies (tetanus)		TET	Serum	ICA	Up to 2 weeks
Clostridium difficile toxin A and B antigen		CDAB	Fresh faeces	ELISA	2-4 days
Clostridium perfringens enterotoxin antigen		CLP	Fresh faeces	ELISA	1-3 days
Coronavirus antibody (FeCoV) / FIP, feline		FIP	Serum	ELISA	2-4 days
Cryptococcus antigen		CRYA	Serum	Agglutinaton	3-5 days



INFECTIOUS DISEASES - ANTIGEN/ANTIBODY TESTING - CANINE/FELINE



Profiles	Includes	Code	Sample	Comments	Turnaround
Cryptosporidium antigen		CRYE	Fresh faeces	EIA	3-5 days
Dirofilaria immitis antigen		DIR	Serum	ELISA	2-4 days
Distemper virus (CDV) antibodies, canine		CDV	Serum	IFAT	2-4 days
Echinococcus antibodies		ECHA	Serum	ELISA	~1 week
Encephalitozoon cuniculi antibodies (IgG)		ECUN	Serum	IFAT	2-4 days
Encephalitozoon cuniculi antibodies (IgG+IgM)		ECU2	Serum	IFAT	2-4 days
Erhlichia canis antibody (ELISA)		EHR	Serum	ELISA (dogs)	2-4 days
Erhlichia canis antibody (IFAT)		EHR2	Serum	IFAT (cats)	2-4 days
FELV (IFAT)		FLV1	EDTA + blood smear	IFAT - confirmatory test	1 week
FeLV antigen (ELISA)		FLV	Serum	ELISA - screening test	Same day
FeLV antigen and FIV antibodies (ELISA)		FLI	Serum, EDTA	ELISA - screening test	Same day
FeLV, FIV & FeCoV (FIP)		FLIP	Serum	ELISA (FeLV, FIV), IFAT (FIP)	2-4 days
FIV (IFAT)		FIV1	Serum	IFAT - confirmatory test	1 week
FIV antibodies (ELISA)		FIV	Serum	ELISA screening test	Same day
FIV antibodies (Western blot)		FIV2	Serum	Western Blot - confirmatory test	Up to 2 weeks
Giardia antigen		GIA	Fresh faeces or 3 day pooled faeces	ICG	Same day
Herpes virus (CHV) antibodies, canine		HERA	Serum	IFAT	2-4 days
Herpes virus (FHV) antibodies, feline		FHV	Serum	IFAT	2-4 days
Leishmania antibodies (ELISA)		SLEL	Serum	ELISA	1-3 days
Leishmania antibodies (IFAT)		LEIS	Serum	IFAT	2-4 days



INFECTIOUS DISEASES - ANTIGEN/ANTIBODY TESTING - CANINE/FELINE



Profiles	Includes	Code	Sample	Comments	Turnaround
Leptospira antibodies	_	LEP	Serum	MAT	2-4 days
Listeria antibodies		SLIS	Serum	IFAT	2-4 days
Microfilaria (Knott test)		KNOT	EDTA	Knott test	2-4 days
Neospora caninum antibodies (IgM + IgG)		NEO	Serum	IFAT	2-4 days
Panleukopaenia (FPV) antibodies, feline		FPV	Serum	IFAT	2-4 days
Panleukopaenia (FPV) antigen, feline		PARV	Faeces	EIA	Same day
Parvovirus (CPV) antibodies, canine		CPV	Serum	IFAT	2-4 days
Parvovirus (CPV) antigen, canine		PARV	Faeces	ICG	Same day
Rabies antibodies		RAB	Serum	FAVN (fluorescent antibody virus neutralisation)	Up to 2 weeks
Rickettsia conorii antibodies		RICC	Serum	IFAT	2-4 days
Rickettsia rickettsii antibodies		RICK	Serum	IFAT	2-4 days
Rotavirus antigen		ROTA	Faeces	EIA	2-4 days
Salmonella antibodies		SSAL	Serum	MAT	2-4 days
Sarcoptes antibodies (canine only)		SAR	Serum	ELISA	2-4 days
Tick-borne encephalitis antibodies (IgG)		TBEE	Serum, CSF	ELISA	3-5 days
Tick-borne encephalitis antibodies (IgM)		TBEM	Serum	ELISA	3-5 days
Toxoplasma antibodies (IgG +IgM)		TOX	Serum	ELISA	1-3 days
Trypanosoma evansi antibodies, canine		STRE	Serum	CATT	2-4 days





Profiles	Includes	Code	Sample	Comments	Turnaround
Qualitative PCR					
Adenovirus 1 (CAV-1), canine		ADVP	EDTA, liver, urine		3-5 days
Adenovirus 2 (CAV-2), canine		ADV2	Pharyngeal swab, tracheal wash, BAL		3-5 days
Aelurostronglyus abstrusus (feline lungworm)		XAAB	BAL, faeces		3-5 days
NEW! Alongshan virus		ALVI	Tissue, tick, EDTA		3-5 days
Anaplasma phagocytophilum		ANAP	EDTA, CSF, bone marrow, synovial fluid, tick		3-5 days
Anaplasma platys		XAPL	EDTA, tick		3-5 days
Angiostrongylus vasorum (canine lungworm)		XAVA	EDTA, BAL, faeces		1-3 days
Aspergillus species		ASPP	Nasal flush fluid, plain swab, BAL, fresh tissue		3-5 days
Babesia species		BABP	EDTA, tick		3-5 days
Bartonella henselae		BARP	EDTA, CSF		3-5 days
Bordetella bronchiseptica		XBB	Nasal flush, pharyngeal swab, tracheal wash, BAL		1-3 days
Bornavirus		XBOR	EDTA, CSF		3-5 days
Borrelia (Lyme disease)		BORA	Synovial fluid/synovium, tick, CSF, skin		3-5 days
Brucella canis		BRUP	Swab, EDTA, semen, urine, abort material		3-5 days
Calicivirus (FCV), feline		FCAP	Oronasal swabs, tracheal wash, BAL, EDTA		1-3 days
Campylobacter jejuni		XCJ	Faeces		1-3 days
NEW! Capillaria aerophila		CAAE	Faeces, BAL		3-5 days





Profiles	Includes	Code	Sample	Comments	Turnaround
		CHP	Swab, faeces,		
Chlamydia species		СПР	aborted material		1-3 days
Canine Circovirus		XCIR	Faeces, EDTA		3-5 days
NEW! Clostridioides difficile toxin A+B		CLDT	Faeces		3-5 days
NEW! Clostridium perfringens alpha toxin		CLP1	Faeces		3-5 days
NEW! Clostridium perfringens enterotoxin		CLP2	Faeces		3-5 days
NEW! Clostridrium perfringens net E		CLP3	Faeces		3-5 days
NEW! Clostridrium perfringens net F		CLP4	Faeces		3-5 days
Coronavirus (FCoV), feline		FIPP	Ascitic fluid, tissue, CSF, faeces		1-3 days
NEW! Coronavirus (FCoV23), feline		FI23	Ascitic fluid, tissue, CSF, faeces	FCoV-23 strain	3-5 days
Coronavirus (enteric), canine		CORP	Faeces		3-5 days
Coronavirus (respiratory), canine		CORR	Swab		3-5 days
Crenosoma vulpis		CREN	Swab, BAL (in plain or EDTA tube), faeces		3-5 days
Cryptosporidium		XCRY	Faeces, gastric lavage fluid		1-3 days
Cytauxzoon incl. species diff.		CYZO	EDTA, tick		3-5 days
Demodex species		XDEM	Skin scraping	Semi-quantitative real-time PCR for D. canis, D. injai, D. cornei, D. cati, D. gatoi, D. felis	3-5 days
NEW! Demodex gatoi		XDEG	Skin scraping		3-5 days





Profiles	Includes	Code	Sample	Comments	Turnaround
Dermatophytes		DERP	Skin scraping, plucked hairs	PCR detection of M. canis, M. gypseum, M. persicolor, T. mentagrophytes, T. equinu, Trichophyton species of Arthroderma benhamiae, Trichophyton equinum, Trichophyton verrucosum, Trichophyton erinacei. Species differentiation possible in positive cases (+£40)	3-5 days
Distemper virus canine (CDV)		CDVP	EDTA, CSF, urine, swab, faeces		1-3 days
Echinococcus multilocularis/ granulosus		ECHI	Faeces, tissue		3-5 days
Ehrlichia canis		EHRP	EDTA, bone marrow, tick		3-5 days
FeLV provirus		FLVP	EDTA, bone marrow		3-5 days
FIV provirus		FIVP	EDTA		3-5 days
Giardia species		GIAP	Fresh faeces or 3-day pooled faeces		1-3 days
Helicobacter species		XHEL	Vomitus		3-5 days
Hepatozoon canis/felis		XHZC	EDTA, Tick		3-5 days
Herpesvirus (CHV), canine		HERP	EDTA, Swab, aborted material		3-5 days
Herpesvirus (FHV), feline		HERP	Conjunctival/oronasal swabs, tracheal wash, nasal flush fluid, EDTA		1-3 days
Influenza A Virus		XIFA	Nasal swab, Lymph node		3-5 days
Leishmania		LEIP	Swab, aqueous humor, bone marrow, lymph node, skin, EDTA		3-5 days
Leptospira species		LEPP	Urine and EDTA, aborted material		3-5 days
Microfilaria species		DIRP	EDTA	If positive, differentiation is available for extra charge (+£50)	3-5 days
Mycoplasma (haemotropic), feline		НМВС	EDTA	includes species differentiation	3-5 days





Profiles Includes Code Sample Comments		Turnaround			
	Iliciuues		Sample	Comments	- Turriar Guria
Mycoplasma (haemotropic), canine		НМВ	EDTA		3-5 days
Mycoplasma (respiratory/ mucous membranes), feline		MFEL	BAL, ocular/throat swab, aborted material		3-5 days
Mycoplasma (respiratory/mucous membranes), canine		MCAN	BAL, ocular/throat swab, aborted material	Mycoplasma canis and Mycoplasma cynos available for extra charge (+£55)	3-5 days
Morbillivirus (FeMV), feline		FMOR	Urine		3-5 days
Neoehrlichia mikurenssis		CNMK	EDTA, tick		3-5 days
Neospora caninum		NEOP	Faeces, CSF		1-3 days
Orthopoxvirus (pox)		OPXV	Scab/crust		3-5 days
Papillomavirus		XPAP	Skin		3-5 days
Parainfluenza virus (CpiV), canine		PIP	Nasal flush, tracheal wash, BAL		3-5 days
Parvovirus (CPV), canine		PARP	EDTA, faeces		1-3 days
Parvovirus (FPV), feline		PARP	EDTA, faeces		1-3 days
Rickettsia		XRIC	EDTA, skin, tick		3-5 days
NEW! Rotavirus A		ROTA	Faeces		3-5 days
NEW! Rustrela virus		XRUS	Brain tissue		3-5 days
Salmonella		XSAL	Faeces		1-3 days
Sarcoptes scabiei var. canis		XSAR	Skin scraping		3-5 days
SARS-CoV-2		SARS	Deep nasal/pharyngeal swab		3-5 days
Tick-borne Encephalitis virus		XTBE	CSF, serum, tick		3-5 days
Toxoplasma gondii		TOXP	Faeces, CSF, aborted material		1-3 days
NEW! Troglostronglyus brevior		XTBR	Faeces, EDTA, BAL		3-5 days
Yersinia enterocolitica		YENT	Faeces		3-5 days





All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Quantitative PCR					
Distemper virus, canine		CDVX	Swab		3-5 days
Parvovirus, canine		PARX	Faeces		3-5 days
Coronavirus - FCoV, feline		FIPX	Ascitic fluid, faeces, EDTA		3-5 days
FIV provirus		FIVX	EDTA		2 weeks
Leishmania species		LEIX	Bone marrow, EDTA		3-5 days
Microfilaria		MICX	EDTA		3-5 days

INFECTIOUS DISEASES - PCR PROFILES - CANINE

Profiles	Includes	Code	Sample	Comments	Turnaround
Canine anaemia profile	Babesia species, Ehrlichia canis, Anaplasma phagocytophilum, Haemotropic Mycoplasma species	CAPP	EDTA		3-5 days
Canine diarrhoea profile	Coronavirus, Circovirus, Parvovirus, Giardia species, Cryptosporidia species	XCDP	Faeces		3-5 days
Canine eye profile	Herpesvirus, Chlamydia species, Mycoplasma species	XCEP	Ocular/conjunctival swabs		3-5 days
UPDATED! Canine lungworm profile	Angiostrongylus vasorusm, Crenosoma vulpis, Capillaria aerophila	CALU	Faeces, BAL, EDTA blood		3-5 days
Canine neurology profile - Small	Distemper virus, Neospora caninum, Toxoplasma gondii, CSF protein.	CNPS	CSF		3-5 days





All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Canine neurology profile - Large	Anaplasma phagocytophilum, Neospora caninum, Toxoplasma gondii, Distemper virus, Tick-Borne Encephalitis antibody, IgA and CSF protein, C-reactive protein	CNPC	CSF		3-5 days
UPDATED! Canine respiratory profile 1	Herpesvirus, Adenovirus, Parainflu- enza virus, Coronavirus, Distemper virus, Bordetella bronchiseptica, Mycoplasma cynos	XCR1	Swab, nasal flush, tracheal wash, BAL fluids		3-5 days
UPDATED! Canine respiratory profile 2	Parainfluenza virus, Corona- virus, Bordetella brochiseptica, Mycoplasma cynos	XCR2	Swab, nasal flush, tracheal wash, BAL fluids		3-5 days
Canine reproduction profile	Herpesvirus, Chlamydia species, Mycoplasma canis, Brucella canis	XCRP	Swab, aborted material		3-5 days

INFECTIOUS DISEASES - PCR - FELINE

Profiles	Includes	Code	Sample	Comments	Turnaround
Feline diarrhoea profile	Coronavius, Tritrichomonas foetus, Giardia species, Parvovirus, Cryptosporidia species	XFDP	Faeces		1-3 days
Feline eye profile	Herpesvirus, Chlamydia species, Mycoplasma felis	FEVP	Ocular/conjunctival swabs		1-3 days
Feline flea profile	Haemotropic mycoplasma (including species differentiation), Rickettsia, Bartonella henselae	FLE1	EDTA, flea		3-5 days





All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
UPDATED! Feline lungworm	Aelurostrongylus abstrusus, Troglostrongylus brevios, Capillaria aerophila	FELU	Faeces, BAL, EDTA blood		3-5 days
UPDATED! Feline neurology profile	Coronavirus, Toxoplasma gondii, Herpesvirus, Rustrela virus	XFN	CSF		3-5 days
Feline respiratory profile 1	Calicivirus, Herpesvirus, Chlamydia species, Bordetella bronchiseptica, Mycoplasma felis	XFR1	Swab, nasal flush, tracheal wash, BAL fluids		1-3 days
Feline respiratory profile 2	Calicivirus, Herpesvirus, Chlamydia species, Mycoplasma felis	XFR2	Swab, nasal flush, tracheal wash, BAL fluids		1-3 days
Feline respiratory profile 3	Calicivirus, Herpesvirus, Chlamydia species	XFR3	Swab, nasal flush, tracheal wash, BAL fluids		1-3 days
Feline respiratory profile 4	Calicivirus, Herpesvirus	XFR4	Swab, nasal flush, tracheal wash, BAL fluids		1-3 days
Feline reproduction profile	Herpesvirus, Chlamydia species, Mycoplasma felis	XFRP	Swab, aborted material		1-3 days

INFECTIOUS DISEASES - PCR PROFILES - TICK-BORNE DISEASES

Profiles	Includes	Code	Sample	Comments	Turnaround
Tick borne disease	Borrelia species, Tick-Borne Encephalitis virus, Babesia species, Anaplasma phagocytophilum, Erhlichia canis, Hepatozoon canis.			Serology and PCR testing available up request. The selection of samples and tests to perform depend on the time or exposure and clinical signs.	



TRAVEL PROFILES



Profiles	Includes	Code	Sample	Comments	Turnaround
Canine travel profile (southern Europe)	Serology: Leishmania, Ehrlichia canis, Babesia species, Richettsia sp. Antigen: Dirofilaria immitis. PCR: Hepatozoon, Microfilaria, Anaplasma platys	CTP2	EDTA and serum	Southern Spain, Balearic Islands, Canary islands, Portugal, southern France, Greece, southern Italy, Croatia, Turkey, Albania, southern Romania, Bulgaria, Serbia, Bosnia.	3-5 days
Canine travel profile (eastern Europe)	Serology: Babesia species, Anaplasma phagocytophilum, Rickettsia species. Antigen: Dirofilaria immitis. PCR: Microfilaria	CTP4	EDTA and serum	Poland, Czech Republic, Hungary, Ukraine, Slovakia, northern Romania, Russia	3-5 days
UPDATED! Canine travel profile (northern central Europe)	Serology: Bartonella henselae, Rickettsia, FIV. Antigen: FeLV. PCR: Anaplasma phagocytophilum, haemotropic Mycoplasma (including diff)	CTP5	EDTA and serum		3-5 days
Canine travel profile (USA)	Ab: Leishmania, Babesia, Rickettsia rickettsii, Ehrlichia. Ag: Dirofiliaria immitis. PCR: Hepatozoon, Microfilaria, Anaplasma platys	CTP6	EDTA and serum		3-5 days
UPDATED! Canine travel profile - Acute	FBC, Dirofilaria immitis (antigen). PCR: Piroplasmida (including diff), Leishmania, Ehrlichia, Hepatozoon, Anaplasma platys, Microfilaria	СТР7	EDTA and serum		3-5 days
Feline travel profile (south/eastern Europe)	Serology: Leishmania, Rickettsia felis, Bartonella henselae, FIV. Antigen: FeLV. PCR: Hepatozoon, Microfilaria, Piroplasmida.	FTP1	EDTA and serum		3-5 days
NEW! Feline travel profile (northern/central Europe)	Serology: Toxoplasma, Bartonella henselae, Rickettsia felis. PCR: Anaplasma, Haemotropic mycoplasma (including differentiation)	FTP2	EDTA and serum		3-5 days
NEW! Feline travel profile - Acute	FBC, PCR: Piroplasmida, Anaplasma Phagocytophylum, haemotropic Mycoplasma (including differentiation), Hepatozoon	FTP3	EDTA and serum		3-5 days
UPDATED! Leishmania profile	FBC, total protein, albumin, globulin, creatinine, urea, ALT, AST, ALP, CRP, UPC, Leishmania (ELISA), serum protein electrophoresis (SPE)	LEIL	EDTA, serum, urine		3-5 days
Vector-borne diseases profile	Serology: Borrelia, Babesia species, Anaplasma phagocytophilum,	VBDP	EDTA or serum		3-5 days



ALLERGY TESTING AT BATTLAB



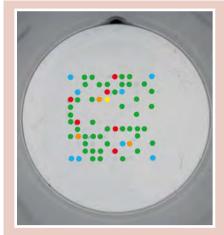
- In dogs, cats and horses, atopic dermatitis is known as an allergy to pollen, dust mites and/or moulds.
- Allergic patients have high concentrations of IgE directed against environmental or food allergens.
- When allergy is suspected, we recommend performing serology testing (ELISA Fcε-receptor test in dogs and cats) 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:

Dog, Cat:

- Moulds: Alternaria alternata, Aspergillus fumigatus, Cladosporium herbarum, Penicillium notatum.
- ✓ <u>Mites</u>: Dermatophagoides farinae, Dermatophagoides pteronyssinus, Acarus siro, Tyrophagus putrescentiae.
- For outdoor housing, we recommend **SEASONAL ALLERGY PANEL**, which includes:

Dog, Cat:

✓ Pollen: 6-grass mix (Orchard grass, Perennial ryegrass, Timothy grass, Meadow fescue, Kentucky blue grass, Velvet grass); Rye, Mugwort, Ragweed, English plantain, Nettle, Sheep sorrel, Birch, Hazel, Willow.





Seasonal allergens of dogs and cats can be affected by the presence of
 anti-CCD IgE (antibodies on carbohydrate side chains of plants) resulting
 into extremely positive results (positive to nearly every allergen). CCD
 reactivity can be identified with CHO test, that identifies IgE to the CCD
 determinant. When the CHO test is positive, an inhibitor is used to block
 the CCD reaction, and this eliminates false positive reactions.



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ALLERGOLOGY - CANINE / FELINE



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Screening test	Mites, pollens, moulds, flea saliva	ALLB	3 ml serum	Including CHO test and blocking as needed.	3-5 days
Seasonal (outdoor) panel	Grasses, weeds, tree pollen	ALLS	1 ml serum	Including CHO test and blocking as needed.	3-5 days
Perennial (indoor) panel	Moulds, mites	ALLP	1 ml serum		3-5 days
Canine pruritus profile	Screening test + Sarcoptes IgG	PRPR	3 ml serum		3-5 days
Canine pruritus profile - Large	Seasonal and perennial panel, food allergens basic, food allergens extended, Sarcoptes IgG, flea saliva	PRPL	3ml serum		~1 week
Nordic allergy profile	Flea saliva, Malassezia, pollen from northern grasses, weeds and trees, moulds and mites	NAPR	3ml serum	Including CHO test and blocking as needed.	~1 week
Feathers/hairs/ epithelia	Cat, dog, rabbit, guinea pig, parrot, feather mix	AFHE	1 ml serum		~1 week
Insect panel	Deerfly, gnat, mosquito, horse fly, stable fly, cockroach	AINS	1 ml serum		~1 week
Mediterranean panel	Grasses, weeds, tree pollen, moulds, mites	AMED	1 ml serum	Including CHO test and blocking as needed.	~1 week
Hymenoptera panel	Bee, wasp, hornet, paperwasp	AHYM	1 ml serum	Including CHO test and blocking as needed.	Up to 2 weeks
Flea saliva IgE		FLEA	>0.5 ml serum		3-5 days
Malassezia IgE		ALLM	>0.5 ml serum		~1 week
Staphylococcus IgG		ALST	>0.5 ml serum		3-5 days
Sarcoptes IgG		SAR	>0.5 ml serum	Canine only	3-5 days
Canine food allergens	IgE and IgG against commonly used food ingredients	CFAT	1 ml serum		3-5 days
Canine food allergens extended	IgE and IgG against horse, ostrich, kangaroo, wild boar, reindeer, amaranth, parsnip and millet.	ACFE	1 ml serum		Up to 10 days

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ALLERGOLOGY - CANINE / FELINE



All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround
Feline food allergens	IgE and IgG against commonly used food ingredients	FFAT	1 ml serum		3-5 daysa
Canine/Feline food allergens exotics	IgE and IgG against trout, goat, camel, buffalo, quail, hermetia/insect, sweet potato, Jerusalem artichocke, buckwheat, bean, carrot, pumpkin, zucchini, pea, yeast	FAEX	1ml serum		Up to 10 days
Gluten sensitivity		GLUS	1 ml serum	Canine only	Up to 2 weeks

ALLERGEN-SPECIFIC IMMUNOTHERAPY

All tests include full reporting unless otherwise stated

Profiles	Includes	Code	Sample	Comments	Turnaround	£ Excl. VAT
Immunotherapy 1 - 4 allergens	Injectable hypo sensitization - see package insert information	ALV1		Written prescription and import certificate available from the VMD website needed to order immunotherapy.	~2 weeks	
Immunotherapy 5 - 8 allergens	Injectable hypo sensitization - see package insert information	ALV2		Written prescription and import certificate available from the VMD website needed to order immunotherapy.	~2 weeks	
Immunotherapy > 8 allergens	Injectable hypo sensitization - see package insert information	ALV3		Written prescription and import certificate available from the VMD website needed to order immunotherapy.	~2 weeks	



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GENETIC TESTS DOGS



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, buccal swabs*

For breed identification testing contact the laboratory prior sampling as a special buccal swab is required.

Test	Code	Breed	
Cystinuria	CN	Australian Cattle Dog, Continental Bulldog, English Bulldog, French Bulldog, Labrador Retriever, Landseer, Mastiff, Miniature Pinscher, Newfoundland, Olde English Bulldog	
Degenerative myelopathy (exon 2)	CDMM	All breeds	
Exercise induced collapse (EIC)	EIC	Boykin Spaniel, Chesapeake Bay Retriever, Clumber Spaniel, Curly Coated Retriever, German Wire-haired Pointing Dog, Labrador Retriever, Old English Sheepdog, Welsh Corgi Pembroke	
Episodic Falling	EF	Cavalier King Charles Spaniel	
Familial Nephropathy (FN)	FN	English Cocker Spaniel, Welsh Springer Spaniel	
Familial Nephropathy (FN)	FN1	English Springer Spaniel, Samoyed	
Fucosidosis	FUC	English Springer Spaniel	
Hereditary cataract (HSF4)	8576	Boston Terrier, French Bulldog, Staffordshire Bull Terrier	
Hyperuricosuria (SLC)	8154	All breeds	
Imerslund-Gräsbeck syndrome (IGS) -cobalamine malabsorption	8475	Beagle, Border Collie, Komondor	
Lafora disease (EDTA blood only)	8005	Basset Hound, Beagle, Chihuahua, Dachshund, French Bulldog, Newfoundland, Welsh Corgi	
MDR1 gene variant (Ivermectin hypersensitivity)	MDR1	Australian Shepherd, Border Collie, Collie (Rough/Smooth), Elo, German Shepherd, Longhaired Whippet, McNab, Miniature American Shepherd, Old English Sheepdog, Shetland Sheepdog, Silken Windhound, Waller, White Swiss Shepherd Dog	
Myotonia congenita	MC	Australian Cattle Dog, Border Collie, Labrador Retriever, Miniature Schnauzer	
Progressive retinal atrophy – Please contact the laboratory as several genetic tests are available for this disease and these may vary depending on the breed	PRA	Please contact the laboratory	
Combination Profiles - Please contact the laboratory, we can offer combination profiles for a wide array of breeds		Please contact the laboratory	

^{*} contact BattLab for suitability, supply and use of cheek brushes



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GENETIC TESTS CATS



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, buccal swabs*

Test	Code	Breed	
Cystinuria	8604	All breeds	
Hypokalaemia	8453	Australian Mist, Burmese, Cornish Rex, Devon Rex, Singapura, Sphynx, Tonkinese	
MDR1 gene variant	8776	All breeds	
Polycystic kidney disease	PKD	All breeds	
Progressive retinal atrophy – Please contact the laboratory as several genetic tests are available for this disease and these may vary depending on the breed	PRA	Please contact the laboratory	
Pyruvate kinase deficiency	8047	Abyssinian, Angora, Bengal, Domestic Shorthair, Egyptian Mau, LaPerm, Maine Coon, Norwegian Forest Cat, Ocicat, Savannah, Siberian, Singapura, Somali	

^{*} contact BattLab for suitability, supply and use of cheek brushes



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