

SRUC Veterinary Services

# Price List April 2024



Farm animals



Companion animals



Health Schemes



## **CONTENTS**

	Page
Contact details	2-3
Welcome	4-5
Livestock (Farm Animal) Diagnostic Services	6-22
Livestock (Farm Animal) Sample Collection Guide	6
Health Schemes (PCHS and PSGHS)	23-26
Companion Animal	27-46
Companion animal index	47
Companion Animal Sample Collection Guidelines	48-52
C-QAS (External Quality Assessment Scheme)	53
Standards of Service	54

#### **CONTACT DETAILS**

# Central telephone number for all departments (excluding Health Schemes):

#### 0131 535 3130:

- Press 1 for all routine administrative and invoicing queries
- Press 2 for vets to speak to the veterinary team for farm animal case advise
- Press 3 for all other queries including companion animals

## **Diagnostic Submissions (Farm and Companion Animal)**

#### **SRUC Veterinary and Analytical Laboratory**

Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ Tel: 0131 535 3130 Email: VSEnquiries@sruc.ac.uk

#### **Farm Animal Post-mortem Service**

#### **Aberdeen Disease Surveillance Centre**

Mill of Craibstone, Bucksburn, Aberdeen, AB21 9TB Tel: 0131 535 3130 Email: VetServices.North@sruc.ac.uk

#### **Dumfries Disease Surveillance Centre**

St Mary's Industrial Estate, Dumfries, DG1 1DX
Tel: 0131 535 3130 Email: VetServices.SouthWest@sruc.ac.uk

#### St Boswells Disease Surveillance Centre

Greycrook, St Boswells, Roxburghshire, TD6 0EQ Tel: 0131 535 3130 Email: VetServices.Central@sruc.ac.uk

#### **Thurso Disease Surveillance Centre**

Janetstown, Thurso, KW14 7XF Tel: 0131 535 3130 Email: VetServices.North@sruc.ac.uk

## Farm Animal Veterinary Surveillance Hubs

#### **Perth Veterinary Surveillance Hub**

5 Bertha Park View, Perth PH1 3FZ Tel: 0131 535 3130 Email: VetServices.Central@sruc.ac.uk

#### **Ayr Veterinary Surveillance Hub**

J F Niven Building, Auchincruive Estate, Auchincruive, Ayr, KA6 5HW Tel: 0131 535 3130 Email: VetServices.SouthWest@sruc.ac.uk

#### **Inverness Veterinary Surveillance Hub**

RAVIC, 9 UHI Campus, Inverness IV2 5NA Tel: 0131 535 3130 Email: VetServices.North@sruc.ac.uk

#### **Health Schemes**

#### **Premium Cattle Health Scheme (PCHS)**

Greycrook, St Boswells, Roxburghshire, TD6 0EQ Tel: 01835 822456 Email: <a href="mailto:HealthSchemes@sruc.ac.uk">HealthSchemes@sruc.ac.uk</a> www.cattlehealth.co.uk

#### **Premium Sheep and Goat Health Schemes (PSGHS)**

Greycrook, St Boswells, Roxburghshire, TD6 0EQ
Tel: 01835 822456 Email: <a href="mailto:HealthSchemes@sruc.ac.uk">HealthSchemes@sruc.ac.uk</a>
www.sheepandgoathealth.co.uk

#### Other related services

#### C-QAS

(External quality assessment scheme for point of care analysers)
Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ
Tel: 0131 535 3130 Email: <a href="mailto:c-qas@sruc.ac.uk">c-qas@sruc.ac.uk</a>
<a href="mailto:www.CQAS.co.uk">www.CQAS.co.uk</a>

#### **Animal Health Planning System (SAHPS)**

Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ
Tel: 0131 535 3130 Email: <a href="mailto:enquiries@sahps.co.uk">enquiries@sahps.co.uk</a>
<a href="mailto:www.SAHPS.co.uk">www.SAHPS.co.uk</a>

#### **CPD for Vets**

Pentlands Science Park, Bush Loan, Penicuik, Midlothian, EH26 0PZ Tel: 0131 535 3130 Email: <a href="mailto:cpdforvets@sruc.ac.uk">cpdforvets@sruc.ac.uk</a>

Visit our website at Veterinary & laboratory services | SRUC

## Welcome

Welcome to SRUC Veterinary and Analytical Services 2024/25 Service Guide, which details our products and services.

In addition, and on behalf of the Scottish Government we carry out disease surveillance to detect new and emerging diseases and changes in the pattern of existing ones. Details available at <a href="Veterinary & laboratory services">Veterinary & laboratory services (sruc.ac.uk)</a>

Our services are independent, impartial and comprehensive, covering histopathology, microbiology, serology, molecular, clinical pathology, post-mortem examination service, EQA and mineral and vitamin testing. We have incorporated MALDI-TOF into our microbiological testing methods, for rapid bacterial identification. We are committed to working in partnership with veterinary surgeons and farmers to provide a high quality analytical service, along with advice and support for the control and prevention of disease. All SRUC Veterinary and Analytical Services' income helps fund SRUC's support of the rural environment.

We endeavour to report test results as rapidly as possible and approximate turnaround times (working days) are given for guidance from date of receipt at the testing laboratory. Results are normally sent by email. If you have any queries please contact us on 0131 535 3130 or by email (VSEnguiries@sruc.ac.uk).

## Sample submission guidelines

To enable us to handle samples efficiently please follow the guidelines below:

- Please label all samples
- Ensure lids of screw pots are tight. If there is a need to further seal tubes we recommend using electrical insulation tape.
- Ensure all sharps have been removed from the samples and package. This particularly refers to hypodermic needles.
- Please identify samples from patients on chemotherapy drugs by recording on the submission form, as such samples require special handling in order to comply with health and safety regulations.
- Package samples in accordance with Post Office regulations.
- Please refer to our srucvs-sampling-guide.pdf for livestock sampling.

#### Payment and prices

Payment terms are available on request. If these alter we will inform you of the change. All prices are in pound sterling and are subject to VAT, which will be added to your invoice at the prevailing rate.

#### Results

Your veterinary practice, your clients and their livestock matter to us and we endeavour to report test results as rapidly as possible. Approximate turnaround times are given for guidance from date of receipt at testing laboratory. Results are normally sent by email.

We will only provide results to the submitting veterinary surgeon, unless express written permission has been given to report to the owner or other third party. This does not apply to livestock health schemes.

Litigation cases require specific procedures to ensure appropriate chain of custody; please advise in advance if this is the case.

#### Quality

We are a United Kingdom Accreditation Services (UKAS) accredited laboratory and the majority of our tests are accredited to the internationally recognised ISO/IEC 17025 standard for laboratory competence. Our farm animal diagnostic testing is carried out under the UKAS accreditation certificates (accreditation nos. 2239 and 7624). The current schedule of accreditation is available in the UKAS website.

Our list of test methods is available at test-method-list-vs-february-2024.pdf (sruc.ac.uk)

Where tests are subcontracted to outside laboratories preference is given to those holding UKAS accreditation. Where this is not possible, laboratories are selected for speciality and expertise. Most tests are undertaken at our central laboratory. For further information contact your local DSC.



2239 7624

Our complaints handling procedure is available at <u>Complaints handling procedure | SRUC</u> under section on sending samples.

#### **Disease Surveillance and Research**

We may wish to use samples anonymously for further disease surveillance or research work.

#### Samples from the European Union

Paperwork required for diagnostic samples from the European Union is available at SRUC Veterinary Diagnostics | Submission forms

#### **Contact Us**

Please contact SRUC Veterinary and Analytical Laboratory on 0131 535 3130 if the test you require is not listed here.

For any Livestock Health Schemes related enquiries, please call 01835 822456.

SRUC. A charitable company limited by guarantee, Scottish Charity Number: SC003712. Registered in Scotland, Company Number: SC103046. SAC Commercial Limited. A subsidiary company of SRUC. Registered in Scotland, Company Number SC148684.



## Livestock (farm animal) Diagnostic Services

### **Contents**

	Page
Microbiology	7
Mycotoxin testing	7
Parasitology	8
Biochemistry	9-10
Haematology	10
Biochemistry profiles	10-11
Serology	12-13
Testing for BVD	14
Molecular biology	15-16
Enteritis	17
Mastitis	18
Scrapie gene testing	18
Urinalysis	18
Skins	18
Respiratory disease	19
Reproductive failure	20
Fertility examinations	20
Post-mortem examinations	21
Cattle abortion package	22
Histopathology and cytology	22
Consultancy	22

Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a>

In the tables the following applies: Superscript A = Accredited to ISO 17025

<b>Microbiology</b> (Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a> )										
Profile/Test	Samples	Turn around (working days)	Nos	Price £						
Bacterial culture <sup>A</sup> (and antibiotic sensitivity if appropriate)	Various	2-5d	1	40.07						
Clostridial toxin ELISA - per toxin	Intestinal content	Day after test	1	32.28						
Preparation and examination of smears <sup>A</sup>	Faeces/urine (min 2ml), tissue	<2d	1	19.29						
Salmonella screen <sup>A</sup>	Faeces/swab	<3d	1-9	25.23						
Cambriella Screen	1 aeces/swab	<b>\30</b>	10+	23.00						
				15.53						
Virus detection: Coronavirus (ELISA) A and	Галага	Day after test	_	ELISA						
rotavirus (PAGE/ELISA) <sup>A</sup>	Faeces		1	31.32						
				PAGE						
Serotyping bacterial Isolates										
Serotyping bacterial Isolates	Isolates, e.g. Strep. suis or Erysipelas	<10d	1	58.04						
Fluorescent antibody tests										
Clostridia <sup>A</sup> , per antigen (C. novyi, C. septicum, C. sordellii, C. chauvoei)	Tissue	<2d	1	37.58						

Mycotoxin testing – pigs (up to 4 samples can be pooled per test)										
Profile/Test	Samples	Turn around (working days)	Nos	Price £						
			1-3	75.63						
ZON or DON – bile IAE/ELISA	5ml bile per pig	15d	4-19	50.09						
			20+	43.83						
			1-3	46.27						
ZON or DON – serum IAC/ELISA	5ml serum per pig	15d	4-19	35.09						
			20+	31.38						
ZON Food	Emi comple per		1-3	81.94						
ZON – Feed	5ml sample per	15d	4-19	56.39						
or DON	pig		20+	43.83						

Parasitology				
Profile/Test	Samples	Turn around (working days)	Nos	Price £
Camelid worm egg count <sup>A</sup>	Faeces min 10g	4d	1	33.02
Comprehensive parasitology (worm egg, fluke eggs, lungworm larvae)	Faeces min 14g	2-3d	1-3 4+	45.69 33.60
Giardia	Faeces min 1g	1d	1	17.81
Grouse caecal worm count	Grouse caecae	1w	1	28.41
Haemonchus contortus egg ID (PNA test) (+ worm egg count)	Faeces min 6g	1w	1	59.04 (+16.70)
ID of ovine coccidia (+ coccidia oocyst count)	Faeces min 6g (3g for count, 3g for species ID)	1w	1	45.69 (+16.70)
ID of bovine coccidia (+ coccidia oocyst count)	Faeces min 6g (3g for count, 3g for species ID)	2d	1	20.95 (+16.70)
Liver fluke coproantigen ELISA	Ovine faeces min 0.5g. Bovine faeces min 2g (fresh as possible)	7d	1	1-9 13.78 10+ 10.76
Liver fluke coproantigen ELISA (pooled)	Faecal samples max no. 10 advised (fresh as possible)	7d	1	25.07
Liver fluke egg check (bulk on 10 samples)	Faeces min 3g from each animal	2d	Bulk (basic) Bulk (full kit)	30.95 40.28
Liver fluke egg check on individual animals	Faeces min 4g	1-2d	1-3 4+	17.81 11.93
Lungworm larvae examination	Faeces min 10g	2-3d	1-3 4+	16.70 13.14
Worm and fluke eggs	Faeces min 4g	1-2d	1-3 4+	31.16 19.29
Worm egg/coccidial oocyst count	Faeces min 3g	1-2d	1-3 4+	16.70 14.47
Wormscan Bulk worm egg count (10 samples) Added liver fluke	Faeces min 3g from each animal	1-2d	Bulk (basic) Bulk (full kit) Added fluke	30.95 40.28 +14.68

Please note: Wormscan and Liver Fluke Egg Check – Basic = testing only, Full = sample pots, envelope to send samples to lab and pre-paid postage.

Do NOT pool samples prior to submission.

If the test is not listed please contact us as we can provide most tests.

Biochemistry (Sample collection guidelines for farm	n animals available at <u>srucv</u>	s-sampling-guide.p	<u>df</u> )	
Profile/Test	Samples	Turn around (working days)	Nos tests	Price £/test
Routine biochemistry				
Total protein, albumin, globulin, sodium, potassium, chloride, calcium, magnesium, phosphate, urea, creatinine, glucose, betahydroxybutyrate, cholesterol, bilirubin, CK, AST, ALT, GDH, GGT, ALP, amylase, lipase (All tests listed above are accredited)	Serum/plasma except (Glucose- fluoride plasma)	1-2d	1 2-3 4+	9.12 5.57 4.72
LDH, ZST	Serum Min 0.5ml	<5d	1 2-3 4+	9.12 5.57 4.72
Copper <sup>a</sup> (serum or plasma acceptable - different reference ranges)	Serum/Plasma min 0.5ml	2d	1 2+	12.83 10.12
Fibrinogen	Citrate/EDTA	<5d	1	19.08
GSH-Px <sup>A</sup>	Whole heparinised	5d	1 2+	13.78 7.21
Haptoglobin	Serum	<5d	1	19.80
Manganese <sup>A</sup>	Whole heparinised min 1ml	2-5d	1	20.03
Pepsinogen	Serum/plasma min 0.5ml	4-5d	1	19.08
Vitamins A or E	Serum/plasma min 0.5ml	4-5d	1	25.60
Lead <sup>A</sup>	Whole heparinised	1-2d	1-3 4+	23.37 17.86
NEFA <sup>A</sup>	Serum only	1-2d	1-3 4+	10.49 8.43
Vitamin B12 <sup>A</sup>	Serum/plasma	3-4d	1	17.81
Zinc <sup>A</sup> <sup>A</sup> Tubes must not contain rubber of gel components	Serum Min 0.5ml	<5d	1	20.03
Special biochemistry				
Bone analysis	Bone 5g (remove fat and meat)	2-4d	1	33.60
Inorganic iodine	Plasma or serum (plasma preferred)	Up to 15d	1 Pool of 2-6	32.28 37.37
Progesterone	Serum/plasma (plasma preferred)	1-2d	1	34.50
Oestrone sulphate	Serum	Up to 15d	1	40.49
Thyroxine T4	Serum/plasma	Same day	1	22.05
Tissue analysis for copper <sup>A</sup> or lead <sup>A</sup>	Tissue min 5g	2-4d	1	33.39
Tissue analysis for selenium <sup>A</sup>	Tissue min 5g	2-4d	1	33.39

Tissue analysis for cobalt	Tissue min 5g	2-4d	1	33.39
Tissue analysis for vitamins A+E (Package)	Tissue min 1g	4-5d	1	47.70
Tissue analysis for copper, cobalt and selenium (Package)	Tissue min 5g	5-7d	1	43.41

See page 11 for recommended profile. Tests can be substituted if required.

Haematology (Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a> )									
Profile/Test	Samples	Turn around (working days)	Price £						
Full haematology additional to profile <sup>A</sup>	EDTA blood	Day of receipt	20.00						
RBC, PCV, Hb, WBC (all four tests) <sup>A</sup>	EDTA blood	Day of receipt	15.37						
WBC and differential <sup>A</sup>	EDTA blood	Day of receipt	20.46						
Full haematology (RBC, PCV, Hb, WBC and differential) <sup>A</sup>	EDTA blood	Day of receipt	28.25						
Examination for blood parasites	EDTA blood, blood smear	Day of receipt	21.15						

Biochemistry profiles – see page 11 for recommended profiles									
(Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a> )									
Profile/Test	Samples	Turn around (working days)	Price £						
Herd metabolic profile <sup>A</sup> - 10 parameters	Serum/plasma + heparin + fluoride-plasma	5d	18 animals 448.91						
Production audit <sup>A</sup> - 5 parameters	Serum/plasma + heparin	1-2d	12 animals 232.19						
Fertility audit <sup>A</sup> - 6 parameters	Serum/plasma + heparin	5d	12 animals 270.88						
General audit <sup>A</sup> - 10 parameters	Serum/plasma + heparin	5d	12 animals 387.11						
Ewe nutrition A (BOHB + Urea)	Serum/plasma	1d	10 animals 47.70						

Suggested bioche	mistr	y pro	fil	es	– t	rac	се	ele	emo	ent	:/ill	th	rif	t/m	ine	era	ıls/	pr	od	uct	tio	n
(Sample coll	ection g	uidelir	nes	for f	arm	an	ima	ls a	vaila	able	at	sruc	vs-s	amp	ling	-guid	de.p	<u>df</u> )				
	_	4+	Cu	Vit B12	GSH-Px	Vit E	CPK	Pepsinogen	Ca	Mg	Ь	AST	Albumin	Globulin	Urea	BOHB	NEFA	Glucose	Creatinine	Bile acid	GGT	ВСТВН
Bovine trace element	19.77	13.83	•		•																	
Bovine ill thrift profile	50.19	44.36	•		•			•					•	•							•	•
Bovine mini metabolic profile	22.59	21.81								•			•		•	•	•					
Ruminant myopathy profile	37.37	29.95			•	•	•															
Ruminant mineral status*	13.30	11.40							•	•	•											
Downer cow profile	22.84	22.84					•		•	•	•	•			•							
Fatty liver profile	21.78	18.13										•				•	•	•				
Ruminant energy/protein status^	23.59	21.89											•	•	•	•	•					
Ewe metabolic disease profile	13.30	11.40							•	•						•						
Ovine trace element	35.56	28.67	•	•	•																	
Ovine ill thrift profile	64.98	59.15	•	•	•			•					•	•							•	•
Individual clinical profile	60.95	60.95					•		•	•	•	•	•	•	•	•		•	•	•	•	•
Herd profiles - see page 10 for p	rices																					
Fertility audit			•		•								•		•	•	•					
General audit			•		•			•					•	•	•	•	•			•		•
Herd metabolic profile			•		•					•	•		•	•	•	•	•	•				
Production audit													•	•	•	•	•					
Ewe nutrition															•	•						

 $<sup>^{\</sup>star}$  Haematology at the discounted rate of £17.60 per animal can be added to any of the above. Prices exclude VAT.

## Serology

Unless indicated otherwise listed tests detect antibody to pathogens involved. Only at peak times are tests run as frequently as indicated.

Profile/Test	Samples	Turn around (working days)	No of test	Price £/each sample			
Cattle							
Bovine coronavirus	Serum/plasma	<7d	1	19.40			
Cattle lungworm	Serum	<8d	1-9 10+	27.88 21.51			
Erysipelas	Serum	<7d	1-9 10+	19.48 15.53			
Fasciola hepatica	Serum	<7d	1	9.49			
IBR (BHV-1 gB) <sup>A</sup> , blood	Serum	<7d	1	6.68			
IBR (BHV-1 gE) <sup>A</sup> , blood	Serum	<7d	1-9 10+	10.02 9.75			
Johne's (MAP) <sup>A</sup>	Serum	<7d	1-39 40+	6.20 5.51			
Leptospira hardjo <sup>A</sup> , blood	Serum	<7d	1	7.10			
Mycoplasma bovis	Serum	<7d	1	9.49			
Neospora caninum <sup>A</sup>	Serum	<7d	1-39 40+	8.06 7.31			
Parainfluenza 3 (PI3) <sup>A</sup>	Serum/plasma	<7d	1	8.06			
Q fever	Serum	<7d	1-9 10+	14.31 10.92			
Respiratory syncitial virus (RSV) A	Serum	<7d	1	8.06			
Schmallenberg virus (SBV) <sup>A</sup> , blood	Serum	<7d	1-9 10+	9.49 8.11			
Dairy Cow – milk serology							
Fasciola hepatica	Milk with preservative	<7d	1	10.28			
IBR (BHV-1 gB) <sup>A</sup>	Milk with preservative	<7d	1	7.10			
Mycoplasma bovis	Milk with preservative	<7d	1	9.49			
Johne's (MAP)	Milk with preservative	<7d	1	6.41			
Leptospira hardjo <sup>A</sup>	Milk with preservative	<7d	1	7.10			
Schmallenberg virus <sup>A</sup> (SBV)	Milk with preservative	th <7d 1					
See also B\	/D milk tests page 14	and Mastitis milk tests p	page 18	•			

Sheep and goats				
Border disease	Serum	<7d	1-9 10-39 40+	10.07 8.75 6.68
CAE <sup>A</sup>	Serum	<7d	1-9 10+	10.28 7.16
CLA	Serum	<7d	1-9 10-39 40+	11.45 9.75 7.31
Chlamydia abortus ELISA <sup>A</sup>	Serum	<7d	1-9 10+	11.02 9.49
Erysipelas	Serum	<7d	1-9 10+	19.48 15.53
Fasciola hepatica	Serum	<7d	1	9.49
Johne's (MAP) <sup>A</sup>	Serum	<7d	1-39 40+	6.20 5.51
Louping ill	Serum	<12d	1-9 10+	16.80 14.68
Maedi visna <sup>A</sup> (MV)	Serum	<7d	1-9 10+	10.76 7.10
MV diagnostic package <sup>A</sup> (12 sheep)	Serum	<7d	1	52.10
Q fever	Serum	<7d	1-9 10+	14.31 10.92
Schmallenberg virus <sup>A</sup> (SBV)	Serum	<7d	1-9 10+	9.49 8.11
Sheep scab	Clotted blood	<7d	1-9 10-39 40+	11.02 9.49 7.42
Toxoplasma <sup>A</sup>	Serum	<7d	1-9 10+	11.13 9.59
Pigs				
Erysipelas	Serum	<7d	1-9 10+	19.48 15.53
Porcine salmonella	Serum	<10d	1	6.41
Porcine parvovirus	Serum	<10d	1	13.52
Porcine respiratory coronavirus/TGE (non-diff)	Serum	<7d	1	12.72
PRRS ELISA	Serum	<7d	1	7.58
PRRS tissue culture (IPMA)	Serum	10d	1	33.55
Swine 'flu (4 strains) HAIT	Serum	3d	1	36.20
Swine 'flu A ELISA	Serum	<7d	1	7.74
M. hyopneumoniae ELISA	Serum	5d	1	7.42

If the test is not listed please contact us as we cater for most species.

Testing for BVD			
Profile/Test	Samples	Turn around (working days)	Price £
BVD antibody – blood <sup>A</sup>	Serum	7d**	5.04
BVD antibody – milk <sup>A</sup>	Milk with preservative	7d	6.57
BVD individual test <sup>A</sup> (< 4 weeks)***	Serum	5d**	25.81
BVD antigen – blood <sup>A</sup> (aged ≥ 4 weeks)	Serum	7d**	7.10
<sup>1</sup> BVD PCR – individual animal validated aged > 6 weeks <sup>A</sup>	Unopened red top tube	5d**	5.51
<sup>1</sup> BVD virus PCR – bulk milk <sup>A</sup>	Milk with preservative	5d**	41.50
BVD virus detection in ear tissue <sup>A</sup> (antigen ELISA)	Ear tissue from tag	7d	7.10
BVD PCR ear tissue <sup>A</sup> (price depends on tag type)	Ear tissue any age animal	5d**	-
BVD PCR in support of a PM	Tissue	5d	36.20

<sup>\*</sup> Further test price discounts apply to combined Tag and Test packages via selected Tag companies

1 Requires dedicated sample for BVD PCR

\*\*\* From receipt at SRUC Veterinary and Analytical Laboratory

\*\*\* Blood samples from calves <4 weeks require individual tests.

N.B. Turnaround times for Health Schemes can be found on PCHS and PSGHS pricelists.

Molecular biology				
Profile/Test	Samples	Turn around (working days)	No	Price £/sample
Cattle				
Bovine respiratory extended PCR - 7 agents (BoHV-1, PI3, RSV, <i>M. bovis</i> , <i>H. somni</i> , <i>P. multocida</i> , <i>M. haemolytica</i> )	Swabs/tissue ideally in VTM	7d	1	66.78
Johne's (MAP) PCR <sup>A</sup>	Faeces	<4d	1	38.05
MCF virus detection PCR	Heparin/EDTA blood or tissue	7d	1	29.79
Schmallenberg virus PCR	Tissue – brain & Spinal cord	7d	1	29.79
Sheep				
Border disease virus PCR <sup>A</sup>	Serum	<7d	1-49 50+	14.47 11.08
Orf examination	Scab		1	29.79
Schmallenberg virus PCR	Tissue – brain & spinal cord	7d	1	29.79
Tick borne fever PCR	Lung/spleen/lymph nodes in VTM / EDTA blood	<10d	1	29.79
Pigs - Please see footnote over for pooling is	nformation			
APP PCR <sup>A</sup>	Throat swabs, culture	<5d	1	49.66
APP toxin gene profiling PCR	Throat swabs, culture	<7d	1 2-3 4-5 6+	107.27 75.21 52.36 41.55
Atrophic rhinitis PCR <sup>A</sup> (Toxigenic Pasteurella multocida)	Throat swabs	<5d	1	49.08
Brachyspira PCR <sup>A</sup> (B. hyodysenteriae & B. pilosicoli)	Faeces, cultures, PM material	<4d	1 2-3 4+	46.96 40.28 33.55
E. coli virulence PCR <sup>A</sup> (after culture)	Faeces, intestine	<7d	1	49.66
Lawsonia intracellularis PCR <sup>A</sup>	Faeces, intestine	<7d	1-3 4+	59.04 57.03
L. intracellularis <sup>A</sup> & B. hyodysenteriae PCR <sup>A</sup>	Faeces	<7d	1 2-3 4+	85.91 69.75 63.18
Mycoplasma hyopneumoniae PCR <sup>A</sup>	Lung tissue, throat swabs, oral fluids*	<4d	1	45.42
Porcine circovirus Type 2 <sup>A</sup>	Lung tissues, throat swabs, oral fluids*	2-6d	1	40.28
Porcine circovirus Type 2 Quantified	Lung tissues, throat swabs, oral fluids*	2-6d	1	58.04

PED/TGE virus PCR <sup>A</sup>	Faeces, oral fluids*	2-6d	1	40.28
Porcine Deltacoronavirus <sup>A</sup>	Faeces, oral fluids*	2-6d	1	40.28
PED/TGE + Porcine Deltacoronavirus <sup>A</sup>	Faeces, oral fluids*	2-6d	1	55.12
PRRS PCR <sup>A</sup>	Semen, serum, lung tissues, throat swabs, blood swabs, oral fluids*	Same day	1	35.09
Strep. suis PCR	Swabs (tonsil, meninges, joint)	<3d	1-3 4+	49.66 35.67
Swine influenza PCR <sup>A</sup>	Lung tissues, throat swabs, oral fluids*	2-6d	1	51.52
All species				
Mycoplasma DGGE/PCR	Tissue/BAL/ swab in Mycoplasma transport medium	15+ d	1	101.44
Porcine Oral Fluid Tests				
Package of 2 (PRRS/SIV/PCV2) <sup>A</sup>	Oral Fluids*	<6d	1	64.55
Package of 3 (PRRS/SIV/PCV2) <sup>A</sup>	Oral Fluids*	<6d	1	83.85

Pooling samples for PCR testing: swabs, semen and faeces up to 5 samples = 1 pool/test. Tissues: up to 3 samples = 1 pool/test.

<sup>\*</sup>Oral fluid samples to be chilled during shipping.

Enteritis (Sample collection guidelines for farm animals ava	ailable at <u>srucvs-sampling-gu</u>	ide.pdf)		
Profile/Test	Samples	Turn around (working days)		rice nimal
Ruminant enteritis				
Adult ruminant enteritis – salmonella, Johne's serology, worm and fluke eggs	Faeces min 5g (blood red top)	3-5d	45	5.69
Adult ruminant enteritis – salmonella, microscopic exam, Johne's, worm and fluke eggs	Faeces	<5d	45	5.69
Johne's (MAP) PCR in addition to above package (Bovine accredited/Ovine not accredited)	Faeces	<4d	36	6.99
Yearling ruminant enteritis – Salmonella, worm eggs, cocccidia, fluke eggs	Faeces min 4g	3-5d	38	3.69
Young ruminant enteritis – Salmonella, worm eggs, coccidian	Faeces min 3g	3-5d	30	).95
Ruminant neonatal comprehensive enteritis – bacteriology and sensitivity, virology, cryptosporidia and coccidia (use in support of control programme or where there is a question of product failure)	Faeces min 4g	<5d	48	3.34
Ruminant neonatal basic enteritis – salmonella, cryptosporidia, coccidian (use to inform therapy)	Faeces min 3g	<3d	33	3.55
Pig enteritis packages				
Brachyspira culture <sup>A</sup> (if negative result)	Faeces or intestine (minimise amount of air in sample container)	14-21d	1-3 4+	31.32 28.78
Brachyspira culture and biochemical identification	Faeces or intestine	14-21d	1-3 4+	43.78 40.12
Package 1 (1-5 days) E. coli, cryptosporidia, rotavirus, Salmonellas	Faeces	3-5d	43	3.78
Package 1 + E. coli virulence PCR	Faeces	<10d	93	3.94
Package 2 (6 days-weaning) cryptosporidia, rotavirus, coccidia, Salmonella	Faeces min 3g	3-5d	44	1.78
Package 2 + E. coli virulence PCR	Faeces Min 3g	3-5d	93	3.44
Package 3 (post weaning) E. coli, rotavirus, Salmonella, Yersinia	Faeces	3-5d	43	3.78
Package 3 + E coli virulence PCR	Faeces	<10d	93	3.44
Package 4 (grower/finisher) Brachyspira, Salmonella, Yersinia	Faeces	14-21d	43	3.78

Mastitis (Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a> )				
Profile/Test	Samples	Turn around (working days)	Nos	Price £
Mastitis package – all species (bacteriology,	Milk	2-5d	1-3	27.14
sensitivity)	IVIIIK	2-50	4+	23.43
Mantitic hand agree a hantarial and and	Milk	2-5d	1-3	18.60
Mastitis herd screen – bacteriology only	IVIIIK	2-50	4+	14.89
Mastitis herd screen – antibiotic sensitivity	Milk	Day after test	1	8.53

Scrapie gene testing – for testing requirements refer to submission form or website www.sruc.ac.uk/vets				
Profile/Test	Samples	Turn around (working days)	Nos	Price £
	I FDTA blood I		1-14	36.73
		Within 3w of	15-29	31.16
Codons 136, 154, 171 (export testing) <sup>A</sup>		receipt	30-49	24.49
		Teceibi	50-69	22.26
			70+	17.97

Urinalysis (Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a> )				
Profile/Test	Samples	Turn around (working days)	Price £	
Microscopic examination <sup>A</sup>	Urine min 2ml	<2d	20.62	
Biochemical examination of urine <sup>A</sup>	Urine min 1ml	1d	11.55	
Calculi analysis	Bladder stone		34.50	
Comprehensive examination <sup>A</sup> (includes biochemistry, microscopy, bacteriology and sensitivity)	Urine min 4ml	<5d	50.62	

<b>Skins</b> (Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a> )				
Profile/Test	Samples	Turn around (working days)	Price £	
Microscopic examination only	Skin/hair plucks including roots and scabs	1-2d	20.67	
Ringworm <sup>A</sup> – microscopy and cultures	Skin/hair plucks including roots and scabs	Microscopy <2d Culture 21 days max*	22.84	
Orf examination by PCR test	Scab		29.79	
Comprehensive <sup>A</sup> (microscopy, bacteriology and sensitivity & mycology)	Skin/hair plucks including roots and scabs	Microscopy <2d Culture 21 days max* Bact. Sens. 2-5d	41.18	

Respiratory disease (Sample collection guidelines for	farm animals available at	srucvs-sampling-guid	de.pdf)	
Profile/Test	Samples	Turn around (working days)	Price £/a	animal
Bovine respiratory extended PCR - 7 agents (BoHV-1, PI3, RSV, <i>M. bovis</i> , <i>H. somni</i> , <i>P. multocida</i> , <i>M. haemolytica</i> )	Swabs/tissue ideally in VTM	7d	66.7	'8
Virus detection on PCR negatives	Fresh lung or swabs	Less than 21d	36.2	20
Vials or virus transport medium are available from our labo	oratories			
Bovine respiratory serology				
IBR <sup>A</sup> , RSV <sup>A</sup> , PI3 <sup>A</sup>	Serum	5d	Single sample Paired samples	23.21 45.21
IBR, RSV, PI3, BVD <sup>A</sup>	Serum	5d	Single sample Paired samples	28.57 55.49
IBR, RSV, PI3, M. bovis	Serum	7d	Single sample Paired samples	32.28 63.71
IBR, RSV, PI3, H. somni	Serum	15d	Single sample Paired samples	60.74 119.99
IBR, RSV, PI3, BVD, M. bovis	Serum	7d	Single sample Paired samples	37.47 73.78
IBR, RSV, PI3, BVD, M. bovis, H. somni	Serum	15d	Single sample Paired samples	74.89 148.67
Porcine respiratory serology			<u>'</u>	l
M. hyopneumoniae, PRRS, Swine 'flu (Influenza A ELISA)	Serum	5/6d	21.4	7
Porcine respiratory serology, PRRS, Swine 'flu (Influenza A ELISA)	Serum	5/6d	14.3	31

Reproductive failure			
Profile/Test	Samples	Turn around (working days)	Price £/animal
Bovine abortion serology packages			
L. hardjo, BVD, N. caninum	Serum	5d	20.62
L. hardjo, BVD, N. caninum, IBR	Serum	5d	27.45
Ovine/Caprine abortion serology packages			
EAE, toxoplasmosis	Serum	7d	1-3 22.15 4+ 19.29
Porcine reproductive failure			
L. Bratislava, PRRS and swine 'flu (Influenza A ELISA)	Serum	10d	27.93
L. Bratislava, PRRS and swine 'flu (Influenza A ELISA), Erysipelas, Parvovirus	Serum	10d	58.04

Fertility examinations			
Profile/Test	Samples	Turn around (working days)	Price £/sample
Bacteriology of semen and sensitivity <sup>A</sup>	Semen	<5d	30.95
Examination of stained semen slides <sup>A</sup>	Semen	2d	19.29
Spermatozoa density	Semen	2d	12.88
Campylobacter – culture and ID <sup>A</sup>	Preputial washings or vaginal mucous	10d	56.76

Post-mortem examinations – Scottish farms only				
Description	Turn around (working days)*	Price £ per animal	Price £ per batch	
Cattle				
Over 18 months <sup>A</sup>	1d	131.44		
6-18 months <sup>A</sup>	1d	103.19		
Up to 6 months <sup>A</sup>	1d	67.05	114.80	
Foetuses <sup>A</sup>	2d	79.98	129.00	
Camelids				
Over 6 months <sup>A</sup>	1d	103.19	154.87	
Under 6 months <sup>A</sup>	1d	67.05	114.80	
Foetuses <sup>A</sup> (1 dam)	2d	79.98		
Sheep				
All ages <sup>A</sup>	1d	67.05	114.80	
Foetuses <sup>A</sup>	2d	51.57	77.49	
Pigs				
Over 6 months <sup>A</sup>	1d	92.86	126.51	
Under 6 months <sup>A</sup>	1d	67.05	114.80	
Foetuses <sup>A</sup> (1 dam)	2d	67.05		
Deer and goats				
All ages <sup>A</sup>	1d	67.05	114.80	
Foetuses <sup>A</sup> (1 dam)	2d	51.57		
Game birds				
Carcase <sup>A</sup>	1d	53.00	104.52	
Poultry				
Carcase <sup>A</sup>	1d	49.08	96.78	
Other small farmed animals				
Carcase <sup>A</sup>	1d	53.00	104.52	
Viscera from farmed species (gross examination and appropriate bacteriology) <sup>A</sup>	2d	60.74	91.58	
On-farm PM service				
PMs done by PVS on-farm (any age or species)	As per the tests being carried out	67.05	114.80	

<sup>\*</sup>Turnaround time refers to the initial reporting of gross PM findings. Completion of additional testing takes on average, around 10 days

Cattle abortion package	
	Price £ per batch
Comprehensive examination of foetus (carcase disposal included) plus maternal serology (4 tests) (Note BS7 samples must be submitted separately from suckler cows). SBV added if indicated.	109.71

Note: Post-mortem charges cover all necessary tests which at the discretion of the SRUCVS veterinarian are required to reach a diagnosis. Additional tests requested by the owner or his veterinary surgeon which fall outwith this definition will be charged for additionally. There is a charge for carcase disposal.

**Batch** = 2-4 animals/birds or foetuses from 2-4 dams. Where batches are submitted, some tests may be carried out on pooled samples.

Standard examination of bovine foetus includes bacteriology, foetal serology for BVDV and L. hardjo; BVDV antigen, and histopath at the discretion of the VIO. Should you request other tests such as PCR for BoHV1 or BVDV, foetal serology for Neospora and tissue iodine these will be charged at the list price. The cattle abortion package is the standard examination plus maternal serology for BoHV1, BVDV, L. hardjo and Neospora.

Histopathology and cytology (Sample collection guidelines for farm animals available at <a href="mailto:srucvs-sampling-guide.pdf">srucvs-sampling-guide.pdf</a> )					
Profile/Test	Samples	Turn around <sup>*</sup> (working days)	P	rice £	
Aspiration biopsy cytology	Body fluid/tissue	2d	32.28		
Fluid analysis (cell count, cytology, protein)	Body fluid	2d	40.07		
Fluid analysis (cell count, cytology, biochemistry, bacteriology and sensitivity)	Body fluid	2d	54.54		
Histopathological examination (including report and prognosis, where appropriate)	1cm³ tissue blocks#	3-4d	First block (1-3 tissues) Additional blocks	48.97 11.13 Max case charge 189.21	

<sup>\*</sup>Special services such as bone decalcification and immunochemistry require longer turnaround times; guidance will be provided by histopathologists.

<sup>&</sup>lt;sup>#</sup> Tissues should be fixed in 5-10 times their own volume of formalin for 48 hours.

They can then be sent in a smaller volume of formalin. Please note: Royal Mail max 50ml.

Consultancy	
On Farm Consultancy Service to Veterinary Practices	164.32/h +



## **Health Schemes**

## Contents

	Page
Premium Cattle Health Scheme	24
Premium Sheep and Goat Health Schemes	25
Useful Tests Available Outside Premium Sheep and Goat Health Schemes	26

Premium Cattle Health Scheme			
Turnaround Times: blood/ milk/ tissue tag and faecal PCR s More information and submission forms at www.cattlehealth		ays.	
Annual Membership Fee	Price £		
Up to 5 diseases (BVD, IBR, Neospora, Lepto, Johne's)	90.00		
As above plus TB Accreditation	122.	50	
Bovine TB Accreditation only	44.5	55	
Entry Level Bovine TB Membership fee	44.5	55	
Profile/Test	Samples	Price £	
Tissue Tests (Keep tags in cool dry place and submit in batch	es every 2 weeks)		
BVD Antigen (price differs according to ear tag type)	Ear tissue		
Blood Tests			
BVD Antibody	Clotted blood	4.14	
BVD Antigen	Clotted blood	5.57	
BVD PCR Pooled Samples (includes individual Antigen tests from positive pools)	Clotted blood	3.92	
IBR Antibody	Clotted blood	4.72	
IBRgE (Marker Vaccine)	Clotted blood	8.37	
Johne's Antibody	Clotted blood	4.88	
L hardjo Antibody	Clotted blood	5.88	
Neospora	Clotted blood 6.78		
Milk Tests (bulk or individual)			
IBR Antibody	Milk	7.05	
BVD Antibody	Milk	6.47	
L hardjo Antibody	Milk 7.05		
Johne's Antibody	Milk 4.88		
Faeces Tests			
Johne's PCR	Faeces	33.92	
Johne's PCR - pooled for up to 5 samples	Faeces 51.94		
Pen/Sale Health Declaration Cards	Member	Non-Member	
Production time is 2 weeks. If testing is required, sale animals must be tested between 6-12 weeks before sale.	9.49	15.05	
BVDFree England Member Database fee per entry	0.50 Antibody result	0.25 Antigen result	

## **Premium Sheep and Goat Health Schemes**

Turnaround Times for MV/CAE/EAE/Johne's: 5-17 working days. PSGHS submission form available at <a href="https://www.sheepandgoathealth.co.uk">www.sheepandgoathealth.co.uk</a>

at <u>www.sneepanugoatneaitn.co.uk</u>				
MV/CAE Accredited Membership		Price £		
Annual fee charged according to flock/herd size animals aged 18 months and over	1 -10 11-50 51+		78.00 111.30 172.60	
Profile/Test	Samples		Price £	
MV/CAE	Clotted blood		3.66	
EAE (available for MV Accredited members)	Clotted blood		3.55	
EAE Accredited Membership		Price £		
Annual fee charged according to ewes put to ram	0-75 76-150 151-250 251+	76-150 161.40 151-250 233.80		
Johne's Accredited Membership				
Profile/Test	Samples		Price £	
All animals over 12 months of age	Clotted blood		4.88	
Johne's	Faeces		33.92	
Johne's (PCR pool of 5)	Faeces	Faeces		
Scrapie Monitoring Membership				
Annual fee if PSGHS Member Annual fee if non-Member			57.85 76.80	

## **NEW! PSGHS Monitoring Scheme**

Membership	Price £		
Flat fee for one or both diseases	44.55		
Profile/Test	Samples	Price £	
MV/CAE	Clotted blood	3.66	
Johne's (individual faeces samples pooled in lab pool of 6)	Faeces	51.94/pool	

All samples must be collected by a veterinary surgeon. Testing may be carried out at any time but samples must be received at least 6 weeks before first sale date.

Useful Tests Available Outside Premium Sheep and Goat Health Schemes				
Profile/Test	Samples	Price £		
Scrapie Full Genotyping (136/154/171) Discounted price for samples	EDTA blood	1-14 36.73 15-29 31.16 30-49 24.49 50-69 22.26 70+ 17.97		
Test Packages (flock/herd screens)				
Wormscan bulk worm egg count 10 animals 1. Testing only 2. Testing plus sample pots and postage 3. Liverfluke as extra	Faeces (do not pool samples prior to submission)	30.92 40.28 14.68		
Pre/Post Sale Testing				
Border Disease Antibody	Clotted blood	1-9 10.07 10-39 8.75 40+ 6.68		
Border Disease PCR	Clotted blood	1-49 14.47 50+ 11.08		
CLA	Clotted blood	1-9 11.45 10-39 9.75 40+ 7.31		
Johne's Antibody	Clotted blood	1-39 6.20 40+ 5.51		
Liver Fluke Antibody	Clotted blood	9.49		
Sheep Scab Antibody	Clotted blood	1-9 11.02 10-39 9.49 40+ 7.42		

**IMPORTANT:** Please send in an extra blood tube and use our standard Farm Diagnostic Submission Forms for tests outside the PSGHS <u>Veterinary diagnostics | SRUC</u>



# **Capital Diagnostics / Companion Animal Service**

## **Contents**

	Page
Microbiology and Parasitology	28
General/miscellaneous Microbiology	28
Cardiorespiratory disease microbiology	28
Ear microbiology	28
Eye microbiology	29
Faecal tests - microbiology/parasitology/miscellaneous	29
Faecal/diarrhoea packages	30
Skin microbiology/parasitology	31
Infectious disease – canine – molecular/serology	32
Infectious disease – feline – molecular/serology	32
Infectious disease – equine – molecular/serology	33
Infectious disease – small mammal/avian – molecular/serology	33
Urinary tract tests – microbiology/biochemistry/cytology	34
Clinical chemistry, endocrinology, haematology	35
Haematology & coagulation products	35
Immunological products	35
Therapeutic drug monitoring	35
Biochemistry – individual tests	36
Biochemistry – canine profiles	37-38
Biochemistry – feline profiles	39-40
Biochemistry – equine profiles	41
Biochemistry – small mammal/avian profiles	42
Endocrinology – Adrenal	43
Endocrinology – Pancreas	43
Endocrinology – Thyroid	43
Endocrinology – Reproductive	44
Histopathology & cytology	45
Post Mortem (necropsy) service	46
Companion animal index	47
Sample collection guidelines	48-52
C-QAS - External quality assessment service	53

In the lists the following superscripts are used

S - assay referred to a laboratory external to Capital Diagnostic/SRUC Veterinary Services

A - Accredited test

General/miscellaneous microbiology – see organ specific sections					
Profile/Test	Samples	Turnaround	Price £		
Comprehensive bacterial culture - Aerobic/anaerobic cultures <sup>A</sup>	Various	3-10d	38.80		
Aerobic bacterial culture - Aerobic cultures, antibiotic sensitivity <sup>A</sup>	Various	3-10d	33.80		
Cerebrospinal fluids culture - aerobic/anaerobic culture <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat supplementary charge)	CSF	3-10d	30.00		
Meticillin resistant Staphylococcus spp (MRSA, MRSS, MRSP) only <sup>A</sup>	Various	3-10d	25.00		
Pleural/peritoneal fluids – aerobic/anaerobic cultures <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat supplementary charge)	Pleural, peritoneal fluid	3-10d	38.80		
Synovial fluid culture – aerobic/anaerobic culture <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat supplementary charge)	Synovial fluid/tissue	3-10d	30.00		
Nasal/tracheal was <sup>A</sup> – aerobic & fungal cultures	Swab	3-10d	36.00		

Cardiorespiratory disease					
Profile/Test	Samples	Turnaround	Price £		
Angiostrongylus vasorum – serology	Serum 0.5ml	Same day	24.00		
Aspergillus culture <sup>A</sup>	Swab/wash	3-10d	26.00		
Aspergillus serology <sup>s</sup>	Serum 0.5ml	7d	62.00		
Blood culture – aerobic/anaerobic culture <sup>A</sup> Inject blood into a liquid media (available on request - £10+vat). Clotted blood and blood in routine tubes is unsuitable	Blood	5-10d	36.00		
Nasal, bronchial, tracheal wash culture <sup>A</sup> Bacteriology, fungal culture	Swab, wash	3-10d	36.00		
Nasal, bronchial, tracheal wash comprehensive analysis Cytology, bacteriology <sup>A</sup> , fungal culture <sup>A</sup>	Swab, wash	3-10d	57.00		
Parasitic disease (Lungworm incl F. osleri, A. vasorum)  Baermann assay (faeces - 3 day pooled sample is preferred) or direct examination of a tracheal wash.	Faeces, Tracheal wash	3-10d	18.00		
Pleural effusion – aerobic/anaerobic cultures <sup>A</sup> Higher isolation rates are obtained if the fluid is injected into a liquid media - provided on request (£8+vat)	Pleural fluid	3-10d	38.08		
Streptococcus equi culture <sup>A</sup>	Swab, wash	3-5d	26.00		
Streptococcus equi PCR <sup>s</sup>	Swab	3-7d	42.00		

Ear			
Profile/Test	Samples	Turnaround	Price £
Bacteria & yeast culture only – 1 ear <sup>A</sup>	Swab	3-10d	33.00
Bacteria & yeast culture only – 2 ears <sup>A</sup>	Swab	3-10d	40.00
Bacteria & yeast culture with cytology	Swab & Smear	3-10d	45.00

Eye			
Profile/Test	Samples	Turnaround	Price £
Bacterial culture – 1 eye <sup>A</sup>	Swab	3-10d	29.50
Bacterial culture – 2 eyes <sup>A</sup>	Swab	3-10d	34.00
Chlamydia PCR <sup>s</sup>	Swab (dry)	3-10d	45.00
FHV PCR <sup>s</sup>	Swad (dry)	3-10d	42.00

Faecal tests			
Profile/Test	Samples	Turnaround	Price £
Angiostrongylus vasorum - Baermann test – 3d pooled sample preferred	Faeces 5g	2d	18.00
Anoplocephala	Faeces 5g	1d	21.00
Campylobacter screen <sup>A</sup>	Faeces 5g	7-10d	25.00
Clostridium difficile <sup>A</sup> – culture	Faeces 5g	2-7d	25.00
Cryptosporidia	Faeces 5g	1d	18.00
Faecal bacteriology <sup>A</sup> - Salmonella, Campylobacter, Yersinia, Clostridium spp.	Faeces 5g	7-10d	38.80
<b>Faecal bacteriology</b> <sup>A</sup> – primate – Salmonella, Campylobacter, Shigella, Yersinia	Faeces 5g	7-10d	52.00
Fluke egg	Faeces 5g	1d	18.00
Giardia	Faeces 2g	Same day	18.00
<b>Lungworm</b> Baermann assay (faeces - 3 day pooled sample is preferred).	Faeces 5g	2d	18.00
Occult blood - dog/cat feed a non-meat diet for minimum 3 days	Faeces 5g	1d	19.00
Parasitology (enteric pathogens) – All species 1-3 samples 4+ samples	Faeces 5g	1d	17.00 15.00
Parasitology (enteric parasites) & Giardia - companion animal	Faeces 5g	1d	31.00
Parasitology (enteric parasites) & Anaplocephala - equine	Faeces 10g	1d	31.00
Parasitology (enteric parasites) – primate Cryptosporidia, helminths, Coccidia, Giardia, Balantidium	Faeces 5g	1d	27.00
Rotavirus PAGE <sup>A</sup>	Faeces 5g	3-5d	22.00
Salmonella screen <sup>A</sup>	Faeces 5g	3-5d	25.00
Salmonella & Campylobacter screen <sup>A</sup>	Faeces 5g	3-10d	30.00
Tritrichomonas foetus PCR – no cat litter in the sample	Faeces 5g	5-14d	48.00
Yersinia screen <sup>A</sup>	Faeces 5g	3-5d	25.00

Faecal packages - canine			
Profile/Test	Samples	Turnaround	Price £
Canine faecal analysis 1 – acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	43.00
Canine faecal analysis 2 – dogs with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , Yersinia <sup>A</sup> , Clostridia, parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	48.00
Canine faecal analysis 3 – dogs with chronic diarrhoea Canine faecal analysis 2, TLI <sup>A</sup> , vitamin B12 <sup>A</sup> , folate <sup>A</sup>	Faeces 10g Serum 2ml	3-10d	104.00
Canine faecal analysis 4– dogs with chronic diarrhoea.  Faecal analysis 2, total protein <sup>A</sup> , albumin <sup>A</sup> , globulin, haematology <sup>A</sup>	Faeces 10g Serum 0.5ml EDTA 1ml	3-10d	70.00
Canine faecal analysis 5– dogs with chronic diarrhoea Faecal analysis 4, TLI <sup>A</sup> , vitamin B12 <sup>A</sup> , folate <sup>A</sup>	Faeces 10g Serum 2ml EDTA 1ml	3-10d	110.00

Faecal packages - feline				
Profile/Test	Samples	Turnaround	Price £	
Feline faecal analysis 1 - cats with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	43.00	
<b>Feline faecal analysis 2</b> - cats with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , Yersinia <sup>A</sup> , anaerobes <sup>A</sup> , parasitology, Coccidia, Giardia, fat/starch	Faeces 10g	3-10d	48.00	
Feline faecal analysis 3 - cats with chronic diarrhoea Feline faecal analysis 2, Tritrichomonas foetus PCR	Faeces 10g	3-10d	96.00	
<b>Feline faecal analysis 4</b> - cats with chronic diarrhoea Faecal analysis 2, total protein <sup>A</sup> , albumin <sup>A</sup> , globulin, haematology <sup>A</sup>	Faeces 10g Serum 0.5ml EDTA 1ml	3-10d	70.00	
<b>Feline faecal analysis 5</b> - cats with chronic diarrhoea Faecal analysis 4, vitamin B12 <sup>A</sup> , folate <sup>A</sup> , PLI	Faeces 10g Serum 2ml EDTA 1ml	3-10d	110.00	

Faecal packages - equine			
Profile/Test	Samples	Turnaround	Price £
<b>Equine faecal analysis 1</b> - horses with acute or chronic diarrhoea Salmonella <sup>A</sup> , parasitology	Faeces 10g	3-10d	38.00
<b>Equine faecal analysis 2</b> - horses with acute or chronic diarrhoea Salmonella <sup>A</sup> , Campylobacter, parasitology, C. difficile	Faeces 10g	3-10d	60.00
<b>Foal diarrhoea</b> - foals with acute or chronic diarrhoea Cryptosporidia <sup>A</sup> , rotavirus <sup>A</sup> , Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , C. difficile.	Faeces 10g	3-10d	58.00

Faecal packages - avian/exotic/small mammal				
Profile/Test	Samples	Turnaround	Price £	
Avian faecal analysis - Salmonella <sup>A</sup> , parasitology	Faeces 10g	3-10d	37.00	
Primate faecal analysis Parasitology, Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , Yersinia <sup>A</sup> , Shigella	Faeces 10g	3-10d	74.00	
Small mammal faecal analysis - rabbits, rodents Salmonella <sup>A</sup> , Campylobacter <sup>A</sup> , parasitology, Coccidia	Faeces 5g	3-10d	34.00	

Skin				
Profile/Test	Samples	Turnaround	Price £	
Skin Parasitology	Skin scrape	1d	17.00	
Ringworm (dermatophyte) culture <sup>A</sup>	Hair	21d	26.00	
Skin parasitology & ringworm (dermatophyte) culture Ringworm cultures <sup>A</sup> , microscopic examination	Hair Skin scrape	3-10d	32.00	
Skin bacteriology <sup>A</sup> - aerobic culture	Skin scrape or swab	3-10d	33.00	
Skin Comprehensive – dog/cat/exotic Bacteriology <sup>A</sup> , mycology, parasitology <sup>A</sup> .	Hair & Skin scrape & Swab	21d	40.00	
Skin Comprehensive – equine Bacteriology <sup>A</sup> (includes. Dermatophilus), mycology, parasitology <sup>A</sup> .	Hair & Skin scrape & Swab	21d	40.00	

# Infectious diseases - Molecular/Serology

Infectious disease - canine			
Profile/Test	Samples	Turnaround	Price £
Aspergillus serology <sup>s</sup>	Serum 1ml	10d	62.00
Blood film examination PCR	EDTA 0.5ml	Same day 7d	19.00 60.00
Borrelia burgdorferi (Lyme disease) antibody – dog	Serum 0.5ml	Same day	30.00
Borrelia burgdorferi (Lyme disease) antibodys – equine	Serum 0.5ml	Same day	36.00
Canine distemper virus PCR <sup>s</sup>	Faeces, Tissue, Urine	7-14d	65.00
Canine parvovirus PCR <sup>s</sup>	Faeces	7-14d	45.00
Ehrlichia canis PCR <sup>s</sup>	EDTA 0.5ml	7d	62.00
Leishmania antibody <sup>s</sup>	Serum 0.5ml	7d	64.00
Leishmania PCR <sup>s</sup>	EDTA 0.5ml, lymph node, skin	7d	60.00
Leptospira canicola antibody <sup>s</sup>	Serum 0.5ml	7d	29.00
Leptospira icterohaemorrhagiae antibody <sup>s</sup>	Serum 0.5ml	7d	29.00
<b>Leptospira - pan species antibody<sup>s</sup></b> Assess for exposure to <i>L. canicol, ictero, bratislava, hardjo</i>	Serum 0.5ml	7d	98.00
Leptospira PCR <sup>s</sup>	Urine	7d	65.00
Neospora caninum antibody <sup>s</sup>	Serum 0.5ml	7d	41.00
Toxoplasma IgG and IgM antibody <sup>s</sup>	Serum 1ml	5-10d	49.00

Infectious disease – feline				
Profile/Test	Samples	Turnaround	Price £	
Chlamydophila PCR <sup>s</sup>	Swab - dry	3-10d	45.00	
FHV PCR <sup>s</sup>	Swab - dry	21d	42.00	
FHV and Chlamydophila PCR <sup>s</sup>	Swab - dry	21d	59.00	
FCoV (FIP) serology <sup>s</sup>	Serum 0.5ml	5d	31.00	
FCoV (FIP) PCR <sup>s</sup>	Fluid, tissue	7d	52.00	
FeLV antigen	Serum/EDTA 0.5ml	Same day	24.00	
FIV antibody	Serum/EDTA 0.5ml	Same day	24.00	
FeLV antigen & FIV antibody	Serum/EDTA 0.5ml	Same day	36.00	
FeLV antigen, FIV antibody & FCoV antibody <sup>s</sup>	Serum 1ml	5d	62.00	
Haemoplasma spp PCR <sup>s</sup>	EDTA 1ml	7d	56.00	
Toxoplasma IgG and IgM <sup>s</sup>	Serum 1ml	3-10d	49.00	
Tritrichomonas foetus PCRs	5g faeces - no cat litter	3-14d	48.00	

# Infectious diseases - Molecular/Serology

Infectious disease – equine				
Profile/Test	Samples	Turnaround	Price £	
Anoplocephala antibody (tapeworm)	Serum 1ml	7-14d	31.00	
Borrelia burgdorferi (Lyme diease) antibody	Serum 1ml	7d	36.00	
Equine infectious anaemias - Coggins test	Serum 1ml	5d	26.00	
<b>Equine viral arteritis antibody</b> <sup>s</sup> – if positive then confirmatory testing is required (additional charge £23)	Serum 1ml	5d	21.20 if negative Added £25.00 if confirmatory test required	
<b>EIA &amp; EVA</b> <sup>S</sup> – if EVA positive then confirmatory testing is required (additional charge £26.00)	Serum 2ml	5d	26.00 if negative, Added 26.00 if confirmatory test required.	
Lawsonia intracellularis PCR <sup>A</sup>	Faeces	5d	58.00	
Louping ill virus <sup>s</sup>	Serum 1ml	5d	35.00	
Rotavirus PAGE <sup>A</sup>	Faeces	2d	22.00	
Streptococcus equi antibody <sup>s</sup>	Serum 1ml	2d	37.00	
Streptococcus equi culture <sup>A</sup>	Swab	5d	25.00	
Streptococcus equi PCR <sup>s</sup>	Wash/swab	3d	42.00	

Infectious disease – small mammal/avian				
Profile/Test	Samples	Turnaround	Price £	
Avian borna disease virus PCR <sup>s</sup>	Faeces, Heparin blood, tissue	7d	70.00	
Chlamydia PCR <sup>s</sup>	Faeces, tissue	7d	45.00	
Encephalitozoon cuniculi antibody <sup>s</sup> - IgG Assesses exposure only	Serum 0.5ml	7d	52.00	
Encephalitozoon cuniculi antibody <sup>s</sup> - IgG & IgM Assesses if active infection	Serum 0.5ml	7d	68.00	
Encephalitozoon cuniculi PCR <sup>s</sup>	Serum 0.5ml	7d	42.00	
Rabbit haemorrhagic disease virus PCR <sup>s</sup>	Liver, faeces, EDTA blood, oropharyngeal swab, intestinal contents	<b>7</b> d	87.00	
Lawsonia intracellularis PCR	Faeces	3d	58.00	

# **Urinary tract disease**

Urinary tract tests			
Profile/Test	Samples	Turnaround	Price £
Urine SG	Urine 0.2ml	Same day	8.00
Urinalysis - Urine chemistry, wet microscopy Alone Additional to urine bacteriology/cytology	Urine 2ml	1d	20.00 16.00
Urine bacteriology <sup>A -</sup> Cystocentesis sample is recommended	Urine 0.2ml	3-10d	31.00
Urine cytology	Urine 0.5ml	1d	31.50
Urine comprehensive Cytology (giemsa), bacteriology <sup>A</sup> , urine chemistry, UP:C <sup>A</sup>	Urine 2ml	3-10d	49.00
<b>Urine cortisol:creatinine ratio</b> <sup>A</sup> Screening test for Cushings disease. It does not provide a definitive diagnosis	Urine 0.5ml	Same day	37.00
Urine lead:creatinine ratio Screening test for lead poisoning or quantify lead excretion following treatment	Urine 25ml	1-4d	40.00
Urine protein:creatinine ratio <sup>A</sup> Alone Additional to other urine analysis tests	Urine 0.5ml	Same day	19.60 14.60
Urine fractional electrolyte excretion <sup>A</sup> 1 electrolyte 2+ electrolytes	Urine 1ml Serum 1ml	Same day	22.00 38.00
Urolith analysis - qualitative	Urolith 5g	3-5d	41.00

# Clinical Chemistry, Endocrinology & Haematology

Haematology & Coagulation						
Profile/Test		Samples	Turnaround	Price £		
Individual tests - PCV <sup>A</sup> , RBC <sup>A</sup> , Hb <sup>A</sup> , WBC <sup>A</sup> , platelets <sup>A</sup> , reticulocytes <sup>A</sup>		0.5ml E	Same day	9.50		
WBC and differential <sup>A</sup>		0.5ml E	Same day	19.00		
Full haematology <sup>A</sup> RBC, PCV, Hb, MCV, MCHC, platelets, WBC, differential, reticuloctyes	Alone Additional to a biochemistry profile comprising a minimum of 4 analytes from the Individual Analyte list above.	1ml E	Same day	28.00 20.00		
Activated partial thromboplastin time (APTT) <sup>S</sup>		1ml C	1-4 days	28.00		
Prothrombin time (OSPT) <sup>S</sup>		1ml C	1-4 days	28.00		
Fibrinogen <sup>s</sup>		1ml C	2d	17.00		

Immunological tests						
Profile/Test	Samples	Turnaround	Price £			
Coombs <sup>s</sup> - canine	1ml E	2d	37.00			
Coombs <sup>s</sup> - feline	1ml E	2d	37.00			

Therapeutic drug monitoring						
Profile/Test	Samples	Turnaround	Price £			
Bromide <sup>S</sup> – timing of sampling is not important	0.3ml S	2-4d	52.00			
Digoxin <sup>s</sup> − 2 - 5 hours post-dosing	0.3ml S	2-4d	44.00			
Phenobarbitone <sup>A</sup> – timing of sampling is not important.	0.3ml S	Same day	26.50			

Biochemistry – individ	lual tests	;		
Profile/Test	Samples	Turnaround	Prio	ce £
Individual analytes <sup>A</sup>		١	Nos. tests	Price
Albumin, ALP, ALT, AST, amylase, beta-hydroxybutyrate, bilirubin,			1	9.20
calcium, chloride, cholesterol, CK, creatinine, GDH, GGT, globulin		_	2	12.80
(calculated from total protein and albumin), glucose, LDH, lipase,	0.5 - 2ml	Same	3	14.80
magnesium, phosphate, potassium, SIAP, sodium, total protein,	S/P	day	4-5 6-10	19.00 25.80
triglycerides, urea			11-15	31.00
See profiles below			16-20	36.00
Bile acids <sup>A</sup>				
Alone	0.3ml S	Same day		14.00
Add to a biochemistry profile/4+ analytes from the analyte list above  Bile acids stimulation test <sup>A</sup> - 0h (after 12h fast) & 2h after feeding				8.00
Alone	0.3ml S	Same day		22.00
Add to a biochemistry profile/4+ analytes from the analyte list above	x2	Same day		16.00
Copper <sup>A</sup> - blood	1ml S/P	1-4 days		13.50
Copper <sup>A</sup> - tissue		,-		
5g is the minimum required for dry matter content to be assessed. If <5g	5g liver	1-4 days		38.00
of tissue is provided a wet weight concentration will be provided.				
C-reactive protein <sup>s</sup>	0.5ml S	Same day		20.00
Folate <sup>A</sup>	0.3ml S	Same day		22.00
Fructosamine <sup>A</sup>	0.3ml S	Same day		19.50
GSHPx <sup>A</sup> - whole heparinised blood is required.	0.5ml H	1-3 days		14.00
Iron only	0.3ml S	1-3 days		25.00
Iron profile - includes iron, TIBC & % saturation	0.5ml S	1-3days		30.00
Lead <sup>A</sup> - whole heparinised blood required	1ml H	1-3 days		25.00
Manganese <sup>A</sup> whole heparinised blood required	1ml H	1-3 days		25.00
PLI – canine	0.5ml S	Same day		39.00
PLI – feline	0.5ml S	Same day		39.00
Protein electrophoresis <sup>s</sup>	0.5ml S	2-5d		38.00
SDMA <sup>s</sup>	0.3ml S	2d		35.00
Selenium <sup>A</sup> - whole heparinised blood is required	1ml H	2-7d		21.00
Serum amyloid A <sup>s</sup>	0.5ml S	2-4d		18.00
TLI (canine)	0.5ml S	Same day		39.00
TLI (feline)	0.5ml S	2d		70.00
Uric acid <sup>s</sup> Urine protein:creatinine ratio <sup>A</sup> Incl sediment examination if UP:C high.	0.5ml S	2d		20.00
Alone	0.5ml Ur	1d		19.60
Additional	3.3 <b>3</b> .			14.60
Vitamin A - blood	0.5ml S/H	2-7d		28.00
Vitamin B12 (cobalamin) <sup>A</sup>	0.5ml S	Same day		24.00
Vitamin E - blood	0.5ml S/H	2-7d		28.00
Vitamin B12 (cobalamin) <sup>A</sup> & folate <sup>A</sup>	1ml S	Same day		42.00
	1ml S	Same day		72.00
Vitamin B12 (cobalamin) <sup>A</sup> , folate <sup>A</sup> & TLI - canine		,		
Vitamin B12 (cobalamin) <sup>A</sup> , folate <sup>A</sup> & TLI - canine  Vitamin B12 (cobalamin) <sup>A</sup> , folate <sup>A</sup> & PLI - feline	1ml S	Same day		72.00

### **Biochemistry profiles**

The profiles below are designed to address specific clinical situations and generally follow a problem orientated approach. They are useful in the work-up of a case or for monitoring progression in response to treatment. See tables below for the components of each profile, and also see the endocrinology section. Sample collection guidelines – page 48

Biochemistry profiles - C	anine		
Profile/Test	Samples	Turnaround	Price £
Acute abdomen/vomiting Screen for hepatic/renal disease/pancreatitis.	1ml S	Same day	56.00
Addisons disease monitoring  Monitor electrolytes and renal function	1ml S	Same day	18.00
Cushings treatment monitoring 1 <sup>A</sup> Pre-vetoryl cortisol only - sample taken prior to Vetoryl dosing	0.5ml S	Same day	28.00
Cushings treatment monitoring 2 <sup>A</sup> Single cortisol 4-6h post-Vetoryl dosing + electrolytes	1ml S	Same day	35.00
Cushings treatment monitoring 3 <sup>A</sup> Cortisol x 2. Collect baseline blood sample 4-6 hours post-Vetoryl dosing. Administer ACTH (min dose 5µg/kg) IV. Collect second serum sample two hours later.	0.5ml S x2	Same day	39.00
Chronic diarrhoea Assess intestinal and pancreatic function	1ml S/H	Same day	71.00
Comprehensive analysis	2ml S 0.5ml F	Same day	37.00
Diabetes mellitus monitoring Assess stability of the diabetic state in the ill animal	1ml S 0.5ml F	Same day	36.00
Fits, collapse – basic Assesses electrolyte, glucose & calcium status in an otherwise well animal	1ml S 0.5ml F	Same day	19.00
Fits, collapse – extended Indicated where seizure/collapse presents with signs of illness.	2ml S 0.5ml F	Same day	26.00
<b>Health Check</b> Basic screen for renal/hepatic disease or a pre-anaesthetic screen	1ml S	Same day	25.00
Kidney	1ml S	Same day	19.00
Liver – basic	1ml S	Same day	22.00
Liver – extended	1ml S	Same day	26.00
Polydipsia	1ml S 0.5ml F	Same day	26.00
Seizure control Assesses therapeutic level of phenobarbitone, and the presence of hepatotoxicity and hyperlipidaemia. Add 1ml serum if bromide is also required	2ml S	Same day	45.00
Skin disease Assesses for multisystemic disease or an endocrinopathy that present with chronic skin disease/alopecia.	2ml S	Same day	53.00

				E	Bioc		nistr Cani		rofil	es							
Parameter	Acute abdo/vomiting	Addisons	Chronic diarrhoea	Comprehensive	Cushings disease 1	Cushings disease 2	Cushings disease 3	Diabetes mellitus	Fits, collapse - basic	Fits, collapse - ext	Health Check	Kidney	Liver- basic	Liver - extended	Polydipsia	Seizure control	Skin
Total protein	1		√	<b>V</b>						√	<b>V</b>			1	1		√
Albumin	1		<b>V</b>	<b>√</b>						1	1	1		1	<b>V</b>		<b>V</b>
Globulin	V		<b>V</b>	<b>√</b>						1	<b>V</b>			<b>V</b>	1		V
Urea	1	1		<b>√</b>						1	1	1		1	<b>V</b>		
Creatinine	V	1		<b>√</b>						V	V	1			1		
ALP	1			<b>√</b>				√		1	V		1	V	<b>V</b>	V	<b>√</b>
SIAP (if ALP elevated)				<b>V</b>				<b>V</b>			1				1		√
ALT	1			√				1		1	√		1	√	1		<b>√</b>
AST																1	
GGT				1									1	1			
Bilirubin	√			√									1	1			
Bile acids	1			1									1	1		1	
Amylase				1													
Lipase				1													
Glucose				1				1	1	1					√		
Fructosamine								1									
Ketones (BOHB)								1									
Cholesterol			1	1				1						1	1	1	√
Triglycerides	1							1								1	
Sodium	1	1		√		√			√	1							
Potassium	1	√		√		√			√	1							
Chloride	1	1		1		1			√	1							
Calcium	1			1					1	√		√			1		
Phosphate									$\sqrt{}$	1		√			1		
СК				1													
Thyroxine (T4)																	<b>√</b>
TSH																	$\sqrt{}$
Cortisol					1	1											
ACTH Stimulation							1										
PLI	1																
Phenobarbitone																1	
TLI/Vit B12/folate			1														

Biochemistry profiles	s - Feline		
Profile/Test	Samples	Turnaround	Price £
Acute abdomen/vomiting Screen for hepatic/renal disease/pancreatitis.	1ml S	Same day	56.00
Chronic diarrhoea Assess for intestinal damage/pancreatitis	1ml S	Same day	71.00
Comprehensive analysis	2ml S 0.5ml F	Same day	37.00
Diabetes mellitus monitoring Assess stability of the diabetic state in the ill animal	1ml S 0.5ml F	Same day	36.00
Fits, collapse – basic Assesses electrolyte & calcium status in an otherwise well animal	1ml S 0.5ml F	Same day	19.00
Fits, collapse – extended Indicated where seizure/collapse presents with signs of illness.	2ml S 0.5ml F	Same day	26.00
<b>Health Check</b> Basic screen for renal/hepatic disease or a pre-anaesthetic screen	1ml S	Same day	25.00
Kidney Monitor progression of renal disease.	1ml S	Same day	19.00
Liver – basic Monitor progress of hepatic disease	1ml S	Same day	22.00
Liver – extended Monitor progress of hepatic disease	1ml S	Same day	26.00
Old thin cat Screens for renal/hepatic disease and hyperthyroidism.	1ml S	Same day	34.00
Polydipsia	1ml S 0.5ml F	Same day	26.00
Seizure control  Assesses therapeutic level of phenobarbitone, and the presence of hepatotoxicity and hyperlipidaemia.	2ml S	Same day	45.00

			Bio	oche		try p ine	orofi	les					
Assay	Acute abdo/vomiting	Chronic diarrhoea	Comprehensive	Diabetes mellitus	Fits, collapse - basic	Fits, collapse - ext	Health Check	Kidney	Liver- basic	Liver - extended	Old thin cat	Polydipsia	Seizure control
Total protein	√	√	√			√	√			√	√	√	
Albumin	√	√	√			√	√			√	√	√	
Globulin	√	√	√			√	√			√	√	√	
Urea	√		√			√	√	√		√	√	√	
Creatinine	√		√			√	√	√			√	√	
ALP	√		√	<b>V</b>		√	√		√	√	<b>V</b>	<b>V</b>	√
ALT	<b>V</b>		√	<b>V</b>		<b>V</b>	√		<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	
AST	<b>V</b>		<b>V</b>	<b>V</b>					<b>√</b>	<b>V</b>			√
GGT			<b>V</b>						√	<b>V</b>			
Bilirubin			<b>V</b>						√	<b>√</b>			
Bile acids	<b>V</b>		√						√	<b>V</b>			√
CK			<b>V</b>										
Amylase			√										
Lipase			<b>V</b>										
Glucose			<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>						<b>V</b>	
Fructosamine				<b>V</b>									
Cholesterol		<b>V</b>	√	<b>V</b>						<b>V</b>		<b>V</b>	√
Triglycerides			V										√
Sodium	<b>V</b>		√		<b>V</b>	√							
Potassium	V		<b>V</b>		V	√							
Chloride	<b>V</b>		<b>V</b>		<b>V</b>	√							
Calcium	<b>V</b>		<b>V</b>		<b>V</b>	√		<b>V</b>				<b>V</b>	
Phosphate			<b>V</b>		V	<b>V</b>		<b>V</b>				V	
PLI	<b>V</b>	<b>V</b>											
Thyroxine											<b>V</b>		
Phenobarbitone													√
Vit B12/folate		<b>V</b>											

Biochemistry profiles - Equine						
Profile/Test	Samples	Turnaround	Price £			
Comprehensive analysis	2ml S 0.5ml F	3-7 d	37.00			
Equine metabolic syndrome Assess for pre-laminitic metabolic syndrome/insulin resistance. Consider adding endogenous ACTH (1ml EDTA plasma required)	3ml S 0.5ml F	1d	51.00			
<b>Health Check</b> Basic screen for renal/hepatic disease or a pre-anaesthetic screen	1ml S	Same day	25.00			
Kidney	1ml S	Same day	23.00			
Liver	1ml S	Same day	26.00			
Rhabdomyolysis/myositis Includes assessment for myopathy	1ml S	Same day	26.00			
Weight loss	1ml S 0.5ml F	Same day	26.00			

	E	Biochen E	nistry pi Equine	rofiles			
Assay	Comprehensive	Equine metabolic syndrome	Health Check	<- Kidney	∠Liver	Rhabdomyolysis / Myositis	< Weight loss
Total protein	$\checkmark$						$\sqrt{}$
Albumin					$\sqrt{}$		
Globulin	$\sqrt{}$				$\sqrt{}$		
Urea							
Creatinine	$\sqrt{}$			√		√	
ALP							
Intestinal ALP							
GDH	$\checkmark$		<b>√</b>		√		
GGT	$\checkmark$		√		√	√	
LDH			$\checkmark$		<b>√</b>	√	
Bilirubin	$\checkmark$				√		
Bile acids	$\checkmark$				√		
AST	$\checkmark$				√	√	
CK							
Triglycerides							
Glucose							
Sodium							
Potassium							
Chloride							
Calcium				$\sqrt{}$			
Phosphate	1			$\sqrt{}$		<b>√</b>	
Magnesium						<b>√</b>	
Insulin							

Biochemistry profiles – Small Mammal/Avian						
Profile/Test	Samples	Turnaround	Price £			
Avian comprehensive	0.5ml S 0.25ml F	Same day	35.00			
Mammal health check	1ml S 0.5ml F	Same day	22.00			
Mammal comprehensive	2ml S 0.5ml F	Same day	35.00			
Primate comprehensive	2ml S 0.5ml F	Same day	45.00			

	Small r	mammal	Avian	Primate
Assay	Health Check	Comprehensive	Comprehensive	Comprehensive
Total protein	V	V	<b>√</b>	V
Albumin	V	V	√	V
Globulin	<b>√</b>	V	1	V
Urea	<b>√</b>	V		V
Creatinine	<b>√</b>	V		V
ALP	<b>√</b>	V		<b>√</b>
ALT	V	V		V
GGT	V		√	V
AST	<b>√</b>	V	1	V
BA	<b>√</b>	V	1	V
Bilirubin	√			V
CK	√	V	√	
Glucose	√	V	<b>V</b>	V
Cholesterol	√		√	$\sqrt{}$
Amylase	V			
Sodium	V		1	V
Potassium	V		V	V
Chloride	<b>V</b>		<b>√</b>	V
Phosphate	V		1	V
Calcium	V		1	V
Uric acid			√	

Adrenal endocrinol	ogy		
Profile/Test	Samples	Turnaround	Price £
<b>ACTH - endogenous</b> <sup>s</sup> – centrifuge and chill the separated EDTA plasma immediately and submit within 24 hours	0.5ml EDTA plasma	Same day	36.00
Cortisol <sup>A</sup> Alone Additional to 4+ biochemistry tests	0.5ml S	Same day	28.00 25.00
Addisons disease monitoring - Monitor electrolytes and renal function	1ml S	Same day	18.00
ACTH stimulation test <sup>A</sup> – canine Sample at 0 &2h after iv ACTH.  Alone  Additional to 4+ biochemistry tests	0.5ml S x2	Same day	39.00 32.00
ACTH stimulation test <sup>A</sup> - feline Sample at 0, 60m & 90m after iv ACTH).  Alone  Additional to 4+ biochemistry tests.	0.5ml S x3	Same day	46.00 38.00
Cushings treatment monitoring 1 <sup>A</sup> Pre-vetoryl cortisol only - sample taken prior to Vetoryl dosing – alone  Additional to 4+ biochemistry tests.	0.5ml S	Same day	28.00 25.00
Cushings treatment monitoring 2 <sup>A</sup> Single cortisol 4-6h post-Vetoryl dosing + electrolytes	1ml S	Same day	35.00
Cushings treatment monitoring 3 <sup>A</sup> Blood sample 4-6 hours post-Vetoryl dosing and 2h after aministration of ACTH (min dose 5µg/kg) IV. Alone Additional to 4+ biochemistry tests	0.5ml S x2	Same day	39.00 32.00
Dexamethasone suppression test <sup>A</sup> - low dose - canine Sample at 0, 3 & 8h after after IV dexamethasone (0.01-0.015mg/kg) Alone Additional to 4+ biochemistry tests	0.5ml S x3	Same day	46.00 38.00
Dexamethasone suppression test <sup>A</sup> - low dose - feline Sample at 0, 3 & 8h after after IV dexamethasone (0.15mg/kg) Alone Additional to 4+ biochemistry tests	0.5ml S x3	Same day	46.00 38.00
Urine cortisol:creatinine ratio Screening test for cushings.	1ml urine	Same day	37.00

Pancreatic endocrinology					
Profile/Test		Samples	Turnaround	Price £	
Insulin <sup>s</sup>		0.3ml S	2d	38.00	

Thyroid endocrinology						
Profile/Test	Samples	Turnaround	Price £			
Total T4 <sup>A</sup> Additional to a profile comprising 4+ parameters	0.3ml S	Same day	21.00 14.00			
Total T4 <sup>A</sup> pre + 6-8h post dosing with thyroid supplement	0.3ml S x2	Same day	38.00			
TSH <sup>A</sup>	0.3ml S	Same day	28.00			
Total T4 <sup>A</sup> and TSH <sup>A</sup>	0.5ml S	Same day	40.80			

Reproductive endocrinology					
Profile/Test	Samples	Turnaround	Price £		
Oestradiol <sup>s</sup>	1ml S	7d	65.00		
<b>Oestrogen - urinary</b> <sup>s</sup> - Mare pregnancy test Sample >150d of pregnancy	1ml S	7d	33.00		
Oestrone sulphate <sup>s</sup> - Mare pregnancy test Sample >120d of pregnancy	1ml S	7d	37.00		
Oestrone sulphate <sup>s</sup> – Cryptorchidism Unsuitable for horses <3 years old or donkeys	1ml S	7d	60.00		
Ovarian Remnant Detection 1 <sup>s</sup> – canine/feline  To detect ovarian tissue in bitches/cats not showing signs of oestrus Inject 0.32µg IV of GnRH (Buserilin). Collect 2ml of serum 2-3 hours after administering GnRH and submit for <b>oestradiol</b> assay.  Baseline sample is not generally required although some protocols recommend its inclusion.	1ml S	7d	Single 2-3h sample only 65.00 Oh & 2-3h sample 100.00		
Ovarian Remnant Detection 2 <sup>A</sup> – canine/feline  To detect ovarian tissue in bitches/cats that show signs of oestrus Inject 200-500iu/dog or 200iu/cat hCG (chorulon) IM. Sample on day 0 (optional) and day 10-14 and submit for progesterone assay. Baseline sample may not be required although some protocols recommend its inclusion.  In bitches assessing progesterone 14-21 days after onset of signs of proestrus can be diagnostic in some cases.	1ml H	Same day	Single 10-14d sample only 34.00 0d & 10-14d sample 65.00		
PMSG <sup>s</sup> - Mare pregnancy test - sample 45-90d of pregnancy	0.3ml S	7d	37.00		
Progesterone <sup>A</sup> – ovulation detection  Take blood samples from day 8 after procestrus starts and continue every 2 days until ovulation is detected. Be aware that on very rare occasions procestrus may be as short as 4 days, and thus testing at 8d could be too late.	1ml H	Same day	34.00		
Testosterone <sup>s</sup>	2ml S	7d	37.00		
Cryptorchidism – hCG stimulation test <sup>s</sup> – canine, feline, equine Inject 100-300iu/cat, or 200-500iu/dog or 6000iu/horse of hCG (chorulon) IV. Collect blood sample 1-2 hours later. Assay testosterone. Baseline sample is not generally required although some protocols recommend its inclusion.	2ml S	7d	Single 2h sample only 37.00 Oh & 1-2h sample 68.00		

### **Histopathology & Cytology service**

Histopathology/Cytology						
Test	Samples	Turnaround	Price £			
Histopathology – 1-3 tissues (not brain)	Fixed tissue	1-2d	49.00			
Histopathology - additional tissues	Fixed tissue	1-2d	10.00 /tissue			
Histopathology – brain (+/- spinal cord)	Fixed tissue	1-4d	49.00			
Bone marrow cytology	Marrow in EDTA pot & smears	1d	31.50			
CSF cytology Fluid analysis recommended. If possible, also submit an air dried smear.	Fluid in plain tube	1d	31.50			
Joint fluid cytology only Fluid analysis recommended. If possible, also submit an air dried smear.	Fluid in plain tube	1d	31.50			
Nasal, tracheal, bronchial wash						
Cytology only	Fluid in plain tube	1d	31.50			
Cytology + bacteriology			57.00			
Pleural/peritoneal effusions cytology Fluid analysis recommended. If possible, also submit an air dried smear.	Fluid in plain tube	1d	31.50			
Tissue cytology One tissue - multiple aspirates from the same organ are one site. 2+ lesions - aspirates from distinct and different lesions/organs	Fine needle aspirate	1d	31.50 40.00			
Urine/prostatic wash Cytology only Cytology & urinalysis	Fluid/urine in plain tube	1d	31.50 43.00			
Fluid analysis package 1 - pleural, peritoneal, CSF, synovial fluids Cytology, cell count, TP, SG, triglycerides, cholesterol as appropriate.	Fluid in plain & EDTA tubes	1d	38.00			
Fluid analysis package 2 - pleural, peritoneal, CSF, synovial fluids Fluid analysis 1 + bacteriology	Fluid in plain & EDTA tubes	3-7d	61.00			
Cytology additional to histopathology – different lesion	Fine needle aspirate	1d	28.00			
Tissue histopathology & aerobic/anaerobic culture	Fixed tissue & fresh tissue wrapped in damp gauze	3-7d	80.00			

### Post Mortem (necropsy) service

Sample collection guidelines - page 48

Post Mortem examina	ntion				
Prices include gross examination and report only.					
Additional tests including disposal are charged as per the list price					
Test	Samples	Turnaround	Price £		
Cat – foetus/abortion - single	Carcase	Same day	70		
Cat – kitten up to 8 weeks old	Carcase	Same day	130		
Cat - >8 weeks old	Carcase	Same day	250		
Dog – foetus/abortion – single	Carcase	Same day	70		
Dog – puppy up to 8 weeks old	Carcase	Same day	130		
Dog - >8 weeks old	Carcase	Same day	250		
Exotic species - contact us for quote prior to submission.  Small mammals/reptiles/birds (generally <5kg)  Large mammals/reptiles/birds (generally >5kg)	Carcase	Same day	70-100 100-550		
Horse – abortion PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	200		
Horse – Foal  PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	270		
Horse/pony PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	300-700		
Pigeons – single carcase  PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	180		
Pigeons – batch of up to 4 carcases PM's only available from Aberdeen, Dumfries, St Boswells and Thurso centres	Carcase	Same day	600		
Small mammals/cage birds (mice, rabbits, pet birds, etc) Single carcase	Carcase	Same day	100		
Small animals/cage birds (mice, rabbits, pet birds, etc) Batch of upto 4 carcases	Carcase	Same day	300		
<b>Disposal</b> – costs vary according to the size of the animal. All post-mortems attract a supplementary disposal charge unless the owner/practice makes separate arrangements	Carcase	Same day	20-200		

Please phone the centre to which the post mortem is being sent before submission.

Animals weighing >35kg can generally only be submitted to our Aberdeen, Dumfries, St Boswells and Thurso centres. If submitting a carcase weighing >35kg to the Edinburgh centre it is essential that the lab is phoned first.

### **Companion Animal Index**

Encephalitozoon 33 ACTH (endogenous) 43 Endocrine tests 43-44 ACTH stimulation test 43 Equine viral arteritis 33 Rabbit haemorrhagic disease 33 Addisons disease monitoring 37, 43 Rheumatoid factor 35 Albumin 36 Ringworm (dermatophyte) 31 Alkaline phosphatase (ALP) 36 Rotavirus 29, 33 Faecal analysis packages 30 Alanine transaminase (ALT) 36 Faecal occult blood 29 Amylase 36 Feline coronavirus 32 Salmonella 29 - 30 Angiostrongylus vasorum - serol 28 Feline herpesvirus 32 Angiostrongylus vasorum - faeces 29 Anoplocephala 29, 33 Feline immunodeficiency virus 32 Selenium 36 Feline leukaemia virus 32 Serum amyloid A 36 Antinuclear antibody 35 Fibrinogen 35 Shigella 30 Aspartate transaminase (AST) 36 Fluid analysis packages 45 SIAP 36 Aspergillus – culture 28 Sodium 36 Fluke 29 Aspergillus - serology 32 Folate 36 Streptococcus equi 28, 33 Fractional electrolyte excretion (urine) 34 Fructosamine 36 Babesia 33 Testosterone 44 Thyroglobulin autoantibodies 43 Bacteriology -blood culture 28 Bacteriology - CSF 28 Glutamate dehydrogenase (GDH) 36 Thyroxine (T4) 43 Bacteriology - ear 28 Bacteriology - eye 29 Bacteriology - faecal 29 Gamma glutamyl transferase (GGT) 36 TLÍ 36 Giarda 29 Total iron binding capacity 36 Globulin 36 Total protein 36 Bacteriology - general 28 Bacteriology - peritoneal 28 Bacteriology - pleural 28 Glucose 36 Toxoplasma 32 Glutathione peroxidase (GSHPX) 36 Triglycerides 36 Tritrichomonas foetus 29, 32 Bacteriology - pieural 26 Bacteriology - skin 31 Bacteriology - synovial 28 Bacteriology - tissue 28 TSH 38, 42 Haematology 35 Haemoplasma 32 u Bacteriology - respiratory 28 Bacteriology - urine 34 Urea 36 Histopathology 45 Uric acid 36 Betahydroxybutarate 36 Bile acids 36 Urinalysis 34 Insulin 43 Urine cytology 34, 45 Bilirubin 36 Iron 36 Urine specific gravity 34 Biochemistry profiles - canine Urolith analysis 34 Biochemistry profiles – feline Biochemistry profiles - equine Lactate dehydrogenase (LDH) 36 Biochemistry profiles - avian Biochemistry profiles - exotic 37-42 Lawsonia intracellularis 33 Vitamin A 36 Lead 36 Vitamin B12 36 Lead:creatinine ratio (urine) 34 Vitamin E 36 Borna virus 33 Borrelia - canine 32 Leishmania 32 Borrelia - equine 33 Leptospira 32 Bromide 35 Lipase 36 Yersinia 29 Louping ill virus 33 Lungworm 28-29 z Calcium 36 Zinc 36 Campylobacter 29 Magnesium 36 Canine distemper virus 32 Canine parvovirus 32 Manganese 36 Chlamydia - avian 33 Chlamydophila - feline 32 Meticillin resistant Staphylococci 28 Chloride 36 Cholesterol 36 Neospora 32 Clostridium difficile 29 Coccidia 30 Coombs 35 Oestradiol 44 Copper 36 Oestrogen - urinary 44 Cortisol 43 Oestrone sulphate 44 Cortisol:creatinine ratio 34, 43 Ovarian remnant syndrome 44 C-QAS 53 C-reactive protein 36 Creatine kinase 36 Pancreatic lipase (PLI) 36 Parasitology - faecal 29, 30 Parasitology - skin 31 Creatinine 36 Cryptorchidism 44 Partial thromboplastin time 35 Cryptosporidia 29 Phenobarbitone 35 Cytology 45 Phosphate 36 Platelets 35 Dexamethasone suppression test 43 PMSG 44 Digoxin 35 Post-mortem examination 46 Dirofilaria 32 Potassium 36 Progesterone 44

Protein:creatine ratio 36

Prothrombin time 35

Protein electrophoresis 36

Ehrlichia 32

Equine infectious anaemia 33



	Page No	
Companon Animal Sample Collection Guidelines	48-52	
Microbiology sample collection guidelines	49	
Urine collection guidelines	50	
Blood sampling guidelines	50-51	
Histopathology/Cytology sample collection guidelines	52	
Post-mortem (necropsy) service	52	

#### Microbiology sample collection guidelines

- Ensure sample is from the lesion; avoid contamination from surrounding tissue. This is particularly important for urine where a cystocentesis sample is recommended for bacteriology.
- Please use sterile plain tubes, containers or swabs for submission of all microbiology samples boric
  acid containers are recommended for urine culture. Many additives in blood tubes are bacteriostatic
  and thus their use reduces isolation rates. If tissue samples are to be submitted please wrap in moist
  material to prevent drying out (do not immerse in fluid).
- When swabbing a lesion for bacteriology please use swabs that contain a transport medium as this preserves organism viability better than dry swabs.
- Faecal samples should be stored refrigerated until the sample is submitted.
- When submitting fluids for culture ensure that the plain container is completely filled to exclude air, as the presence of oxygen will potentially lead to loss of strict anaerobes from the sample.
- Generally samples that are >48 hours old are unsuitable for bacteriology due to reduced organism viability.

Origin of sample	Sample container	Sample preparation	Tests carried out
Abscess, wound	Sterile pot	Aseptically prepare the collection site	Aerobic, anaerobic & fungal culture
Blood	Blood culture medie	Prior to obtaining the blood sample aseptically prepare the venipuncture site. Collect 2-10ml of blood depending upon animal size and inject into the liquid media.	Aerobic & anaerobic culture
Bone marrow	Sterile pot	Aseptically prepare the collection site	Aerobic & anaerobic culture
CSF	Sterile pot Liquid media	Prior to obtaining the sample aseptically prepare the site. Isolation of organisms is improved if the sample is added to a liquid culture media.	Aerobic & anaerobic culture
Ear	Swab	Swab different regions of the ear, including deeper areas if possible	Aerobic & fungal culture
Eyes	Swab	Swab discharge material before applying any topical medication including local anaestehtic	Aerobic culture
Faeces	Sterile pot Swab	Avoid contamination with soil or urine	Salmonella, Campylobacter, Yersinia, Clostridium spp
Nasal cavity, sinus	Sterile pot Swab	Aspirate from sinus or swab/wash the nasal cavity.	Aerobic, anaerobic & fungal culture
Skin, nail, hair	Swab Sterile pot	Swab/scrape lesion. Do not include the blade in the sample pot. Place hairs taken from the periphery of the lesion for fungal culture in a small envelope.	Aerobic &fungal culture
Synovial fluid	Sterile pot Liquid media	Prior to obtaining the sample aseptically prepare the site Isolation of organisms is improved if the sample is added to a liquid culture media	Aerobic, &anaerobic culture
Tissue	Sterile pot	Place tissue in a sterile pot with small amount of sterile saline to prevent drying.	Aerobic, anaerobic & fungal culture
Trachea, bronchi	Sterile pot	Swab/wash the trachea/bronchi, swab the endotracheal tube	Aerobic & fungal culture
Urine	Sterile pot Boric acid.	Cystocentesis is recommended. For free catch samples use of Boric acid will restrict bacterial overgrowth. Refrigerate.	Aerobic culture

#### **Urine collection guidelines**

Test	Sample	Container	Sample preparation	Storage	Comment
Urine	Urine	Sterile pot	Obtain urine by	Seal and	Boric acid is preferred
culture		Boric acid	cystocentesis to	refrigerate.	where samples are not
		container	ensure sterility.	Prevent	obtained by
				exposure to	cystocentesis. Boric
				sunlight.	acid samples cannot be
					used for any chemistry
					tests including UP:C, or
					cytology. For these
					please submit urine in a
					plain tube.
Urinalysis	Urine	Plain pot	Obtain sample by	Seal and	Do not collect urine
			cystocentesis,	refrigerate.	from the floor/litter
			catheter or free catch	Prevent	trays.
			into a clean container	exposure to	
				sunlight	
Urine	Urine	Plain pot	Obtain sample by	Refrigerate	
cytology			cystocentesis,		
			catheter or free catch		
			into a clean container		
Urolith	Urolith	Plain pot	None – do not add	Room	
analysis			any liquid including	temperature	
			formalin		

#### **Blood sampling guidelines**

Accurate and useful results are determined by the correct choice of tests and quality of the sample provided. If you are unsure what tests may be appropriate for your case please contact us for advice in advance. We store all surplus serum for 3 months enabling you to request further testing at a later date if your initial test choice is not diagnostic. Whole blood degrades over a few days and thus cannot be stored for longer than 7 days.

The tests shown in this document identify the sample types, minimum requirements and guidelines on appropriate sampling.

- · Avoid lipaemia by taking samples after fasting.
- Reduce the risk of haemolysis. Haemolysis can be reduced by ensuring as wide a needle as possible
  is used, that a good free flow of blood is obtained and minimise the time blood is in the syringe. Do not
  forcibly eject blood through a needle; remove the needle prior to transferring the sample in a blood
  tube
- When filling tubes, fill the plain tube first to avoid any risk of carry over of anticoagulants. In particular small amounts of EDTA can interfere with several biochemistry tests
- With serum gel tubes please centrifuge sample if possible to separate red cells from the serum.
- Ensure plain tubes are clotted and clot retraction has occurred before centrifuging. Note that the sample requirements indicate the volume of serum/plasma that is required, not the volume of whole blood.
- Ensure that the correct blood tubes are used for the tests required.
- Fill all tubes to the correct level to avoid any issues with high concentrations of anticoagulants. This is particularly important with EDTA as cellular morphology is affected by high concentrations of EDTA.
- We recommend submitting an air dried blood smear which we can then use for the differential count when cellular morphology in the EDTA sample is not preserved.
- In cases where blood clotting occurs rapidly in the syringe before the sample can be mixed with EDTA (hypercoagulable states), coating the inside of the needle and syringe barrel with liquid citrate may be

helpful. Aspirate a small amount of citrate into the syring ensuring all internal surfaces are coated and then eject surplus citrate prior to obtaining the sample.

#### **Container types**

Blood tubes show the name of the tube on its label – please check before adding blood and do not rely on the lid colour as this varies. The letters shown for each tube type are used in the assay lists below

- Serum gel/plain tubes (S) (red or white lids): Serum tubes contain no anticoagulant and thus blood clots in these tubes. The serum gel tubes should be centrifuged prior to submission to prevent haemolysis affecting the serum. The resulting serum is used for biochemistry and endocrinology tests.
- Lithium heparin tube (H) (green or orange lids): Contains an anticoagulant that prevents clotting. Plasma can be used for biochemistry and endocrinology. The whole blood can be used for haematology, and for exotic species it is pSerred to blood taken in to EDTA. It is also used for some molecular tests. Ensure the tube is filled to the appropriate level.
- Potassium EDTA tube (E) (red or pink lids): Contains a chelating agent which acts as anticoagulant and
  preserves cellular morphology. It is used for haematology and for fluid aspirates (e.g. pleural/peritoneal
  effusion, synovial fluid etc). It is important that the tube is filled to the correct level to preserve cellular
  morphology.
- Separated EDTA plasma (ES): This is required for endogenous ACTH estimation. Centrifuge the EDTA sample and place the plasma into a plain tube (not serum gel tube).
- Fluoride-oxalate tube (F) (yellow or grey lids): Oxalate is an anticoagulant whilst fluoride prevents glucose metabolism by cells. This tube is required for glucose estimation.
- Citrate tube (C) (lilac or green lids): Citrate is in anticoagulant and tubes contining this are used for clotting factor and fibrinogen assay, and may be used for haematology.

Test	Sample	Container	Sample preparation	Comment
Chemistry	Serum	Serum	Submit whole blood or separated serum.	For therapeutic
(most),		gel or	For a plain tube (no gel) transfer the serum to	drug monitoring
Immunology,		plain tube	a new plain tube.	non-gel tubes are
Endocrinology		(S)		recommended
Progesterone	Plasma	Heparin	Submit whole blood, or separated plasma	
		(H)		
Selenium,	Whole	Heparin	Do not centrifuge. Submit whole blood	
lead,	blood	(H)		
manganese,				
GSHPx,				
Vitamin A	Serum,	Plain or	Keep samples in the dark as sunlight/UV light	Wrap in foil to
Vitamin E	plasma	Heparin	degrades vitamins A and E.	exclude light.
		(S/H)		
ACTH	Plasma	EDTA (E)	Centrifuge sample at the earliest opportunity.	Post immediately to
(endogenous)			Place the plasma into a plain tube.	arrive with us the
				next day
Haematology	Whole	EDTA	Fill tube to the mark mix well by inversion	
	blood	(E)		
Coagulation	Plasma	Citrate	Minimum 1ml of citrated plasma (c2ml of	Post immediately to
tests		(C)	whole blood) is required for PT and APTT	arrive with us the
(PT, APTT,			test. Mix adequately and ensure no clots are	next day. If the
fibrinogen)			present. Submit whole blood or centrifuge and	plasma has been
			submit the plasma in a separate plain tube	frozen, submit with
			(plasma can be frozen pending submission)	an ice-pack if
				possible.

#### Histopathology sample collection guidelines

- Provision of a full history, patient details and description of the lesion enables more accurate interpretations.
- For adequate fixation samples fix in 10% neutral buffered saline (10:1 ratio of formalin to tissue). For large biopsies it is appropriate to fix the tissue in a large pot in the practice for a few days. Completely fixed tissue can be submitted in a sealed bag or small pot with formalin soaked gauze to keep it moist. To allow formalin to penetrate large biopsies make 0.5-1cm wide incisions through the lesion; do not extend to the deep margin or through the full thickness of the tissue. For very large tissues remove 1cm cubed representative pieces, fix separately.
- Samples that are very small (<2mm) and friable, haemorrhagic, fatty or mucoid may not survive processing in which case an interpretation will not be possible.
- Multiple biopsies from different sites should be placed in separate pots and clearly labeled.
- Open hollow tissues e.g. intestine to allow formalin access to the mucosa.
- Small bone marrow, tru-cut liver or kidney should be submitted in mesh bags (available on request)
- Samples requiring extended fixation or decalcification have a longer turn-around time.

#### Cytology collection guidelines

Cytology sample may be obtained by aspiration, scraping or imprints. Slides may be made by smearing the aspirate or making a squash preparation. When making smears please ensure a thin film is created. Islands of material on the slide will be too thick for examination. Provision of a full history, patient details and description of the lesion enables more accurate interpretations.

- Submit labelled air-dried, unstained smears. Smears may be fixed in methanol for 5 minutes, but if unavailable, do not fix.
- Keep smears away from formalin fumes and avoid submitting slides in the same bag as formalin containing pots.
- Submit fluids and washes in EDTA pot for cytology and a plain sterile pot for culture along with unstained smears. Prepare smears immediately after taking the fluid/wash.
- Do not supply fluids in gel tubes or syringes.

#### Post-mortem (necropsy) service

#### Post mortem guidelines

The cost of the post mortem is for the necropsy only. All other tests will incur charges as shown in this service guide. **Disposal charges apply** unless separate arrangements are made; **carcases cannot be released to owners for burial**. For litigation cases extra charges will be incurred if discussions with legal representatives or attendance at court are required – please contact us for an estimate of costs. Smaller carcases can be posted to us. A full history is required. We must be informed in advance if a case is to be submitted for necropsy, and the body should be submitted at the earliest opportunity. Smaller carcases should be kept refrigerated, whilst larger bodies should be kept as cool as possible. Avoid freezing a body unless the time between death and submission is likely to be >72 hours, in which case freezing is preferred.

## C-QAS

### **Capital Quality Assessement Service**

# External quality assessment (EQA) for point-of-care biochemistry and haematology analysers

C-QAS provides an independent comprehensive, external quality assurance scheme for veterinary point-of-care analysers of all makes and models. Our unique EQA service assesses the performance of biochemistry and haematology analysers and provides guidance on how poor performance may be managed. We cover all analyser types including hand held kennel-side analysers such as glucometers.

Our external quality assessment service uses peer comparison with the same analyser make (where we have sufficient numbers of the analyser type registered), a method widely used across all human EQA schemes. The process is simple and satisfies the requirement of the RCVS's practice standards scheme.

Novel features specific to C-QAS include

- a. Peer-comparison of both biochemistry and haematology analysers; including manual white cell differentials.
- b. Comprehensive list of biochemistry analytes including blood gases, ionised calcium, thyroxine, progesterone and cortisol
- c. Inclusion of parameters specific to equine and livestock species.

Samples (serum and whole blood) are posted monthly to the subscriber, who return their results online through our VetPortal. The annual subscription runs from April to March and the current rates (ex-vat) are

Biochemistry analysers only - 1-3 analysers at the same site
 Haematology analyser only at one site
 Biochemistry (1-3 analysers) and haematology analyser at one site
 £200/y
 £300/y

If more than 3 biochemistry analysers are to be registered at one site each extra analyser will be invoiced at a cost of £60/analyser/y

Practices joining part way through the year will be invoiced for the remaining months prorata.

Email c-qas@sruc.ac.uk for further details.



# SRUC VETERINARY AND ANALYTICAL SERVICES STANDARDS OF SERVICE

We provide laboratory services in the veterinary sector. Our operations comply with the requirements of ISO 17025:2017 and are assessed annually by the United Kingdom Accreditation Service (UKAS).

Full schedules of accredited SRUC Veterinary and Analytical Services procedures are available on request or can be viewed on the web at <a href="www.ukas.com/find-an-organisation">www.ukas.com/find-an-organisation</a> - accredited organisation search on customer number 2239 and 7624.

The diagnostic work we carry out to support Scottish Government's animal disease surveillance programme is reported by SRUC. Other work submitted is reported by SAC Commercial Ltd. SRUC and SAC Commercial Ltd are separate legal entities and are covered by separate accreditation to ISO 17025:2017 by UKAS on certificate numbers 2239 and 7624 respectively.

Where applicable, decision rules for tests are available on request. Decisions relating to test interpretation are provided to clients by means of standard comments in veterinary reports. This covers aspects such as positive, negative or inconclusive cut-offs for serological tests based on kit manufacturer's information, and other data such as biochemistry values and parasitology results in relation to species, age of animal and sample type. Further interpretation taking account of clinical history and other information pertaining to the case, is provided as Veterinary Opinions and Interpretations.

Our scope of accreditation includes opinions and interpretations in farm and companion animal species.

Our opinions and interpretations will be based primarily on the test results and appear under the interpretation section of test reports. Accreditation for the expression of opinions and interpretations relates to test results generated from the accredited methods on the UKAS schedule. At all times our team will seek to provide opinions and interpretation, but on the occasions where this is not possible we will use advice from an approved subcontractor. In such circumstances this will be clearly identified on the test reports.

The test method list for all accredited tests is available at <u>Test Method List</u>. Almost all tests we offer are accredited to ISO 17025, however in the small number of tests that are not accredited, or where the test is carried out by another laboratory on our behalf we will clearly identify that these tests are not accredited. We are responsible to customers for any subcontracted tests, with the exception of subcontractors specified by customers or regulatory bodies. We have an assessment procedure for subcontractors and a register of approved subcontractors is maintained and reviewed on an annual basis. Should subcontracting be required, the services of an accredited laboratory will be employed wherever possible. We will indicate where a subcontracted laboratory was used.

We are committed to providing the highest level of service to customers and we welcome recommendations for improvement and any comment you may have on the quality of service and service delivery.

Anne Seaton Head of Veterinary Diagnostics and Livestock Health Schemes

VSG Standards of Service Version 24 Authorised by: A Seaton/L Connell

Effective Date: 1 April 2024