

PATHOLOGY
VIROLOGY
BIOCHEMISTRY
PCR TESTING
FARM ANIMAL HEALTH
SCHEMES
RABIES TESTING
FOOD SAFETY TESTING
BACTERIOLOGY
PARASITOLOGY



Veterinary
Diagnostic
Laboratory

2022
Price List

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About Biobest

Welcome to the 2022 Biobest price list. Biobest was founded by Dr David Snodgrass in 1995 when he identified a gap in the market for a private veterinary virology laboratory. Initially Biobest operated as a specialist referral laboratory, only accepting samples via other veterinary laboratories. David soon realised that there was also a need in the market for a GLP accredited virology lab to assist pharma companies with study work and so systems were quickly introduced to allow Biobest to gain GLP accreditation, our first quality standard. Quality has remained the fundamental to Biobest’s success and, over the years, we have added ISO:17025 and GMP accreditation and we are the largest VMD authorised equine stem cell centre in the UK.

In 2000 David took the bold step of setting up a second laboratory for Biobest, a high containment facility which enabled us to perform rabies testing for the newly created pet travel scheme. This was a truly transformational event in the history of Biobest as the high demand for this test over the years has allowed the business to grow and prosper, eventually becoming a ‘one stop shop’ for all veterinary laboratory requirements.

Biobest was purchased by the Origin group in 2014 which was subsequently purchased by Vet Partners in 2018. Biobest are now part of one of the largest veterinary groups in the UK.



Check List For Avoiding Delay

In order to ensure that your samples are tested efficiently you should aim to have them delivered to us the day before tests are set up. We will always aim to provide a quick turnaround time for all samples but if you have a specific urgent case please contact us directly to discuss your requirements.

There are a few simple steps you can take when submitting samples to ensure that they are tested as quickly as possible and allow us to provide you with the best possible customer service:

- Ensure that submission forms are completed in full.
- Ensure you have clearly indicated what testing is required for every sample submitted.
- For farm animal samples remember to include the animal ID(s) and the farmer’s name on the submission form. We can supply sample labels and pre-populated submission forms for cattle health scheme members who have granted us CTS access.
- Where relevant, include a concise clinical history to assist our vets when writing reports.
- For tissue, swab, cytology smears and fluid, please include details of the sampling site.
- It is important that you send the correct sample type and sufficient volume for your chosen test(s). Details of sample type and volume can be found on pages 22-23.
- Please ensure that the lids of all sample tubes and pots are leakproof and firmly closed.
- Do not send faecal samples in plastic bags or gloves, instead use rigid plastic pots.
- When sending large volumes of samples try to ensure tubes are in numerical order.

The Biobest team have strong and varied academic and technical experience, as well as enthusiasm for delivering the best for our customers. We offer our unique blend of expertise in virology and genetics with commercial dynamism and excellent customer service.



Paul Burr BSc(VetSci)Hons BVM&S PhD MRCVS - Laboratory Director

Paul has 5 years experience of farm practice, followed by over 10 years of diagnosis and research in infectious diseases. Advising both vets and farmers on infectious disease problems and health scheme operation remains an important and enjoyable part of his role at Biobest. Paul has regularly presented papers at British Cattle Veterinary Association meetings and often does talks to vets and farmer meetings on infectious disease.



Stuart Marshall BSc (Hons) MBA - Chief Operations Officer

Stuart graduated from the University of Edinburgh with an honours degree in Virology in 1998. He joined Biobest in 1999 following a 12-month placement with the IBR research team at the Moredun Research Institute. Stuart also has an MBA from the University of Warwick where his thesis was on the use of lean manufacturing techniques within the laboratory environment. In his role as Chief Operations Officer of the Biobest lab group Stuart has day-to-day management responsibility for all the Biobest lab sites.



Susan Duthie BVM&S PhD CertVR MRCVS - Veterinary Manager

Susan graduated from the University of Glasgow Vet School and went straight into mixed practice. Five years later, she returned to Glasgow to complete a PhD encompassing veterinary virology. After completing a related post-doctoral study, she joined Biobest in 2003. Susan has daily involvement with the HiHealth Herdcare Cattle Health Scheme, providing reports and advice for members, and is a member of the CHCS Technical group.



Jennifer Bunyan BSc (Hons) Cert Mgmt (Open) - Laboratory Manager

After graduating with an honours degree in Neuroscience from the University of Edinburgh, Jennifer started with Biobest in 2001. Since then Jennifer has progressed within the company to Laboratory Manager overseeing a team of 22 scientists and technicians. In 2010 she also obtained an Open University professional certificate in management winning the Derek Pugh award for best student. At Biobest she takes responsibility for all aspects of laboratory management to ensure we provide our customers with the highest possible standards of testing in an efficient and timely fashion.



Kieran McDonald BSc (Hons) MSc - Technical Manager

Since joining Biobest with a degree in microbiology, Kieran has worked in a range of roles before devoting the majority of his time to test development, as well as cell and tissue culture. Since gaining his masters degree, he has spent 15 years growing stem cells which have been used in the treatment of over 2500 competitive sports horses and companion animals.



Maggie Carson BSc - Farm Animal Manager

Maggie joined Biobest in 2014 as the bovine administrator for the HiHealth Herdcare team. She was promoted to Deputy Farm Animal Manager in 2016 and subsequently to Farm Animal Manager in 2019. A University of Edinburgh chemistry graduate, she spent a few summers working and travelling in America before taking on her role here at Biobest. Maggie is responsible for the day-to-day management of the bovine testing; writing reports and preparing accreditation and sales certificates. She also plays an active role in advising new and current members.



Karen Johnston BSc MBE - Deputy Cattle Health Scheme Manager

Karen joined the Biobest team in 2011 when HiHealth and Herdcare merged to form HiHealth Herdcare and has been working from the Orkney office based within Orkney Auction Mart since 2001. As well as being secretary of Orkney Livestock Association she is Deputy Cattle Health Scheme Manager of HiHealth Herdcare. Karen was awarded an MBE in 2011 for services to farming. Her main roles include scheme promotion, member support and livestock sales.



Rebecca Mearns, MA VetMB CertSHP MRCVS - Senior Veterinary Advisor

Rebecca joined Biobest as Senior Veterinary Advisor in January 2015 to offer advice and expertise across the board on ruminants (cattle, sheep and goats). Before starting her role at Biobest, Rebecca was a Veterinary Investigation Officer at Penrith Veterinary Investigation Centre and prior to that worked in a similar role at SAC Edinburgh, having started out in general veterinary practice. She is an RCVS Advanced Practitioner in Sheep Health and Production and current President of the Sheep Veterinary Society.



Kate Haig BVM&S, MRCVS - Senior Veterinary Advisor

Kate graduated from the University of Glasgow veterinary school in 1980. Her experience within the veterinary industry includes research, general practice and the State Veterinary Service. She has also worked as a freelance copy-editor and proofreader specialising in scientific, medical and veterinary textbooks. Kate joined Biobest in 2005 and provides veterinary support to Biobest customers, including current and prospective members of HiHealth Herdcare.



Sanne Dolieslager, DVM PhD MRCVS - ClinPath Advisor

Sanne joined Biobest Laboratories as a Veterinary Advisor in December 2014 and her main role is to work as part of the clinical pathology team. After graduating from Utrecht University, the Netherlands, in 2008 she continued her studies at the University of Glasgow and gained a PhD in veterinary microbiology and immunology. Prior to joining Biobest she worked in small animal veterinary practice and has taught undergraduates at the Royal (Dick) School of Veterinary Studies in Edinburgh.



Emily Anderson BVM&S M VetSci MRCVS - Veterinary Advisor

Emily joined the Biobest veterinary team at the start of 2021. Her role includes reporting and providing veterinary support to submitting vets and health scheme members. She graduated in 2006 from the Royal (Dick) Vet School and has subsequently worked in mixed practice in Aberdeenshire, the Scottish Borders and New South Wales, Australia. She has also undertaken voluntary veterinary work with charities in Thailand, Fiji and the Cook Islands. Most recently she returned to Edinburgh to complete a research Masters on bovine TB.



Claire Pearson BVetMed MRCVS - Veterinary Advisor

Claire joined the Biobest veterinary team at the start of 2021. She graduated from the Royal Veterinary College in 1999 and worked in mixed practice for a number of years before moving on to small animal practice. She has worked in charity and private sectors around the UK. Claire is excited to be a part of a team dedicated to improving the health and welfare of farm animals. Claire's roles at Biobest include reporting and providing veterinary support to submitting vets and health scheme members.



Heather Nicholls BVM&S BVSc CertAVP MRCVS - Veterinary Advisor

Heather graduated from the University of Edinburgh (Royal Dick) Vet School in 2012, completing an Honours degree in Infectious Diseases as part of her studies. After gaining a broad range of clinical experience in equine, small animal and farm animal practice in different regions of the UK, she decided to return to her interest in infectious diseases and joined the Biobest team in 2021. Heather provides reports and advice to vets and farmers including members of HiHealth Herdcare.



Victoria Enoch BVM&S CertAVP MRCVS - Veterinary Advisor

After graduating from Edinburgh in 2005, Vicky began her veterinary career in mixed practice before moving into small animal and gaining her certificate in advanced veterinary practice. She has worked in both private and charity sectors and was involved in undergraduate teaching at the Royal (Dick) School of Veterinary Studies for several years. Vicky joined Biobest in summer 2021 as a Junior Veterinary Advisor and her responsibilities include reporting results and providing advice to both vets and farmers.



Supplying specialist contract research and laboratory support services in infectious diseases, clinical pathology and cell culture.

Working with the major pharmaceutical companies and contract research organisations to complete both regulatory and non-regulatory research studies.

Additional activities include disinfectant testing and virological reagent sales. We are compliant with Good Laboratory Practice as inspected by the UK Department of Health's GLP Monitoring Authority.

We hold a GMP Test Site (Biologicals) certificate from the MHRA. This means that we are authorised to perform biological QC testing in accordance with Article 111(1) of directive 2001/83/EC.



Providing testing services for a wide range of species including cattle, sheep, goats, dogs, cats, horses, pigs, birds, poultry and fish, with a particular emphasis on virology, DNA testing and serology. As a specialist laboratory we have the skills to develop and use the best available assay technology.

Biobest gives you:

- The best available diagnostic test
- Expert interpretation on all test results
- Fast and efficient service
- The best prices



A leading CHECS accredited cattle health scheme provider. HiHealth Herdcare is a partnership with the farmer, their practice vet and the cattle team at Biobest. Together we can work within the guidelines of CHECS to:

- Eliminate BVD, Johne's, IBR, Lepto and Neospora from your herd and obtain accredited disease-free status
- Improve biosecurity on your farm and prevent reintroduction of the five diseases into your herd
- Help you identify accredited disease-free sources of breeding cattle



LABORATORY SERVICES
Providing a comprehensive service for all species covering haematology, biochemistry, cytology, histopathology, parasitology and bacteriology.

Biobest ClinPath is an independent, client-orientated quality service providing:

- Analytical accuracy, speed and reliability
- Access to a veterinarian to discuss cases
 - Result interpretation
- Provision of information rich, jargon free reports
- Flexibility to suit individual practice needs
 - Value for money



A flexible membership plan helping you to get the most out of lab diagnostics for your flock and flocks under your care. Members receive expert advice and discounted testing in the following areas to improve flock health and productivity:

- Parasitology
- Clinical chemistry including trace elements
- Infectious disease testing

Testing can be used to monitor flock status and to investigate common problems such as barren ewes, thin ewes, ill thrift in lambs and worm and fluke control.

The team at Biobest work with farmers and their own vet to provide guidance and advice.

Mailing Guidelines

Royal Mail should accept all samples for routine diagnostic testing. Royal Mail do not accept Category A infectious material, but this should not affect routine veterinary samples. General guidance is that samples (blood, tissue, excreta, secreta etc.) from humans or animal are considered to be Category B infectious substances. These samples are then assigned to UN3373 and must be packaged according to IATA PI:650 for transport. There is an added complication that for Category B samples each individual package must hold a total of less than 50ml of liquid or 50g of tissue.

Samples which are taken for routine screening from healthy animals are exempt from UN3373. Specimens for which there is minimal likelihood that pathogens are present are not subject to the regulations (meaning volumes over 50ml/50g can be sent) if the sample is sent in a manner which will prevent any leakage and which is marked with the words "Exempt animal specimen" or "Exempt human specimen" as appropriate.

What to avoid when sending samples

- Using excessive sellotape on outer packaging
- Sending haemolysed blood
- Using gloves or any other non-leak proof containers
- Writing multiple sample numbers on a single sample container
- Placing samples in non-sequential order in boxes containing multiple samples
- Using a container if sample content has seeped onto its exterior

Biochemistry profiles	Turnaround	Price (£)	Code
Small animal full profile (serum, fluoride, EDTA and freshly made blood smears) Routine haematology, albumin, ALT, AP, bilirubin, calcium, chloride, cholesterol, creatinine, globulin, glucose, phosphate, potassium, sodium, total protein, urea	1-2 days	55.00	PROF 006
Small animal full profile, biochemistry only (serum, fluoride)	1-2 days	46.00	PROF 035
Small animal kidney profile (serum, EDTA and blood smear) Routine haematology, albumin, calcium, chloride, creatinine, globulin, phosphate, potassium, protein (total) and urea	1-2 days	35.00	PROF 027
Small animal liver profile (serum) Protein (total), albumin, globulin, ALT, AP, GGT, bilirubin, cholesterol	1-2 days	28.00	PROF 026
Bile acids stimulation panel (serum x2) Pre-prandial and post-prandial	Up to 2 days	21.00	BILE_STIM
Canine or feline short malabsorption panel (serum) Folate and cobalamin	Up to 6 days	43.00	PROF 032
Electrolyte panel (serum) Chloride, potassium, sodium, Na:K ratio	1-2 days	17.50	PROF 051
Short FIP profile (serum) FCoV serology, AGP and albumin/globulin	Up to 3 days	44.00	FIP_PACK
Full FIP profile (wet) (serum) FCoV serology, AGP, albumin/globulin and cytology	1 day for fluid, 3 days completed	55.00	PROF 043
Full FIP profile (dry) (serum and EDTA) FCoV serology, AGP, albumin/globulin and haematology	1 day for fluid, 3 days completed	55.00	PROF 044

Routine biochemistry	Turnaround	Price (£)
Serum sample required Albumin, ALT, AP, AST, bilirubin, BHB, chloride, cholesterol, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, NEFA, phosphate, potassium, protein, sodium, total calcium, urea		
1-4 tests	Same to next day	8.20
5-9 tests	Same to next day	5.20
10 or more tests (or in addition to any profile)	Same to next day	4.20

Haematology	Turnaround	Price (£)	Code
Routine haematology (EDTA and freshly made blood smears)	1-2 days	28.00	PROF 001
Routine haematology including smear exam by a pathologist (EDTA and freshly made blood smears)	1-2 days	46.00	PROF 002
Blood smear report (EDTA and freshly made blood smears)	1-2 days	21.00	SMEAR_RPT
Smear examination for haematological parasites (EDTA and freshly made blood smears)	1-2 days	21.00	SMEAR_HAEM
Reticulocyte count (EDTA)	1-2 days	15.50	RETIC_CNT
Manual platelet count (EDTA)	1-2 days	19.00	PLATE_MAN
Coomb's test (EDTA)	Up to 2 days	32.00	COOMBS
Fibrinogen (citrate)	Up to 2 days	11.00	FIBRINOGEN
D-dimer (citrate)	Up to 2 days	25.00	D_DIMER
Coagulation profile (citrate) PT, APTT, fibrinogen	Up to 2 days	42.00	PROF 004

Special biochemistry	Turnaround	Price (£)	Code
Canine prostate specific arginine esterase (CPSE/BPH) (serum)	Up to 5 days	60.00	CPSE
C-Reactive protein (CRP) (serum)	Up to 3 days	20.00	CRP
Digoxin (serum, no gel tube)	Up to 3 days	47.00	DIGOXIN
Fructosamine (serum)	Up to 2 days	21.00	FRUCTOS
Phenobarbitone (serum, no gel tube)	Up to 2 days	30.00	PHENOBARB
PLI (canine or feline) (serum)	Up to 4 days	80.00	PLI
Amylase (serum)	Up to 2 days	9.50	AMYLASE
Bile acids (serum)	Up to 2 days	13.00	BILE_ACIDS
Lead (heparin)	Up to 4 days	26.00	LEAD_SA
Lipase (serum)	Up to 2 days	10.00	LIPASE
Zinc (serum)	Up to 4 days	15.00	ZINC
Potassium bromide (serum, no gel tube)	Up to 2 days	45.00	POTAS_BROM
Serum protein electrophoresis (SPE) (serum)	Up to 4 days	35.00	ELECTRO
TLI (canine) (serum)	Up to 6 days	45.00	TLI_CANINE
TLI (feline) (serum)	Up to 8 days	68.00	TLI_FELINE
Symmetric Dimethylarginine (SDMA) (serum)	Up to 4 days	35.00	SDMA

Faecal Tests	Turnaround	Price (£)	Code
Occult Blood (1g faeces)	Up to 2 days	24.00	OCCULT
Giardia (1g faeces)	1-2 days	22.00	GIARDIA
Salmonella (1g faeces)	Up to 5 days	22.00	SALMONELLA
Campylobacter (1g faeces)	Up to 5 days	23.00	CAMPYL
Worm egg count & coccidia (3g faeces)	1-2 days	15.50	WEC_SA
Faecal Bacterial culture & sensitivity (includes Salmonella, Campylobacter, aerobic) (1g faeces)	Up to 6 days	40.00	BACT_FAEC
Small animal faecal analysis profile (3g faeces) Routine bacteriology, worm eggs, Coccidia, Giardia	Up to 6 days	80.00	PROF 024

Urine	Turnaround	Price (£)	Code
Urinalysis (5ml urine) USG, dipstick and deposit exam	1-2 days	22.00	PROF 020
Full urinalysis (5ml plain urine and 1ml boric acid) USG, dipstick, deposit exam and bacterial culture & sensitivity	Up to 6 days	47.00	PROF 055
Urine cytology (5ml urine)	1-2 days	37.00	UR_CYT
Urine protein : creatinine ratio (1ml urine)	1-2 days	22.00	UR_PRO_CRT
Urine cortisol : creatinine ratio (1ml urine)	1-2 days	40.00	UR_COR_CRT
Urine qualitative calculi analysis	Variable	35.00	CALCULI

Microbiology	Turnaround	Price (£)	Code
Routine bacteriology and sensitivity (swab/tissue)	Up to 7 days	36.00	BACTERIAL
Anaerobic culture add on (swab/tissue) (contact us to discuss sampling methods)	Up to 6 days	41.00	BACT_ANAER
Faecal bacterial culture & sensitivity (1g faeces) Includes aerobic plates, Salmonella and Campylobacter	Up to 6 days	40.00	BACT_FAEC
Fungal culture (swab)	7 days	37.00	FUNGAL
Dermatophyte culture (hair pluck)	14 days	27.00	DERMATO

Histopathology & cytology	Turnaround	Price (£)	Code
Histopathology single site (tissues in formalin)	5 days	75.00	HE_STN
Histopathology additional site (tissues in formalin)	5 days	21.00	HE_STN_ADD
Gram stain (air dried smears)	1-2 days	21.00	GRAM_STAIN
ZN stain (air dried smears)	1-2 days	21.00	ZN_STAIN
Cytology single site (up to 4 smears from the same location)	1-2 days	41.00	CYT_SMEAR
Cytology additional site	1-2 days	25.00	CYT_ADD
Full fluid analysis: (fluid in EDTA & plain tubes, air dried smears) Cytology, total protein, total cell count	1-2 days	52.00	PROF 013

Endocrine	Turnaround	Price (£)	Code
Cortisol (serum)	Up to 2 days	33.00	CORT_PRE
ACTH stimulation test (serum x2) Cortisol: pre and 1 hour post ACTH	Up to 2 days	44.00	ACTH_STIM
Low Dose Dexamethasone suppression test (serum x3) Cortisol: pre, 3 and 8 hr post dexamethason	Up to 2 days	50.00	LDDST
Total T4 (serum)	Up to 4 days	24.00	T4_TOTAL
Free T4 (serum)	Up to 6 days	60.00	FREE_T4
TSH (serum)	Up to 4 days	36.00	TSH
Total T4/TSH (serum)	Up to 4 days	48.00	T4_TSH
Anti-Mullerian Hormone (serum)	Up to 7 days	95.00	AMH_CN
Progesterone (serum)	Up to 4 days	37.00	PROGESTER

Skin	Turnaround	Price (£)	Code
Skin scrape for ectoparasites (scrape and hair pluck)	1-2 days	22.00	SKIN_SCRAP
Direct microscopy for bacteria and fungi (hair pluck, smear, skin scrape, tape strip)	1-2 days	21.00	MICRO_EXAM
Skin analysis panel (smear, hair pluck, swabs) Direct microscopy, bacteriology, dermatophyte culture	14 days	50.00	PROF 045

Feline Diagnostics	Turnaround	Price (£)	Code
Serology			
Rabies serology Minimum 2mL blood, 1mL serum. Includes certificate and titre in IU/ml	Up to 7 days	66.00	RABIES
Computer rabies certificate (requested prior to testing)	1-2 days	11.00	CGR_CERT
Rabies certificate re-issue	1-2 days	27.50	RAB_CERT
Rabies express	Up to 3 days	550.00	RABEX
Feline coronavirus IFA	1-2 days	26.25	FCOS
AGP	Up to 7 days	18.00	AGP
Short FIP profile: FCoV serology, AGP and albumin/globulin	Up to 7 days	44.00	FIP_PACK
Full FIP profile (wet): FCoV serology, AGP, albumin/globulin and cytology	Up to 7 days	55.00	PROF 043
Full FIP profile (dry): FCoV serology, AGP, albumin/globulin and haematology	Up to 7 days	55.00	PROF 044
Feline immunodeficiency virus IFA (serum or clotted blood)	1-2 days	35.00	FIVS
Toxoplasma gondii IgG and IgM IFA (serum or clotted blood)	Up to 2 days	39.00	F_TOXO_GM
Neospora IFA (serum or clotted blood)	Up to 4 days	39.00	F_NEOS
Panleukopaenia virus IIFT (serum or clotted blood)	Up to 7 days	36.50	FPS
Calicivirus VNT (serum or clotted blood)	Up to 7 days	52.50	FCAV
Herpesvirus VNT (serum or clotted blood)	Up to 7 days	52.50	FHVS
Feline TB interferon gamma test (2ml Heparinised blood)	Call for advice	234.50	FTBIG
Pathogen detection			
FeLV antigen (air-dried smear or EDTA blood)	Up to 7 days	34.00	FELV
Respiratory virus isolation FHV/Calicivirus (swab in transport medium)	Up to 10 days	25.00	F_VIRUS_IS
Pox virus isolation (swab in transport medium or from scab)	Up to 10 days	25.00	F_POX_VI
Triple respiratory profile - respiratory VI + FHV & Chlamydia PCR (2 swabs in transport medium)	Up to 10 days	60.00	F_RESP
Chlamydia PCR (ocular or nasal swab)	Up to 7 days	32.50	PCRFC
Herpesvirus PCR (ocular or nasal swab)	Up to 7 days	32.50	PCRFH
Chlamydia & Herpesvirus PCR (ocular or nasal swab)	Up to 7 days	50.00	PCR_FH_FC
Panleukopenia PCR (faeces or tissue)	Up to 7 days	47.50	FPV_PCR

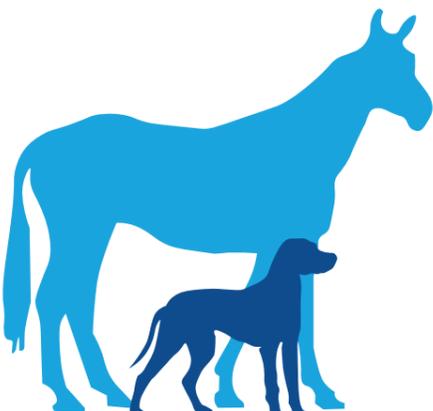


Dogs

Dogs	Turnaround	Price (£)	Code
Serology			
Rabies serology Min. 2mL blood, 1mL serum. Incl certificate & titre in IU/ml	Up to 7 days	66.00	RABIES
Computer rabies certificate (requested prior to testing)	Same to next day	11.00	CGR_CERT
Rabies certificate re-issue	Same or next day	27.50	RAB_CERT
Rabies express	Up to 3 days	550.00	RABEX
Pre-booster immunity check (serum or clotted blood) Titres to Distemper Virus, Adenovirus and Parvovirus	Up to 7 days	57.50	DAPS
Canine TB interferon gamma test (2ml heparinised blood)	<i>Call for advice</i>	234.50	FTBIG
Distemper virus VNT (serum or clotted blood)	Up to 7 days	24.00	CDS
Adenovirus VNT (serum or clotted blood)	Up to 7 days	24.00	CAS
Parvovirus HAI (serum or clotted blood)	Up to 7 days	24.00	CPS
Toxoplasma gondii IgG & IgM IFA (serum or clotted blood)	Up to 2 days	39.00	C_TOXO_GM
Neospora caninum IFA (serum or clotted blood)	Up to 4 days	39.00	CNEOS
Parainfluenza VNT (serum or clotted blood)	Up to 10 days	68.00	CPIF
Herpesvirus VNT (serum or clotted blood)	Up to 7 days	68.00	CHVS
Leptospirosis IFA (detects antibodies to all pathogenic serovars but not vaccination)	Up to 7 days	68.00	CLEPTO
CPSE - prostate hyperplasia (detects canine prostate specific arginine esterase)	Up to 7 days	60.00	CPSE
Pathogen Detection			
Virus Isolation (adenovirus/ herpesvirus/ parainfluenza)	Up to 14 days	25.00	C_VIRUS_IS
Leptospirosis PCR (tissue, EDTA blood or urine)	Up to 7 days	57.75	CLEPTO_PCR
Parvovirus PCR (faeces or tissue)	Up to 7 days	47.50	CPV_PCR
Distemper PCR (CSF, EDTA blood, swab or urine)	Up to 7 days	57.75	CDPCR

Stem Cell Therapy

Stem cell	Price (£)	Code
Equine bone marrow aspiration kit (including transport box)	126.00	
Canine adipose tissue kit (including transport box)	52.50	
Transport box only	25.50	
Equine stem cell culture (up to 40 million cells from bone marrow aspirate)	1075.00	STEM_CELLS
Canine stem cell culture (20 million cells from adipose tissue, includes cryopreservation of cells)	625.00	STEM_CN
Canine stromal vascular fraction (SVF) 48 hour service (includes cryopreservation of cells)	410.00	
Cryopreservation of equine stem cells (up to 5 yrs)	210.00	
Resuscitation of cryopreserved cells (10 million)	210.00	



Horses

Horses	Turnaround	Price (£)	Code
Equine viral arteritis screen (positive/negative)	Up to 5 days	19.00	EVAS
Equine virus arteritis titration following positive screen	Up to 5 days after positive screen	18.00	TL_EQ_VNT
Equine virus arteritis titration (e.g. of ELISA positive samples)	Up to 5 days	32.00	EVA_TITR
Equine infectious anaemia serology (Coggins test)	Up to 2 days	19.00	EIA
Combined viral arteritis & infectious anaemia serology test	Up to 5 days	38.00	EQU_2TEST
Rotavirus diagnostics (please phone for advice)	On demand	POA	

Birds

Birds	Turnaround	Price (£)	Code
Avian chlamydia PCR (faeces, cloacal swab or tissue)	Up to 4 days	35.00	PCRAC
Psittacine beak and feather disease PCR (feather, heparinised blood, tissue)	Up to 4 days	35.00	PCRPBFD
Polyomavirus PCR (feather, heparinised blood, faeces, cloacal swab or tissue)	Up to 4 days	41.00	PCRAP
Avian sexing PCR (egg membranes, mouth swabs, feather, heparinised blood, tissue)	Up to 6 days	35.00	PCRAS

Lyme Disease

Ticks	Turnaround	Price (£)	Code
Lyme Disease PCR (single tick)	Up to 5 days	45.00	

Ruminant

Biochemistry profiles & haematology	Turnaround	Price (£)	Code
Large animal full profile (serum, fluoride, EDTA and freshly made blood smears) Routine haematology, albumin, AST, bilirubin, calcium, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, phosphate, total protein, urea	Up to 2 days	47.00	PROF 012
Large animal full profile, biochemistry only (serum, fluoride)	Up to 2 days	37.00	PROF 036
Large animal liver profile (serum) Albumin, AST, bilirubin, GGT, GLDH, globulin, total protein	Up to 2 days	28.00	PROF 025
Ruminant metabolic profile (serum and fluoride) Albumin, BHB, calcium, globulin, glucose, magnesium, NEFA, phosphate, total protein, urea	Up to 2 days	29.00 26.00 (5+)	PROF 009 PROF 037
Downer cow profile (serum) AST, calcium, CK, magnesium, phosphate, urea	Up to 2 days	25.00	PROF 054
Bovine trace element profile (serum and heparin) Copper, selenium (GSH-Px)	Up to 5 days	17.00 12.00 (5+)	PROF 008 PROF 039
Ovine trace element profile (serum and heparin) Copper, selenium (GSH-Px), Vitamin B12	Up to 5 days	23.00 19.00 (5+)	PROF 049 PROF 050
Periparturient recumbent ewe profile (serum) BHB, calcium, magnesium	Up to 2 days	14.00	PROF 047
Pre lambing profile (serum) Albumin, BHB, urea	Up to 2 days	14.00 7.50 (5+)	PROF 046 PROF 052
Camelid profile (serum, fluoride, EDTA and freshly made blood smears) Large animal full profile plus smear exam for parasites	Up to 3 days	57.00	PROF 057
Routine haematology (EDTA and freshly made blood smears)	1-2 days	28.00	PROF 001
Haemoglobin or PCV (EDTA)	1-2 days	14.00	HB/HCT
Smear examination for haematological parasites (EDTA and freshly made blood smears)	Same to next day	21.00	SMEAR_HAEM

Routine biochemistry	Turnaround	Price (£)
Serum sample required Albumin, ALT, AP, AST, BHB, bilirubin, chloride, cholesterol, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, NEFA, phosphate, potassium, protein, sodium, total calcium, urea		
1-4 tests	1-2 days	8.20
5-9 tests	1-2 days	5.20
10 or more tests (or in addition to any profile)	1-2 days	4.20

Histopathology & cytology	Turnaround	Price (£)	Code
Histopathology up to 3 tissues	Up to 7 days	72.00	HE_LA
Histopathology additional tissue	Up to 7 days	16.50	HE_LA_ADD
Histopathology on post-mortem tissue up to 3 tissues	Up to 7 days	82.00	HE_PM
Cytology single site (up to 4 slides from one site)	1-2 days	41.00	CYT_SMEAR
Cytology additional site	1-2 days	25.00	CYT_ADD
Large animal vasectomy check	Up to 7 days	57.00	VASECTOMY

Ruminant

Special biochemistry	Turnaround	Price (£)	Code
Copper (serum)	Up to 2 days	9.00 7.00 (5+)	COPPER COPPER_4
Copper (5g fresh tissue)	Up to 7 days	41.00	COPPER_LVR
Fibrinogen (citrate blood)	Up to 2 days	12.00	FIBRINOGEN
Haptoglobin (serum)	Up to 5 days	20.00	HAPTO GLOBIN
Iodine - pooled up to 6 samples (serum, heparin)	Up to 1 month	25.00	PII
Iron (total iron binding capacity, % saturation) (serum)	Up to 5 days	29.00	IRON_BIND
Lead (heparin) Bovine & Ovine only	Up to 5 days	24.00	LEAD
Lead (5g fresh tissue)	Up to 7 days	41.00	LEAD_LVR
Manganese (heparin)	Up to 4 days	25.00	MN
Pepsinogen (serum)	Up to 7 days	18.00	PEPSINOGEN
Selenium (GSH-Px) (heparin)	Up to 5 days	9.00 7.00 (5+)	GSH_PX GSH_PX_4
Selenium (5g fresh tissue)	Up to 7 days	41.00	SELEN_LVR
Selenium (serum)	Up to 7 days	30.00	SELEN_SER
Thyroxin (T4) (serum)	Up to 4 days	12.50	T4_BOVINE
Vitamin A (serum)	Up to 7 days	25.00	VIT_A
Vitamin B12 (serum)	Up to 4 days	12.00 10.00 (5+)	VIT_B12 VIT_B12_4
Vitamin B12 (5g fresh tissue)	Up to 7 days	41.00	COBALT_LVR
Vitamin E (serum)	Up to 7 days	25.00	VIT_E
Vitamin A & E (5g fresh tissue)	Up to 7 days	55.00	VIT_E_LVR
Zinc (sodium heparin or serum)	Up to 5 days	15.00 9.00 (5+)	ZINC
Zinc sulphate turbidity test (serum)	Up to 6 days	10.50 5.50 (5+)	ZST ZST_4

Microbiology	Turnaround	Price (£)	Code
Routine bacteriology (swab, tissue, milk)	Up to 7 days	36.00 25.00 (5+)	BACTERIAL
Milk bacterial culture only	Up to 7 days	19.00 15.00 (5+)	BACT_MILK BACT_CULT
Bacterial culture and sensitivity (including Salmonella)	Up to 7 days	40.00	BACT_FAEC
Routine anaerobic culture	Up to 7 days	41.00	BACT_ANAER
E. coli K99 (1g faeces)	Up to 2 days	26.00	K99
Yersinia culture (1g faeces)	Up to 7 days	25.00	YERSINIA
Clostridial toxins (5 ml small intestinal contents in sterile universal)	Up to 8 days	35.00	CLOSTRID

Ruminant

Faecal Tests	Turnaround	Price (£)	Code
Worm egg count & Coccidia (3g faeces) Bovine, Ovine, Caprine	1 to 2 days	15.00 13.00 (5+)	WORM_EGG WORM_4PLUS
Worm egg count & Coccidia (3g faeces) Camelid	Up to 5 days	30	WORM_CAM
Fluke detection (10g faeces)	1 to 2 days	19.00	FLUKE_EGG
Coccidia count (3g faeces)	1 to 2 days	12.00	WORM_COCCI
Worm egg count, no Coccidia (3g faeces)	1 to 2 days	12.00	WORM_ONLY
Pooling charge for up to 10 samples	n/a	15.00	CHRG_WORM
Worm egg count & Coccidia (add on to young ruminant profile)	1 to 2 days	12.00	WORM_ADD
Coccidial speciation - ovine (3g faeces)	Up to 7 days	46.00	COCCI_SPEC
Haemonchus stain (3g faeces)	Up to 7 days	46.00	HCHUS_DIFF
Lungworm larvae (10g faeces)	Up to 3 days	19.50	LUNG_LARV
Faecal Giardia (immunological) (1g faeces)	Up to 2 days	22.00	GIARDIA
Cryptosporidium (1g faeces)	1 to 2 days	22.00	CRYPTO
Salmonella (1g faeces)	Up to 5 days	22.00	SALMONELLA
Rotavirus PAGE (1g faeces)	Up to 6 days	25.00	
Coronavirus (1g faeces)	Up to 6 days	20.00	B_CVV
Rotavirus ELISA (1g faeces)	Up to 7 days	20.00	RVV
Neonatal cattle enteritis profile (<5 days old) (5g faeces) Bacteriology including Salmonella, Rotavirus, Coronavirus, Cryptosporidium, E.coli K99	Up to 7 days	47.00	PROF 030
Neonatal small ruminant enteritis profile (<5 days old) (5g faeces) Bacteriology including Salmonella, Rotavirus, Cryptosporidium	Up to 12 days	55.00	
Young cattle enteritis profile (6-21 days old) (5g faeces) Salmonella, Rotavirus, Coronavirus, Cryptosporidium	Up to 7 days	44.00	PROF 029
Young small ruminant enteritis profile (6-21 days old) (5g faeces) Salmonella, Rotavirus, Coronavirus, Cryptosporidium	Up to 12 days	52.00	
Growing cattle enteritis profile (>22 days old) (5g faeces) Salmonella, worm egg count, coccidia count	Up to 7 days	30.00	PROF 053
Adult ruminant scour profile (>20g faeces) Johne's PCR, Fluke coproantigen ELISA, Salmonella	Up to 7 days	55.00	PROF 056

Endocrine	Turnaround	Price (£)	Code
T4 Bovine (serum)	Up to 4 days	12.10 11.50 (5+)	T4_BOVINE
Progesterone (serum)	Up to 2 days	35.00	PROGESTER

Pigs

We offer a range of porcine serology tests for contract customers including PRRS serology and PCR, and serology for M. Hyopneumonia and Swine Influenza.

Sheep

Sheep	Turnaround	Price (£)	Code
Serology			
MV/CAE	Up to 7 days	9.40	MV_CAE
CLA ELISA	Up to 15 days	10.00	CLA
EAE ELISA	Up to 10 days	10.50	EAE
Toxo ELISA	Up to 7 days	10.50	OV_TOXO
Johne's disease ELISA	Up to 3 days	5.40	JOHNES
Sheep Scab ELISA	Up to 7 days	11.00 9.40 (2-11) 7.00 (12+)	SCAB_OVINE SCAB_OV_11 SCAB_OV_12
Liver fluke antibody	Up to 7 days	8.35	B_FLUKE
Border disease ELISA	Up to 7 days	10.00 9.00 (10+)	BDV
Teladorsagia circumcincta IgA ELISA (serum)	On demand	POA	
Pathogen Detection			
Fluke coproantigen ELISA Pool of up to 10 samples	Up to 7 days	12.50 20.00	F_COPRO_OV F_COPRO_PL
Border disease PCR Pool of up to 10 samples	Up to 10 days	26.00 37.50	BDV_PCR
Johne's PCR (faecal sample) Pool of up to 5 samples	Up to 7 days	34.00 41.00	JOHNES_PCR JOH_PCR_PF

Sheep Health Scheme

HiHealth Flockcare membership options	Price (£)
Annual membership	32.00
HiHealth Flockcare & Herdcare full membership	105.00
HHF Profiles and Disease Testing	
Pre-lambing nutritional profile (BHB, urea, albumin)	Turnaround: Same to next day Price (£): 14.00 7.50 (5+) Code: PROF 046 PROF 052
Periparturient recumbent ewe profile (serum) BHB, Ca, Mg	Turnaround: Same to next day Price (£): 14.00 Code: PROF 047
Trace element profile (samples from 6 animals - copper, cobalt, selenium)	Turnaround: Up to 5 days Price (£): 105.00
Trace element profile (plus fluke serology x 6)	Turnaround: Up to 7 days Price (£): 150.00
Trace element profile (plus fluke serology and pooled WEC)	Turnaround: Up to 7 days Price (£): 165.00
Trace element profile (samples from 6 animals - copper, cobalt, selenium (GSH-Px), (T4 for 4 samples))	Turnaround: Up to 5 day Price (£): 145.00
Thin ewe package (MV, CLA ELISA x 12, Johne's PCR pooled faecal x 2)	Turnaround: Up to 15 days Price (£): 260.00
Pre-purchase/quarantined sheep package (Scab, MV & CLA ELISA, BDV PCR, Johne's PCR)	Turnaround: Up to 15 days Price (£): 78.00
MV/CAE	Turnaround: Up to 7 days Price (£): 8.50 6.30 (50+) Code: MV_CAE
CLA	Turnaround: Up to 15 days Price (£): 9.00 8.00 (50+) Code: CLA
EAE	Turnaround: Up to 10 days Price (£): 10.00 Code: EAE
Toxo	Turnaround: Up to 7 days Price (£): 9.50 Code: OV_TOXO
Johne's disease Ab ELISA	Turnaround: Up to 3 days Price (£): 4.40 Code: JOHNES
Johne's disease PCR (faeces) Pool of up to 5 samples	Turnaround: Up to 7 days Price (£): 32.00 40.00 Code: JOHNES_PCR JOH_PCR_PF
Border disease virus Ab ELISA	Turnaround: Up to 7 days Price (£): 9.50 8.50 (10+) Code: BDV
Border disease virus PCR Pool of up to 10 samples Individual as follow up for a positive pool	Turnaround: Up to 10 days Price (£): 25.00 35.00 21.00 Code: BDV_PCR

Cattle	Turnaround	Price (£)	Code
Antibody assays (Most tests can be done on serum, milk or bulk milk. Please call for details)			
BVD ELISA Serum	Up to 3 days	4.30	BVDS
Bulk Milk		5.00	
Johne's ELISA Serum	Up to 3 days	5.40	JOHNES
Bulk Milk		4.85 (50+) 5.60	JOHNES_50
<i>Leptospira hardjo</i> ELISA Serum or Milk	Up to 4 days	6.25	LEPTOS
IBR ELISA Serum	Up to 3 days	5.95	IBRS
Bulk Milk			
IBR gE marker ELISA Serum	Up to 7 days	8.70	IBR_GE_SRM
Bulk milk		17.20	IBR_GE_MLK
<i>Neospora caninum</i> ELISA Serum	Up to 7 days	8.30	NEO_ELISA
Bulk Milk		7.25 (40+) 10.00	NEO_40
<i>Fasciola hepatica</i> (Liver Fluke) ELISA Serum and Milk	Up to 7 days	8.35	B_FLUKE
Salmonella ELISA Serum	Up to 15 days	13.50	SALM_ELISA
RSV ELISA Serum	Up to 7 days	7.35	RSVS
PI3 ELISA Serum	Up to 7 days	7.35	PI3S
<i>Mycoplasma bovis</i> ELISA Serum	Up to 7 days	8.30	M_BOVIS
Total IgG Serum	Up to 7 days	34.50	TOTAL_IGG
Milk		39.50	
Rotavirus serology (colostrum or milk only)	Up to 10 days	90.00	RVS
Coronavirus serology (colostrum or milk only)	Up to 10 days	90.00	B_CSV
Rotavirus/coronavirus combined (colostrum or milk only)	Up to 10 days	140.00	RVS_CSV
<i>Ostertagia ostertagi</i> ELISA (recommended bulk milk only)	Up to 7 days	17.00	OSTERTAG
IBR or BVD VNT (minimum of 5 samples) Serum	On demand	POA	
Antigen detection			
BVD antigen (serum/ear tissue)	Up to 4 days	6.60	BVDV
Fluke coproantigen ELISA (faeces)	Up to 7 days	12.50	F_COPRO_BV
PCR			
Johne's (faecal sample)	Up to 7 days	35.00	JOHNES_PCR
Johne's pool (5 faecal samples or tissue on request)	Up to 7 days	43.00	JOH_PCR_PF
BVD (individual serum)	Up to 4 days	26.00	BVD_PCR
BVD (pooled serum up to 10 samples)	Up to 5 days	37.50	BVD_PCR003
BVD (ear tissue tag and test)	Up to 5 days	6.10	
BVD (ear tissue test only)	Up to 5 days	4.90	BVD_PCR004
BVD (bulk milk)	Up to 5 days	33.00	BVD_PCR_BM
Bactoproof™ mastitis PCR test (preserved milk) Detects 16 pathogens, see website for further details	Up to 4 days	55.00	MAST-16
Respiratory PCR* (swab)	Up to 7 days	65.00	RESP_PCR
Respiratory PCR* (BAL or tissue)	Up to 7 days	80.00	RESP_BAL
Respiratory PCR* (pool of up to 5 samples - must be same sample type) <small>*Includes BoHV-1 (causative agent of IBR), PI3, RSV, Bovine coronavirus, Mycoplasma bovis, Histophilus somni, Pasteurella multocida, Mannheimia haemolytica</small>	Up to 7 days	86.00	RESP_POOL
Fee for posted copies of report	n/a	2.00	
BVDFree antibody test upload	n/a	0.50	
BVDFree antigen test upload	n/a	0.25	

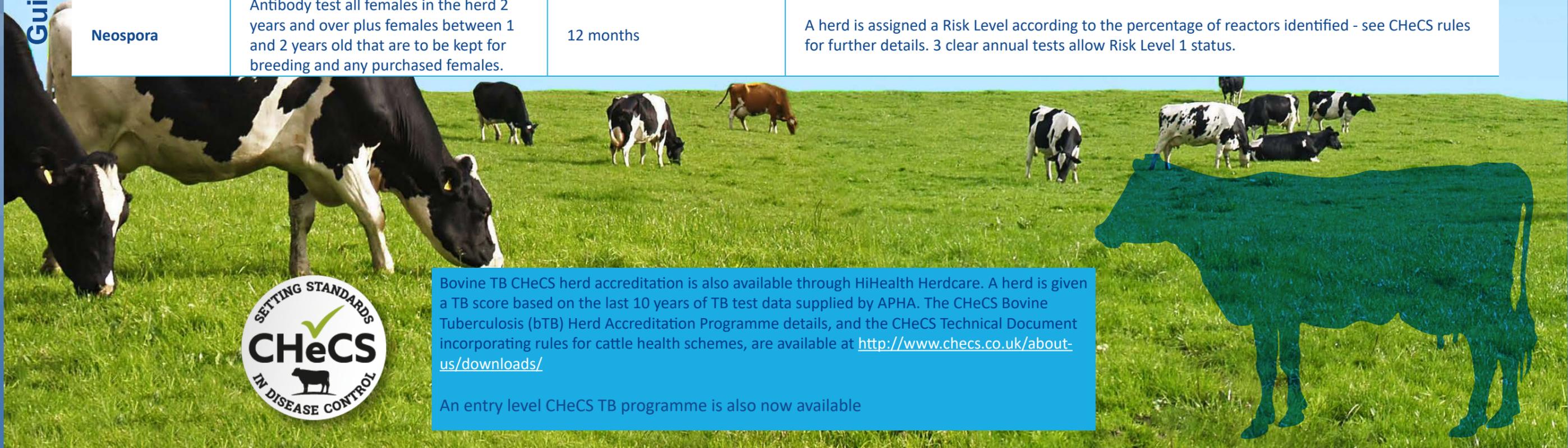
Cattle Health Scheme

HiHealth Herdcare membership options	Price (£)
CHeCS herd health programmes for BVD, leptospirosis, IBR, Johne's, Neospora and bTB	
Full Membership Testing and accreditation for up to 5 diseases: BVD, IBR, Johne's disease, leptospirosis, neospora	79.00*
BVD accreditation only BVD testing and control	32.00*
bTB accreditation (includes Entry Level) only	40.00
bTB accreditation (includes Entry Level) add on to BVD or full membership	26.50
TB Entry Level only	25.00
TB Entry Level add on to BVD only or full membership	15.00
HiHealth Flockcare add on to any HiHealth Herdcare membership	26.00
Bulk milk monitoring programme (3 bulk milk samples per annum including testing, milk pots and veterinary reporting) BVD, IBR & leptospirosis CHeCS programme & Johne's, Neospora, liver fluke and Ostertagia	125.00*
Use of results from an external lab towards herd status BVD	25.00
Use of results from an external lab towards herd status Johne's disease, IBR, Leptopirois, Neospora	45.00
*A £10 surcharge will be applied to all members who wish to accept results and invoices by mail instead of email or fax.	

Disease Testing	Turnaround	Price (£)	Code
CHeCS Testing			
Antibody assays (serum or individual milk)			
BVD ELISA	Up to 3 days	3.70	BVDS
Johne's ELISA	Up to 3 days	4.40	JOHNES
<i>Leptospira hardjo</i> ELISA	Up to 4 days	5.30	LEPTOS
IBR ELISA	Up to 3 days	4.25	IBRS
IBR gE marker ELISA	Up to 7 days	7.50	IBR_GE_SRM
<i>Neospora caninum</i> ELISA	Up to 7 days	6.70	NEO_ELISA
Virus detection			
BVD antigen ELISA (serum)	Up to 4 days	6.10	BVDV
PCR			
Johne's (individual faecal sample)	Up to 7 days	32.00	JOHNES_PCR
Johne's (pooled faecal up to 5 samples)	Up to 7 days	40.00	JOH_PCR_PF
BVD (pooled serum up to 10 samples)	Up to 5 days	35.00	BVD_PCR003
BVD (ear tissue tag and test)	Up to 5 days	5.80	
BVD (ear tissue test only)	Up to 5 days	4.50	BVD_PCR004
Pliers for BVD Ear tissue testing	n/a	20.00	
Individual animal sales certificate (Declaration required please contact office)	n/a		
Members		10.00	
Non members		15.00	
BVD Free antibody upload (per sample)	n/a	0.50	
BVD Free antigen test upload (per sample)	n/a	0.25	

Metabolic profile and trace element testing is also available. Please contact the cattle health team for further advice or information packs.

Disease	Testing requirement	Time interval between tests	Accreditation requirement	Maintaining accreditation
BVD	Antibody check test on 5 animals from each management group of animals 9–18 months for antibody. Consult CHeCS rules for definition of separate groups. Or Test all calves born over a 12-month period for virus. In addition bulk milk antibody testing in dairy herds not vaccinating against BVD.	12-month interval between antibody check tests. Calf virus testing ongoing throughout year. Quarterly bulk milk tests. If main bulk tank antibody positive test sample from 1st lactation heifers only – see CHeCS rules.	2 clear tests, 1 on each of 2 subsequent calf crops. Or 2 clear calf crops. Every calf born must be tested. Negative herd or 1st lactation bulk tests.	Annual young stock check test Or Continuing negative virus screens of every calf born. In addition bulk milk testing can be used to monitor dairy herds (not compulsory).
IBR	Antibody test all animals 12 months and over plus all younger non-homebred animals.	1-12 months	2 clear tests	Antibody testing on a statistical sample of animals 12 months and older – see CHeCS rules for further details. Breeding bulls, and for IBR all non-homebred and marker vaccinated animals must additionally be tested. In dairy herds milking animals are not included in the sample but are monitored through quarterly bulk milk tests.
Leptospirosis	Antibody test all animals in the herd 2 years and over plus animals between 1 and 2 years old that are to be kept for breeding.	6-12 months	2 clear tests	
Johne's disease	Antibody test all animals in the herd 2 years and over.	12 months	A herd is assigned a Risk Level according to the percentage of reactors identified - see CHeCS rules for further details. 3 clear annual tests allow Risk Level 1 status. Biennial testing for herds that have been Risk Level 1 for over 2 years may be possible.	
Neospora	Antibody test all females in the herd 2 years and over plus females between 1 and 2 years old that are to be kept for breeding and any purchased females.	12 months	A herd is assigned a Risk Level according to the percentage of reactors identified - see CHeCS rules for further details. 3 clear annual tests allow Risk Level 1 status.	



Bovine TB CHeCS herd accreditation is also available through HiHealth Herdcare. A herd is given a TB score based on the last 10 years of TB test data supplied by APHA. The CHeCS Bovine Tuberculosis (bTB) Herd Accreditation Programme details, and the CHeCS Technical Document incorporating rules for cattle health schemes, are available at <http://www.checs.co.uk/about-us/downloads/>

An entry level CHeCS TB programme is also now available

Sample Requirements

Blood & Tissue

Test	Sample Required
All Antibody testing BVD Antigen ELISA BVD / BDV PCR Biochemistry, including minerals, vitamins & trace elements (unless otherwise stated, see GSH-Px, others below)	Clotted blood/serum tube/red-topped samples - Lithium heparin cannot be used for BVD PCR testing - Tissue samples can also be used for BVD Ag ELISA/PCR testing
GSH-Px	Lithium heparin tube, whole blood
Blood lead	Lithium heparin tube, whole blood
MCF PCR	EDTA or lithium heparin (a red-top is not suitable for this test)
Blood glucose	Fluoride oxalate tube; separated plasma or serum
Blood zinc	Serum (no metal, rubber stopper/caps or gel tubes. Most modern red-top tubes are acceptable)
Inorganic iodine	Serum (individual or pool up to 6 samples)
Haematology	EDTA tube and air dried smears (a freshly made smear improves the lab's ability to provide meaningful differential counts and blood smear reports) Lithium heparin is a good backup for large animal haematology
Tissue analysis (e.g. liver copper, selenium, other elements)	> 5 g fresh (not fixed) tissue. Freezing acceptable if mailing is delayed from time of sampling. Please note on submission if sample frozen.
Histopathology	10% buffered formalin (at least 10x the tissue volume)
Ectoparasites	Wool/hair plucks, skin scrapes in sterile screw-capped container

Milk

Test	Sample Required
Mastitis PCR	Bronopol preservative advised
Mastitis Culture	Unpreserved sample ONLY
Antibody testing/BVD virus testing	Bronopol preservative advised

Faecal

Please submit faeces samples in a leak-proof container such as a pot with a screw on lid, NOT a glove.

Test	Sample Required
Johne's PCR	>20g faeces (one full universal)
Worm Egg/ Coccidial Oocyst Count (WEC)	3g faeces (a heaped teaspoon)
Lungworm detection	10g faeces (a heaped dessertspoon)
Fluke detection	10g faeces (40g for 'liquid' samples)
WEC, Fluke and Lungworm detection	>20g faeces (one full universal)
Fluke Coproantigen ELISA	5g faeces for bovine 2g faeces for ovine/caprine/camelid
Clostridial toxins	2 ml small intestinal contents in universal (freezing acceptable if mailing delayed)

Ruminant Enteritis

Please state the age of the animal on the form when submitting faeces for enteritis packages – what is tested varies depending on whether the animals is 1-5 days, 6-21 days or over 21 days.

Test	Sample Required
Neonatal Ruminant enteritis profile (1-5 days) - Routine aerobic bacteriology (including Salmonella), Rotavirus, Coronavirus, Cryptosporidium, K99	5g faeces
Young ruminant enteritis profile (6-21 days) - Salmonella, Rotavirus, Coronavirus, Cryptosporidium	5g faeces
Growing cattle enteritis profile (>22 days) - Salmonella, worm egg and coccidial oocysts5g	5g faeces
Adult ruminant scour package - Johne's PCR, Fluke Coproantigen, Salmonella culture	>20g faeces

Respiratory swabs for PCR

Samples types:

- Plain dry nasopharyngeal swabs (gel/agar swabs **cannot** be tested)
- Tissue (not fixed)
- BAL fluid (>5ml)

- Up to 5 samples of the same type can be pooled.
- Samples should be received at the lab within 24 hours of collection; chilled transport preferred.
- If samples are collected on a Friday they should be frozen at the practice over the weekend and sent to us on Monday with freezer packs to ensure they remain frozen. Do not send samples over the weekend as they will not be able to be stored correctly once they arrive.
- Due to the multiple PCRs required, there is a test limit of a maximum 10 samples at a time therefore advance notice of multiple samples being sent will help us provide the best possible service.

DISCLAIMER - All standard testing days subject to change without prior notice. Turnaround times may increase as a result of problems with tests or samples.

Feline Testing Days

Test	Test set up	Results Available	Notes
VNT - Antibody Test Calicivirus (FCaV) Herpesvirus (FHV)	Friday	Following Monday	
IIFT/IFA - Antibody Test Panleukopaenia (Parvo or FPV)	Tuesday	Tuesday (PM)	
IIFT/IFA - Antibody Test Toxoplasma IgG & IgM	Daily Monday-Friday	Same day if negative, following day if suspected positives.	
IIFT/IFA - Antibody Test Neospora	Tuesday, Thursday	Same day if negative, following day if suspected positives.	
IIFT/IFA - Antibody Test Coronavirus	Monday, Wednesday, Friday	Same day	
IIFT/IFA - Antibody Test FIV	Monday, Wednesday, Friday	Same day	
IIFT/IFA - Antigen Test Feline Leukaemia Virus (FeLV)	Tuesday	Tuesday (PM)	Heparin Blood preferred but EDTA can be used
Feline TB	1st & 3rd Thursday of each month	Following Monday	Heparin must be used Blood must NOT be chilled
Virus Detection - Virus Isolation Calicivirus (FCaV) Herpesvirus (FHV)	Monday Friday	Test read Thur in the first instance Test read Mon in the first instance	VTM swabs preferred but can use dry if required
Virus Detection - PCR Panleukopaenia Virus (Parvo/FPV)	Wednesday	Wednesday (PM)	
Virus Detection - PCR Feline Chlamydia/Herpesvirus (FHV)	Wednesday	Wednesday (PM)	Dry swabs preferred but can use VTM if required
Virus Detection - Virus Isolation Feline Pox Virus	Thursday	Read on following Monday then re-read until ready	
Rabies FAVN	Monday, Wednesday, Friday	Wednesday (PM), Friday (PM) & Monday (PM)	Samples prepared on day of arrival (except Saturday)

Equine Testing Days

Test	Test set up	Results Available	Notes
VNT - Antibody Test Equine Viral Arteritis (EVA)	Monday, Wednesday, Friday	Wednesday, Friday, Monday	Additional test days in busy period (Jan - Mar)
ELISA - Antibody Test Equine Viral Arteritis (EVA)	Friday (All year) Monday, Wednesday (Jan-Mar only)	Same day for negatives (See above if VNT required)	Test screens for negative samples Suspected positives are then tested by VNT
AGID Equine Infectious Anaemia (EIA)	Monday, Tuesday, Wednesday, Thursday	Tuesday, Wednesday, Thursday, Friday	

Canine Testing Days

Test	Test set up	Results Available	Notes
VNT - Antibody Test Distemper Virus (CDV) Adenovirus (CAV) (AKA Infectious Hepatitis or CAV-2) Herpesvirus (CHV) Parainfluenza (CPiV)	Thursday	CDV/CAV/CHV Following Monday CPiV - Checked on following Monday then re-read until ready	
HAI - Antibody test Parvovirus HAI (CPV)	Tuesday	Tuesday (PM)	Samples required day before test set up
IIFT/IFA - Antibody Test Toxoplasma IgG & IgM	Daily Monday-Friday	Same day if negative, following day if suspected positives.	
IIFT/IFA - Antibody Test Neospora	Tuesday, Thursday	Same day if negative, following day if suspected positives.	
IIFT/IFA - Antibody Test Canine Leptospirosis	Tuesday, Friday	Same day for negative samples. Suspected positives are titrated on following test.	
CPSE	Tuesday	Same day	Send as serum or plasma if possible. Best to send chilled or guaranteed O/N
Virus Detection - Virus Isolation CAV, CHV, CPiV	Thursday	CAV/CHV Following Monday CPiV - Checked on following Monday then re-read until ready	VTM swabs preferred but can use dry if required
Virus Detection - PCR Canine Parvovirus (CPV)	Wednesday	Wednesday (PM)	
Virus Detection - PCR Canine Distemper (CDV)	Friday	Friday (PM)	Samples required day before test for prep
Virus Detection - PCR Canine Leptospirosis	Monday	Monday (PM)	
Rabies FAVN	Monday, Wednesday, Friday	Wednesday (PM), Friday (PM) & Monday (PM)	Samples prepared on day of arrival (except Saturday)

Avian Testing Days

Test	Test set up	Results Available	Notes
Avian Chlamydia (AKA Psittacosis)	Tuesday (AM) Thursday (AM)	Tuesday (PM) Thursday (PM)	Faeces should be pooled from samples taken over 3-5 days for maximum sensitivity Although blood can be tested there is no published evidence to support its use Samples received by 9am on Monday or Wednesday will be included on the following days test
Psittacine Beak and Feather Disease (Pbfd)	Tuesday (AM) Thursday (AM)	Tuesday (PM) Thursday (PM)	Samples received by 9am on Monday or Wednesday will be included on the following days test
Avian Polyomavirus (AKA Budgerigar Fledgling Disease)	Tuesday (AM) Thursday (AM)	Tuesday (PM) Thursday (PM)	Faeces should be pooled from samples taken over 3-5 days for maximum sensitivity Samples received by 9am on Monday or Wednesday will be included on the following days test
Pigeon Circovirus	As required	As required	Minimum of 5 samples required for this test There is limited validation of the use of blood, cloacal swabs and faeces
Sexing	Monday (O/N) Wednesday (O/N)	Tuesday (PM) Thursday (PM)	Samples received by 9am on Monday or Wednesday will be included on that nights test Extraction rate is around 60% for mouth swabs compared with around 99% for other sample types. Authorisation slip needed for mouth swabs

Porcine Testing Days

Test	Test set up	Results Available	Notes
IDEXX Porcine Reproductive + Respiratory Syndrome Virus ELISA (PRRS)	Monday	Same day (PM)	
Oxoid Mycoplasma hyopneumoniae ELISA (M. hyo)	Monday	Same day (PM)	
PCV-2 ELISA	Monday	Same day (PM)	

Bovine & Ovine Testing Days

Test	Test set up	Results Available	Notes
Antibody Tests			
IBR (Bovine Herpesvirus-1) ELISA BVD (Bovine Viral Diarrhoea) ELISA Johnes (MAP) ELISA	Monday, Wednesday, Friday	Day after test set up	Regular IBR ELISA is not the same as the marker ELISA Regular BVD ELISA is for antibody detection NOT virus detection which is Antigen ELISA or PCR
PI3 (Parainfluenza-3 virus) ELISA RSV (Respiratory Syncytial virus) ELISA M. bovis (Mycoplasma bovis) ELISA	Tuesday	Wednesday	Milk is not a validated sample type We will test milk samples, however we have no established interpretation
Neo (Neospora) ELISA Fluke (Fasciola hepatica) ELISA	Thursday	Friday	
Lepto (Leptospirosis) ELISA	Tuesday, Thursday	Day after test set up	
Ostertagia ELISA	Tuesday	Wednesday	
IBR gE marker ELISA	Tuesday (O/N)	Wednesday	
Rotavirus VNT Coronavirus VNT	As required	Day after test set up	
Sheep Scab ELISA	Thursday	Friday	Samples needed the day before the test to be prepared
MVV/CAEV ELISA	Tuesday	Wednesday	
CLA ELISA	Tuesday (Fortnightly)	Wednesday	
Antigen Tests			
BVD (Bovine Viral Diarrhoea) ELISA	Wednesday, Friday	Day after test set up	Ear tissue samples must be received the day before the test to be prepared
Fluke Coproantigen ELISA	Thursday	Friday	Samples needed the day before the test to be prepared
Total IgG	As required	Day after test set up	
PCR Virus Detection			
BVD (Bovine Viral Diarrhoea) BDV (Border Disease Virus)	Tuesday, Thursday	Day after test set up	Serum MUST be from red top tube, heparin (green tops) cannot be tested by PCR Samples must be received the day before the test as they are pooled/aliquoted
Johnes (MAP)	Wednesday	Thursday (PM)	Faeces is the only validated sample type, tissue can be tested but not covered by ISO17025
Mastitis Pathogens	Tuesday, Thursday	Same or following day	Diagnostic samples follow routine procedure
Respiratory	Thursday	Friday (PM)	Plain dry swab is most suitable swab type, but we can also use VTM and charcoal swabs. We CANNOT use gel/agar swabs Ensure strict transport procedures are adhered to

1. Routine Diagnostic Testing Services

We shall conduct diagnostic testing services ("Routine Diagnostic Testing Services") as follows:

- a. We will test a sample following its receipt as per any report or specification provided by us and in accordance with the test schedule and turnaround times publicised in our current marketing materials or on our website (www.biobest.co.uk). The testing schedule is subject to change by us without prior notification. We will use reasonable endeavours to ensure that tests are completed as per this schedule; however we make no guarantees of test times, unless specifically agreed to by us in writing. In this respect time shall not be of the essence. Upon request urgent tests may at our discretion be conducted outside the normal test schedule. In such circumstances additional charges may be applicable, and these shall be notified to you in advance of setting up the test.
- b. If a sample is received in a condition such that it is considered to be broken or otherwise unsuitable for testing, we will inform you immediately and request submission of a repeat sample. There will be no additional charge in such circumstances. However, we reserve the right to charge for the original and re-test where the unsuitable condition of the sample does not become apparent until during or after test completion.
- c. If we receive a request for test cancellation before we have set up the test, we will provide a full refund. If we receive a request for test cancellation after we have set up the test, we reserve the right to charge an amount to reflect our costs incurred up to the standard test price.
- d. If we receive a request from you to add a test to a sample already received, we will conduct this additional test providing there is sufficient material. The additional charge will be as per the standard test price.
- e. The diagnostic test service includes as standard faxed, e-mailed or posted reports, and where specifically requested telephoned results; interpretation of results by a veterinary surgeon; advice on sampling and submission; and supply of sampling kits where appropriate. We retain ownership of and retain all copyright and other intellectual property rights in all reports, written advice and other materials prepared by us.

2. Contract Research, Project Studies, Supply of Goods

We shall conduct contract research, project studies, supply of Goods and any other service or product that we supply which is not classified as a Routine Diagnostic Testing Service (together, "the Services"), as per the scope of work and terms and conditions specified and previously agreed to by us in writing in any tender request, proposal documentation and agreed contract. In the absence of any such agreed contract, these Conditions will apply. Unless otherwise agreed in writing payment terms for such research or study work will be 40% of contract value on signature of the contract by us, 30% on completion of testing and 30% on delivery of final report.

3. Samples and Results

- a. Unless otherwise agreed with us in writing, all samples received by us for Routine Diagnostic Testing Services shall become our property upon delivery of the sample to us or collection of the sample by us and, on the completion of Routine Diagnostic Testing Services, may be retained and used for research and development and other purposes. Any data or other results (and all intellectual property and other rights in them) arising from such use shall belong to us and you shall not have any rights in any of them.
- b. Unless otherwise agreed with us in writing, all data, results, reports and advice produced by us as a result of our carrying out the Routine Diagnostic Testing Services shall be our property and may be used for such purpose(s) as we decide from time to time.
- c. If you provide any data or information with, or relating to, the samples, we may use such data and information for our own purposes and may provide it to third parties in an anonymised manner. All personal data is held in full compliance with the General Data Protection Regulations (GDPR) and will only be passed to third parties where it is a legal requirement for us to do so or where we have your informed consent.

4. Prices and Payment

- a. Prices are publicised on our website and in our current marketing materials. We reserve the right to change prices.
- b. All prices for eligible transactions are subject to VAT at the current rate.
- c. For non-account holders and new customers we require payment upon submission of the sample before an order will be accepted. We accept payment in pounds Sterling in the form of a cheque, bankers draft, by an electronic transfer of funds to a bank account of our choosing (with you being responsible for any costs associated with such transfer) or by debit or credit card.
- d. For repeat customers and account holders we will invoice on a monthly basis. You shall pay the full amount of any invoice within 30 days from date of invoice. We will exercise our statutory right to charge interest and compensation for debt recovery costs under late payment legislation if we are not paid according to agreed credit terms.
- e. We will request two trade and one banker's reference in order to set up a new account.

5. Delivery

- a. If any Goods are to be delivered by us as part of this Contract then such Goods shall be delivered to a delivery address agreed to by the parties during our normal business hours. If any Goods are to be delivered outside the United Kingdom, such delivery shall be Exworks Incoterms 2000.
- b. We shall make reasonable endeavours to deliver any Goods within timescales notified to you. If no dates are specified, delivery shall be within a reasonable time, however time shall not be of the essence.
- c. The Goods shall remain our property and title in the Goods shall not pass to you until all sums due by you to us have been paid.
- d. Until the transfer of title in terms of Condition 5c above:-
 - (i) you shall store the Goods in a manner which distinguishes them from any other goods and which indicates that the Goods are owned by us;
 - (ii) the Goods shall be kept at your premises and you shall take good care of the Goods and use and maintain them in accordance with good industry practice;
 - (iii) you shall be responsible for loss of, or damage to the Goods; and
 - (iv) you shall not permit any form of security or charge to be created over the Goods.
- e. Until the property in the Goods passes to you in accordance with the provisions of Condition 5c above, you shall keep the Goods insured to their full replacement value with full comprehensive insurance to be approved by us and with our interest noted on the policy. Evidence of such insurance shall be made available to us at any time on request.

6. Warranty of Performance

- a. We shall exercise all reasonable skill, care and professional due diligence in the performance of the Services, however we do not guarantee or warrant that any particular result is correct or otherwise.
- b. All conditions, representations and warranties relating to the Goods and/or the Services and their use and receipt and all remedies otherwise available to you are excluded to the fullest extent permitted by law

7. Limitation of Liability

- a. Under no circumstances shall our liability for any loss or damage suffered by you or any other person as a result of our performance or non-performance of our obligations under this Contract be greater than £10,000 or the total sums received by us under the provisions of the Contract, whichever is the greater. You shall indemnify us in respect of any loss sustained and any expenses incurred by us arising directly out of or in connection with your breach of this Contract.
- b. We shall not be liable in any circumstances for any indirect or consequential loss or loss of anticipated profits, loss of anticipated savings or any other economic loss of yours.
- c. Notwithstanding the provisions of Condition 7a and 7b above, neither party excludes or limits liability to the other party for death or personal injury arising from the breach of duty of such party.
- d. Our liability to you under this Contract is excluded to the fullest extent permitted by law.
- e. Should any limitation or provision contained in this Condition be held to be invalid under any applicable statute or rule of law it shall to that extent be deemed omitted but if either party thereby becomes liable for loss or damage which would otherwise have been excluded such liability shall be subject to the other limitations and provisions set out herein.

8. Force Majeure

- a. Any delay or failure by either party in performance hereunder, other than your obligation to pay us any monies due to us, shall be excused if and to the extent that such delay or failure is caused by occurrences beyond such party's reasonable control including but not limited to, acts of God, decrees or restraints of government, strikes, war, fire, riot, sabotage, terrorism and any other cause or causes whether similar or dissimilar to those already specified which cannot reasonably be controlled by either party. Such performance shall be so excused for the period during which such inability of the party to perform is so caused but for no longer period and shall be remedied as far as possible with all reasonable despatch. Any time period for performance shall be extended by a period equal in duration to any period during which such performance is excused by this Condition.

- b. If any of the events detailed in Condition 8a above prevents either party from performing all of its obligations under the Contract for a period in excess of one month, the party affected by such non-performance may terminate the Contract.

9. Termination

- a. We may terminate this Contract by providing written notice to that effect to you.
- b. In addition to, but without prejudice to our other rights and remedies under and in terms of this Contract, we may terminate this Contract forthwith if:-
 - (i) you fail to pay any part of the price payable to us by the date specified in Condition 4 above;
 - (ii) you become insolvent or enter into any arrangement with your creditors;
 - (iii) a petition is presented, or a resolution proposed, for the winding-up of your business;
 - (iv) any procedure is commenced with a view to the appointment of an administrator, receiver or administrative receiver in relation to you or any other party gives notice of its intention to appoint an administrator to you;
 - (v) you are unable to pay your debts as they fall due;
 - (vi) you cease trading or threaten to cease trading; or
 - (vii) any equivalent event as outlined in Conditions 9b(i) – 9b(vi) occurs in any jurisdiction other than Scotland.
- c. In the event of termination of this Contract you shall pay to us all amounts which remain outstanding for Services performed or Goods delivered by us under this Contract within 10 Business Days of this Contract terminating.

10. Assignment

We shall be entitled to assign, transfer or sub-contract any of our rights or obligations under this Contract. You shall not assign, transfer or sub-contract any of your rights or obligations under this Contract or purport to do so unless you have obtained our prior written consent.

11. Dispute Resolution

Should any dispute arise between us and you, the parties will attempt to resolve the dispute in good faith. If the parties are unable to resolve any such dispute between them, either party may request that the parties seek to resolve the dispute through mediation using the services of the Centre for Dispute Resolution to facilitate the mediation process but this shall not prejudice a party's right to raise court or other proceedings.

12. Entire Agreement

This Contract and any other document referred to herein as being applicable contains the entire agreement of the parties with respect to the subject matter of this Contract and supersedes all prior agreements and arrangements whether written or oral between the parties with respect to the subject matter of this Contract. Nothing in this Condition 12 shall have effect to exclude the liability of either party for fraud or fraudulent misrepresentation.

13. Severability

If any provision of this Contract is held by the appropriate court or other competent authority to be void or unenforceable in whole or in part this Contract shall continue to be valid as to the other provisions of it and the remainder of the affected provision.

14. Governing Law

This Contract shall be governed by and construed in accordance with the law of Scotland and the parties hereby submit to the non-exclusive jurisdiction of the Scottish courts.

biobest

Contact Us

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