



CITY U

ETERINARY

IAGNOSTIC

Discover our Exclusive Services in Hong tong

Service and Price List

2025

Contents

Οι	ır ۱	Veterinary Pathologists and Section Heads	2
La	bo	ratory Details	4
Sa	ımı	ple Submission Guidelines and Submission Form	5
Sp	ec	imen Collection Guidelines	7
Pr	ice	e List	
		Histopathology	9
		Post Mortem	10
		Cytology	11
		Clinical Pathology	12
		Microbiology	17
		Molecular PCR	19
		Serology	23
		Genetics Testing	24
		Export / Quarantine Testing	26

Courier Services

To book a sample pickup please submit the Specimen Collection Order Form via https://alt.jotfor.ms/212520971760049 or contact our courier service provider **Lalamove** at 9220-5494.

Clinics and institutions are also welcome to deliver specimens to CityU VDL during our opening hours. For more details, please call **3442-4849** or email us at **info@cityuvdl.com.hk**.

Opening Hours

Monday to Friday: 9am – 7pm Saturday: 9am – 5:30pm Sunday: 2pm – 5:30pm Public Holiday: Closed

Contact details

Phone: (852) 3442-4849

(for case enquiry, consumable purchase, submission forms, pricelist)

Fax: (852) 3442-0819

Email: info@cityuvdl.com.hk

Website: https://www.cityuvdl.com.hk

LinkedIn: https://www.linkedin.com/company/cityuvdl

Address

Y1710, 1/F, Yellow Zone Yeung Kin Man Academic Building City University of Hong Kong 83 Tat Chee Avenue Kowloon, Hong Kong

(It is advised to come in from the entrance on Nam Shan Chuen Road)



Veterinary Pathologists



Dr. Fraser Hill, Director, Veterinary Anatomic Pathologist, Adjunct Professor BVSc (dist), MANZCVS (Sheep Medicine, Pathology), FANZCVS (Anatomic Pathology)

Registered Specialist Veterinary Anatomic Pathologist

Adjunct Professor Fraser Hill is recognised as a specialist in veterinary pathology in Hong Kong, Australia and New Zealand. He is a member of the Australia and New Zealand College of Veterinary Scientists in Sheep Medicine and Pathology as well as a fellow of the Australia and New Zealand College of Veterinary Scientists in Anatomic Pathology.



Prof. May Tse, Veterinary Anatomic Pathologist BVM&S, MRCVS, Dip ACVP (Anatomic Pathology)

Registered Specialist Veterinary Anatomic Pathologist

Dr. May Tse studied veterinary science at the University of Edinburgh and completed her anatomic pathology residency at Cornell University (in conjunction with City University) before successfully completing the board examinations in 2018. She is currently a clinical

assistant professor at the City University's Jockey Club College of Veterinary Medicine and Life Sciences. Working two days per week on the anatomic pathology roster, Dr. Tse enjoys all aspects of diagnostic pathology but has a particular interest in neoplasia.



Dr. Andrew Ferguson, Veterinary Pathologist BVSc, GCVSt (Diag Path) MANZCVS (Pathobiology)

Dr. Andrew Ferguson has extensive experience working in veterinary diagnostic laboratories within government, research and commercial settings across several countries. He has worked for various offices of WHO and OIE, and has also consulted for FAO in both technical and management roles, promoting collaborative approaches in the fields of laboratory, diagnostic testing, and zoonotic disease.



Prof. Jeanine Sandy, Veterinary Anatomic Pathologist and Clinical Pathologist BVSc, MANZCVS, PhD, Dip ACVP (Anatomic Pathology and Clinical Pathology)

Registered Specialist Veterinary Anatomic Pathology

Dr. Jeanine Sandy is an associate professor for veterinary pathology at the City University's Jockey Club College of Veterinary Medicine and Life Sciences. She obtained her American Board qualifications as an anatomic pathologist in 2010 and as a clinical

pathologist in 2021. Working two days per week on the anatomic and clinical pathology roster, Dr. Sandy's special areas of interests include liver, bone, skin and clinical pathology.

International Collaboration



Dr. Steve MillsVeterinary Clinical Pathologist *DVM, Dip ACVP (Clinical pathology)*

Registered Specialist Veterinary Clinical Pathology



Dr. John JardineVeterinary Anatomical Pathologist
BVSc, MMV (Pathology), Dip ACVP



Dr. Charan GantaVeterinary Anatomical Pathologist *DVM, PhD, ACVP (Anatomic Pathology)*



Dr. Rita Figueiredo Ornelas Veterinary Clinical Pathology *LMV. MRCVS*

In addition to our local on-site pathologists, CityU VDL has expanded the veterinary expertise available in Hong Kong by partnering with international pathologists. Using the latest in imaging scanning technology board certified pathologists Dr. Steve Mills, Dr. John Jardine, Dr. Charan Gantan, and Dr. Rita Ornelas can review and comment on cases with CityU VDL.

Section Heads



Dr. Arthur Ching, Molecular and Serology Scientist BSc, PhD, MLT Part I

Dr. Arthur Ching has more than 10 years of clinical experience in Molecular diagnostics and extensive research experience in molecular biology. He has a BSc in Biology and PhD degree from the Chinese University of Hong Kong. He is also a registered MLT Part I.



Dr. Andrew Ferguson, Microbiology Veterinarian BVSc, GCVSt (Diag Path) MANZCVS (Pathobiology)

In addition to working on pathology cases, Dr. Ferguson also leads the microbiology department. His extensive experience in many laboratory roles equips him well to guide this section.

Laboratory Details

Laboratory Overview

CityU Veterinary Diagnostic Laboratory (CityU VDL) provides a comprehensive veterinary diagnostic service to veterinarians, researchers and wildlife parks locally and regionally. In addition, it is a valuable resource for teaching undergraduate students at the City University Jockey Club College of Veterinary Medicine and Life Sciences, Bachelor of Veterinary Medicine program.

Staff

At CityU VDL, our on-site staff work at our veterinary laboratory located on-campus at City University of Hong Kong. Our current pathology team includes eight specialist pathologists, five of whom are American Board Certified Pathologists (Dip. ACVP) and, a fellow of the Australian and New Zealand College of Veterinary Scientists (FANZCVS). Access to board certified veterinary clinical pathologists for cytology, blood smear analysis and consultation is also available. In addition, there are also highly trained medical laboratory technicians (MLT) and scientists in clinical pathology, histopathology, microbiology, immunology and molecular diagnostics. We are all committed to offer a high standard of service.

To contact our staff, simply phone the front desk (3442-4849). Our reception will handle your enquiry and direct you to the staff member required.

Results

Results are validated by the duty pathologist and/or scientists and can be reported by email, fax or post to the submitter. Reports are confidential. CityU VDL keeps digital copies of the reports indefinitely and can re-issue them at the submitter's request.

Client feedback on service provision and timeliness is encouraged.

Retention of Samples

CityU VDL keeps unfixed tissues for 14 days. Glass slides are kept for 3 years. Fixed tissues are kept for 30 days after reporting. Paraffin blocks are kept for 10 years. Submitters may request additional tests from the submitted tissues within these times.

Fees

CityU VDL issues invoices with final reports and requires payment within 30 days of receiving the invoice. Statements are issued monthly.

Referral of Samples

Please note, some tests offered at CityU VDL may be outsourced to overseas referral laboratories. Additional samples may be needed to ensure sufficient sample volume is available for testing.

Filling in Submission Forms and Sample Submission Guidelines

Submission of Samples

Samples must be submitted in the CityU VDL specimen bags (provided free on request) together with a completed Sample Submission Form.

Place all samples from a case into one specimen bag and place the Sample Submission Form into the pocket attached to the specimen bag. If the sample does not fit into the specimen bag (e.g. a 10L biopsy pot), please place the Submission Form into the specimen bag and securely attach the bag onto the sample.

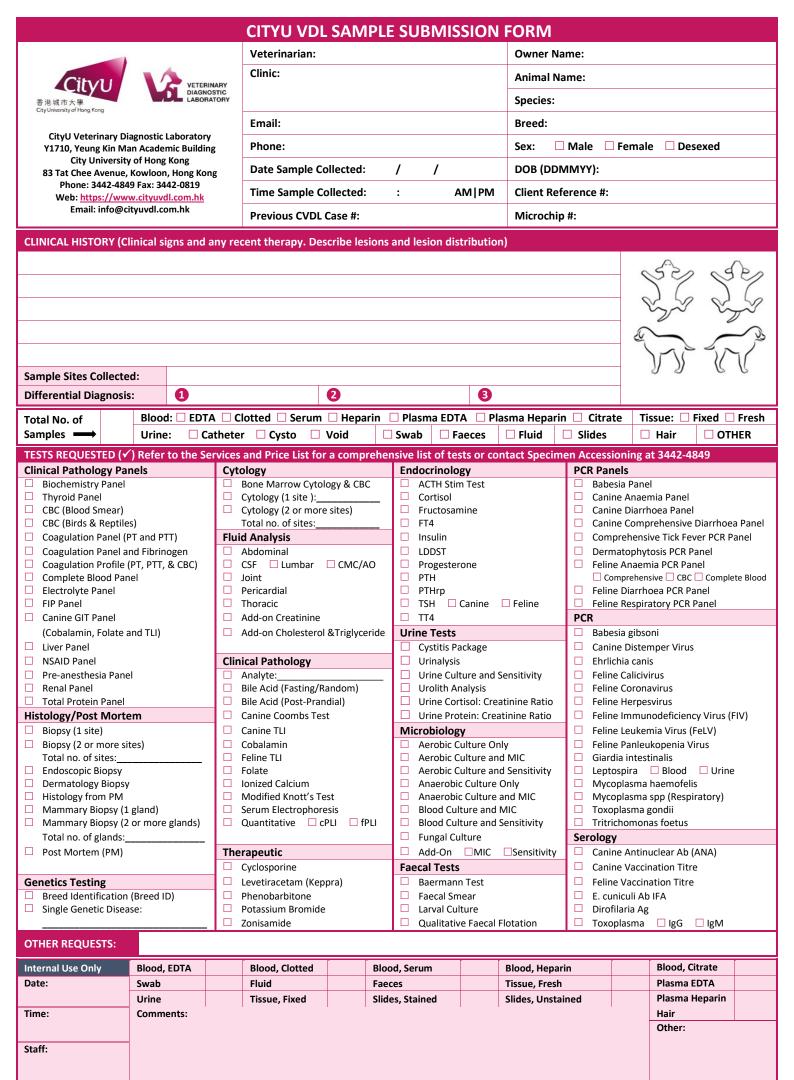
Please correctly identify and label all samples, and fully complete all Sample Submission forms.

Filling in a Submission Form

- Please fill in the **full name** of the submitting veterinarian. To avoid confusion during accessioning (which may result in delay of sample processing), please do not write the veterinarian's initials only.
- Please indicate what sample type has been submitted. For example, if multiple biopsy samples from
 multiple sites has been taken and placed into one biopsy pot, please indicate on the submission form
 which sites the biopsy samples are taken from.
- Please fill in all the fields on the submission form including date collected and time.
- If your clinic has multiple branches, please indicate in the clinic name field which branch you are submitting from. This will avoid confusion during accessioning and delay in sample processing.
- If there have been earlier submissions from a particular case, please include any previous case numbers so the prior findings can be correlated with the current case.

Sample Submission

If a sample is submitted for two different tests (e.g. a nasal swab for culture and sensitivity as well as a viral PCR test) it is recommended to submit two separate samples from the same site, one for each test requested.



Specimen Collection Guidelines

Cytology

- Performed on fine needle aspirates (FNA), fluids, scrapings, and imprints.
- We recommend using slides with one end frosted. Write sample identification data here with pencil, as pen and felt tipped markers will wash off in fixative during staining. Label the sample clearly with the patient name, date of collection, and sample location.
- Avoid submitting slides in the same packaging with formalin-fixed samples as exposure to formalin can render cytology slides unreadable.
- Cytology cannot be done on swabs submitted in transport media.
- Body fluids (which includes abdominal, thoracic, pericardial, joints, and CSF) are best submitted in both EDTA and sterile tubes/containers. The EDTA preserves the cytology and prevents clotting to allow cell counts and protein estimates required for a full fluid analysis. The sterile tube/container may allow other procedures e.g. culture and some biochemistry tests. If there is insufficient volume available (e.g. CSF and joint fluid), then an EDTA sample is preferred. For very small samples a smear should be made from the fluid.
- Other fluids are best submitted in EDTA as cytology is required. However if culture is also required, a separate sample of the fluid must be submitted in a sterile container.
- For FNA samples, it is recommended to collect material from multiple separate aspirations taken from the lesion, from various locations within the sample, if size allows. This will increase the likelihood of a diagnosis. FNA samples that results in thick clumps on the slide do not typically have a monolayer of cells that is required for diagnosis. Visible clumps of cells should be spread over the surface of the slide by placing another slide at 90° to the first slide and smearing the clumps out with light pressure.
- CityU VDL fees apply to cytology examinations whether the slides contain diagnostic material or not.
 When aspirating lesions for cytology evaluation, check the smears as you collect them. If there are more than three smears, send the three best smears for cytology evaluation. The maximum number of cytology slides from each site for evaluation is three.
- If a sample is non-diagnostic, a second sample will be examined for free if submitted within 30 days. Remember to quote the previous case number.

Histopathology

- For adequate formalin penetration, ensure all biopsy specimens are fixed in a 10:1 ratio of formalin to tissue.
- If possible, submit the WHOLE specimen. If the specimen size is large e.g. whole spleen, make
 multiple slices 1cm apart before placing in formalin to allow better formalin penetration as formalin does
 not penetrate greater than 5mm into tissue. The only exception is brain, which can be fixed whole
 without slicing.
- You may wish to ink the surgical margins prior to placement in formalin. Allow the ink to dry before putting into formalin.
- Specimens >5 cubic cms in volume may be fixed in formalin for 48 hours at the clinic and forwarded to
 the laboratory with a reduced formalin:tissue ratio. This is especially useful for large samples, where
 several days fixation in large volumes of formalin at the veterinary clinic leads to good tissue fixation.
 Lower volume of formalin is required when the sample is in transit.

- If accurate identification of individual tissue samples is required, multiple tissue samples should be
 placed in separate containers that are clearly labelled.
- All samples must be submitted in a leak-proof plastic container. Do not use glass containers as they may break during transportation. Plastic containers may be purchased from CityU VDL.

Post Mortem

CityU VDL offers post-mortem services. <u>Before submitting cases, the veterinarian should contact</u> <u>CityU VDL's duty pathologist to discuss the circumstances of the case, the scope and costs of laboratory examination, and delivery of the animal.</u> All bodies should be kept in the refrigerator at 4°C.

Animal bodies undergoing post mortem are not allowed to be returned to the owner; however CityU VDL can release the body to a staff member of a cremation company, who are required to follow strict guidelines on handling prior to cremation. If the owner does not wish to have the body cremated, the body will be disposed of by CityU VDL and a body disposal fee will be applied (see page 11 for price).

Fluid Cytology & Analysis

We recommend clinicians prepare 2 slides and submit this to us as well as the fluid in an EDTA tube.

Container Type	
EDTA tube	Required with all fluids - preserves cytology, allows fluid analysis
Sterile Tube	For culture. Can be placed in sterile containers such as urine pots. Do not place in serum tube.
Plain tube	If requesting biochemistry of the fluid such as creatinine, cholesterol, and triglyceride

Below is a table indicating what container type to use for specific tests and what type of tests are required for different types of fluid.

Fluid Type Container Type	Fluid from Conventional Cavity (Abdominal, Thoracic, Pericardial, Joint, CNS)	Bronchoalveolar lavage (BAL) Transtracheal wash (TTW)	Other fluids (eg. seromas, haematomas, various washes such as nasal or prostatic washes)
EDTA	Cytology. Fluid Analysis always required for a proper diagnosis.	Cytology. No fluid analysis required.	Cytology. No fluid analysis required. If stained cytology is required for a urine sample, the urine can be placed in an EDTA tube.
Sterile Tube	If culture required. This can be ordered if cytology suggests. For CNS, as sample quantity is usually small and protein content is low, sample can be collected in sterile tube.	If culture required. This can be ordered if cytology suggests.	If culture required. This can be ordered if cytology suggests.

HISTOPATHOLOGY

Turnaround time: 4 working days (All turnaround times are calculated on receipt of samples by accessioning)

Histology	Comments	Test Includes
Biopsy: 1 site	Multiple lymph nodes are considered as 1 site (unlimited tissue size per site)	Includes one organ or site, full margin evaluation
Biopsy: Additional sites	Per additional biopsy from different organ samples or sites	Each additional site
Endoscopic Biopsy	For endoscopic intestinal biopsies from multiple intestinal sites	Includes multiple sites
Mammary Gland Biopsy: 1 gland	One nipple and mammary gland	
Mammary Gland Biopsies: additional glands	Additional nipple and mammary gland	Each additional nipple and mammary gland
Dermatology Biopsies	For general skin conditions where a mass is not involved (for example, conditions such as allergic dermatitis, pemphigus, etc.)	Includes up to 6 punch biopsies
Histology collected from Post Mortem	For samples collected during a post mortem that requires histological examination	Includes ONE block and ONE slide made
Limb Dissection	Whole limb submitted for dissection and sample collection	Includes sample collection only
Special stains	Will be determined by pathologist	
Special request	One block and one slide	
Immunohistochemistry	Comments	Test Includes
IHC/ICC Marker	For biopsy samples	Contact us for the list of IHC and ICC markers available

NOTES: For guides on how to collect a biopsy sample, please refer to page 7 & 8.

POST MORTEM

Turnaround time:

Gross pathology report: 1 working day

With histopathology results: 5 working days (allowing time for tissues to fix)
All turnaround times are calculated on receipt of samples by accessioning

*Please contact the pathologist before submitting animals for post mortem. Call our reception at 3442-4849. Prices do not include histopathology or other tests. See "Histology collected from Post Mortem" above for the price for histology done on post mortem samples.

Post Mortem	Comments	Test Includes
Cat	≤ 1kg	Gross pathology only
	> 1kg	Gross pathology only
Dog	≤ 5kg	Gross pathology only
	> 5kg	Gross pathology only
Mini post mortem	e.g. Limb, brain removal	Gross pathology only
Pocket Pets	For rabbits, rodents, ferrets	Gross pathology only
Birds		Gross pathology only
Reptiles	For chelonians, lizards, snakes	Gross pathology only
Amphibians		Gross pathology only
Fish ≤ 20cm		Gross pathology only
> 20cm		Gross pathology only
Others	Any sample not in the categories above	Gross pathology only
Body Disposal	This is mandatory for all non-cremated post mortem cases sent to CityU VDL	

NOTES:

- 1) Animal bodies undergoing post mortem are not allowed to be returned to the owner.
- 2) CityU VDL can release the body to a staff member of a cremation company, who are required to follow strict guidelines on handling prior to cremation.
- 3) If the owner does not wish to have the body cremated, the body will be disposed of by CityU VDL and a body disposal fee will be applied.

CYTOLOGY

Resubmit within 30 days for free if the initial sample is non-diagnostic

Turnaround time: 2 working days (All turnaround times are calculated on receipt of samples by accessioning)

Cytology	Comments	Test Includes	Sample Required
[†] Cytology First Site	Maximum: Four slides per site (Each lymph node is considered as 1 site)		Fluid, smear, aspirates smeared on slides or in EDTA tube
Cytology Additional Sites	An add-on to "Cytology First Site". Sample must be from the same animal (Maximum: Four slides per site)		Fluid in EDTA tube; Aspirates or smears on glass slides Wash samples from BAL, prostate, tracheal, cystic, nasal, urine, crop in EDTA tube. FNA, impression smears
Immunocytochemistry (ICC) Marker	For cytology samples		
Fluid Analysis	For thoracic, abdominal, pericardial, joint, and CSF ONLY Note: CSF should be submitted to the VDL on the day of collection as cells degenerate quickly	Total protein, NCC, RBCC, gross appearance and cytology	Fluid in EDTA tube; slides may be submitted for cytology; fluid in plain tube if culture required
Fluid Analysis additional sites			
*Cholesterol & Triglyceride	Ordered as an add-on test for fluid analysis only For chylothorax cases		
*Creatinine	Ordered as an add-on test for fluid analysis only. For abdominal fluids with suspected ruptured bladder		
Bone Marrow Examination	Bone marrow aspirate and peripheral blood required	CBC and cytology	Bone marrow aspirate in EDTA tube; blood smears, 1.3 ml whole blood in EDTA
Buffy Coat Examination			1.3 ml whole blood in EDTA

Skin Scraping Smear on glass slide

[†]If a sample is non-diagnostic, a second sample will be examined for free if submitted within 30 days. Remember to quote the previous case number.

^{*}A fluid analysis must be performed first before add-ons can be ordered.

All turnaround times (TAT) are calculated on receipt of samples by accessioning

Panels and Profiles (interpreted)	Test Includes	Sample Required
Complete Blood Panel	CBC + biochemistry (see CBC and Biochemistry panel for details)	1.3mL whole blood in EDTA tube AND 1.3mL clotted whole blood in serum tube
Complete Cell Count (CBC)	HCT, PCV, haemoglobin, RBCC, WBCC, MCV, MCH, MCHC, manual WBC differentials to derive % and absolute count, manual platelet count, TPP, cell morphology, platelet assessment. Reticulocyte count if anaemic. All abnormal smears reviewed by a pathologist	1.3mL whole blood in EDTA
Biochemistry Panel (canine / feline)	Na, K, Na:K (canine only), Cl, Ca, P, bicarbonate, anion gap, AST, ALT, ALP, GGT, CK, urea, creatinine, amylase, lipase, TP, albumin, globulin, total bilirubin, glucose, cholesterol, triglyceride, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube
Biochemistry Panel (equine)	Na, K, Cl, Ca, phos, bicarbonate, anion gap, AST, ALP, GGT, CK, urea, crea, TP, alb, glob, gluc, chol, trig, total bilirubin	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube
Electrolyte Panel (canine, feline, equine)	Na, K, Cl, bicarbonate	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube
Thyroid Panel (canine / feline)	TT4, fT4, TSH	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube
Pre-anesthesia Panel	Na, K, Cl, Bicarbonate, Anion Gap, Creatinine, Ca, Glucose, ALT, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube
Liver Panel	Alb, AST, Glu, ALT, Urea, ALP, GGT, total bilirubin, cholesterol	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube
Renal Panel	Na, K, Cl, Bicarbonate, Anion gap, Urea, Creatinine, Alb, Ca, P, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube
Total Protein Panel	TP, Albumin, Globulin, A/G Ratio	3.3mL whole blood in plain tube OR 5.5mL serum in plain tube

All turnaround times (TAT) are calculated on receipt of samples by accessioning			
Panels and Profiles (interpreted)	Test Includes	Sample Required	
NSAID Panel	ALP, ALT, Urea, Creatinine, USG, SDMA	1.3mL whole blood in plain tube + 1mL urine OR 0.5mL serum in plain tube + 1mL urine	
FIP Panel	AGP, Feline Coronavirus PCR, Fluid Analysis, Albumin, Globulin, A/G Ratio	 1) 1.3mL whole blood in plain tube 2) 0.5mL serum in plain tube 3) 1ml fluid in EDTA tube 	
Panels and Profiles (uninterpreted)	Test Includes	Sample Required	
Senior Profile	CBC, Albumin, A:G ratio, ALP, ALT, Amylase, Anion gap, AST, Bicarbonate, Bilirubin, BUN, Calcium (Ca), Cholesterol, CK, Chloride (Cl), Creatinine, GGT, Globulin, Glucose, Potassium (K), Lipase, Sodium (Na), Na:K, Phosphorus (P), TP, Triglyceride, T4, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	
Wellness Profile	CBC, Albumin, A:G ratio, ALP, ALT, BUN, Creatinine, Globulin, Glucose, TP, T4, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	
Off Colour Profile	CBC, Albumin, A:G ratio, ALP, ALT, Amylase, Anion gap, AST, Bicarbonate, Bilirubin, BUN, Calcium (Ca), Cholesterol, CK, Chloride (Cl), Creatinine, GGT, Globulin, Glucose, Potassium (K), Lipase, Sodium (Na), Na:K, Phosphorus (P), TP, Triglyceride, T4, Cortisol, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	
Pre-Anaesthetic Profile	CBC, Albumin, A:G ratio, ALP, ALT, BUN, Creatinine, Globulin, Glucose, Total protein, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	
Total Annual Health Profile	CBC, Albumin, A:G ratio, ALP, ALT, Amylase, AST, Bilirubin, BUN, Ca, Cholesterol, CK, Creatinine, GGT, Globulin, Glucose, Lipase, Phosphorus (P), TP, Triglyceride, T4, SDMA	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	

All turnaround times (TAT) are calculated on receipt of samples by accessioning

Haematology	Test Includes	Sample Required	TAT
Direct Coombs Test (canine)		1.3mL whole blood in EDTA + freshly prepared blood smear (unstained)	2 days
Modified Knott's Test		1.3mL whole blood in EDTA	2 days
Biochemistry	Test Includes	Sample Required	TAT
Individual Analytes	Please specify the analyte required on the submission form	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
AGP		0.5mL serum in plain tube	7-10 days
Bile Acid (fasting/random)		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Bile Acid (post-prandial)		Name of the second in the second of the	2 days
Canine TLI (Trypsin-Like Immunoreactivity)		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Feline TLI (R)		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	12 days
Folate		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Cobalamin (Vitamin B12)		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Canine GIT Panel	TLI, Folate & Cobalamin	1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Faecal occult blood		Fresh faeces in faecal collection pot	2 days
SDMA		0.5mL serum in plain tube	2 days

(R) = Referral Test

All turnaround times (TAT) are calculated on receipt of samples by accessioning

Biochemistry	Test Includes	Sample Required	TAT
Quantitative cPLi (R)		1ml serum (prefer fasted) in serum tube	7-8 days
Quantitative fPLi (R)		1ml serum (prefer fasted) in serum tube	7-8 days
Serum Electrophoresis		1.3mL clotted whole blood in serum tube	4-5 days
Serum Iron (R)		2mL serum in serum tube	2-3 days
Ionized Calcium (R)		1mL serum in serum tube	2-3 days
Endocrinology	Test Includes	Sample Required	TAT
ACTH Stimulation Test	Basal cortisol level, post ACTH stimulation cortisol level	2 x 1.3mL whole blood or 2 x 0.5mL serum in plain tube (at 0min and 60 min)	2 days
Low Dose Dexamethasone Suppression Test	3-4 cortisol results at 0hr, 3-4hr, 8hr post dexamethasone injection.	3 x 1.3mL whole blood or 3 x 0.5mL serum in plain tube (at 0hr, 3-4hr, 8hr post dexamethasone injection)	2 days
High Dose Dexamethasone Suppression Test	3-4 cortisol results at 0hr, 3-4hr, 8hr post dexamethasone injection.	3 x 1.3mL whole blood or 3 x 0.5mL serum in plain tube (at 0hr, 3-4hr, 8hr post dexamethasone injection)	2 days
Cortisol		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Total T4		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Free T4 (canine and feline)		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
TSH (canine and feline)		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days

(R) = Referral Test

All turnaround times (TAT) are calculated on receipt of samples by accessioning

Endocrinology	Test Includes	Sample Required	ТАТ
Progesterone		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Fructosamine		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube	2 days
Insulin (R)		2mL serum in serum tube	14 days
Parathyroid Hormone (PTH) (R)		1mL frozen serum in serum tube (non-hemolysed/non-lipaemic)	10 days
Parathyroid hormone-related protein (PTHrp) (R)		1mL frozen EDTA plasma in plain tube (non-hemolysed/non-lipaemic). Separate plasma within 1hr of collection	10 days
Relaxin (R)		0.5mL heparinised plasma in plain tube (30 days post breeding)	14 days
Coagulation	Test Includes	Sample Required	ТАТ
Coagulation panel	PT, PTT	2mL whole blood in sodium citrate tube, or to the marking on the tube	3-4 days
Coagulation panel + fibrinogen	PT, APTT, Fibrinogen	2mL whole blood in sodium citrate tube, or to the marking on the tube	3-4 days
Coagulation profile	PT, PTT, CBC	2mL whole blood in sodium citrate tube, or to the marking on the tube AND 1.3ml whole blood in EDTA	3-4 days
Fibrinogen		2mL whole blood in sodium citrate tube, or to the marking on the tube	3-4 days
Therapeutics	Test Includes	Sample Required	ТАТ
Phenobarbitone		1.3mL whole blood in plain tube OR 0.5mL serum in plain tube Do NOT place in gel tube	2 days
Potassium Bromide _(R)		2mL serum in serum tube Do NOT place in gel tube	5-7 days

All turnaround times (TAT) are calculated on receipt of samples by accessioning

Therapeutics	Test Includes	Sample Required	TAT
Levetiracetam (keppra)		1mL serum in serum tube	4-5 days
Zonisamide		2mL of non-hemolysed separated serum or non-hemolysed EDTA plasma or 3) non-hemolysed heparinised plasma	4-5 days
Cyclosporine (R)		3mL whole blood in EDTA	7 days
Toxicology	Test Includes	Sample Required	TAT
Blood Lead (R)		2mL whole blood in heparin tube	2-3 days
Serum Zinc (R)		2mL serum in serum tube	3-4 days
Cholinesterase (R)		2mL non-hemolysed serum in serum tube	10 days
Urine Analysis	Test Includes	Sample Required	TAT
Urinalysis	Colour, turbidity, dipstick (pH, TP, glucose, ketones, bilirubin, blood), specific gravity, and sediment examination	Urine in sterile urine collection pot (minimum 3mL)	2 days
Urine Protein:Creatinine Ratio (UPCR)		Urine in sterile urine collection pot	2 days
Urine Cortisol:Creatinine Ratio (UCCR)		Urine in sterile urine collection pot	2 days
Others	Test Includes	Sample Required	TAT
		2mL non-hemolysed heparinised plasma	18-20
Amino acids (R)		in plain tube	days

MICROBIOLOGY

All turnaround times are calculated on receipt of samples by accessioning

Microbiology	Comments	Test Includes	Sample Required	TAT
Cystitis Package		Urinalysis, Culture and AST	Urine in sterile collection pot	1-3 days
Aerobic Culture only	Antimicrobial Sensitivity Testing (AST) not included	Culture only	Fluid in sterile pot, or swab in transport medium	3 days
Aerobic Culture & Sensitivity		Culture and AST by disc diffusion	Fluid in sterile pot, or swab in transport medium	4 days
Aerobic Culture & MIC		Culture and AST by MIC	Fluid in sterile pot, or swab in transport medium	4 days
Anaerobic Culture only	AST not included	Culture only	Fluid in sterile pot, or swab in transport medium	3-8 days
Anaerobic Culture & MIC^		Culture and AST by MIC	Fluid in sterile pot, or swab in transport medium	4-9 days
Aerobic and Anaerobic Culture		Culture only	For deep wounds, pus, abscess and sterile body fluids only	3-8 days
Aerobic Culture & Sensitivity + Anaerobic Culture & MIC		Aerobic: Culture and AST by disc diffusion Anaerobic: Culture and AST by MIC	For deep wounds, pus, abscess and sterile body fluids only	4-9 days
Aerobic and Anaerobic Culture & MIC		Culture and AST by MIC	For deep wounds, pus, abscess and sterile body fluids only	4-9 days
Blood culture only	AST not included. Blood Culture Bottles are suitable for most fluids	Culture only	Blood Culture Bottle*	4-10 days
Blood Culture and Sensitivity	Blood Culture Bottles are suitable for most fluids	Culture and AST by disc diffusion	Blood Culture Bottle*	4-12 days
Blood culture and MIC	Blood Culture Bottles are suitable for most fluids	Culture and AST by MIC	Blood Culture Bottle*	4-12 days
Faecal culture	AST not included	Culture only	Fresh faeces in faecal collection pot	3 days
Faecal culture & sensitivity		Culture and AST by disc diffusion	Fresh faeces in faecal collection pot	4 days

MICROBIOLOGY

All turnaround times are calculated on receipt of samples by accessioning

Microbiology	Comments	Test Includes	Sample Required	TAT
Faecal culture & MIC		Culture and AST by MIC	Fresh faeces in faecal collection pot	4 days
Fungal Culture	AST not included	Culture only	Hair, tissue, toothbrush place in a urine pot, paper envelope, or a zip lock bag, or swab	14 days
Urine culture and sensitivity	Free MIC for any high resistance organisms	Culture and AST by disc diffusion	Urine in sterile collection pot	4 days
Urine Culture & MIC		Culture and AST by MIC	Urine in sterile collection pot	4 days
Sensitivity testing [^]	Add on an antimicrobial panel to existing aerobic culture results			2 days
MIC^ Sensitivity	Add on an antimicrobial panel to existing culture results (aerobic or anaerobic)			2-4 days
Staining: Gram Stain			Fluid in sterile pot, or swab in transport medium	1 day
Staining: Acid Fast			Fluid in sterile pot, or swab in transport medium	1 day
*Contact lab for delivery of blood culture bottles				

^{*}Contact lab for delivery of blood culture bottles ^AST per organism

Faecal Analysis	Comments	Test Includes	Sample Required	TAT
Qualitative Faecal Floatation			Fresh faeces in faecal collection pot	2 days
Faecal Smear			Fresh faeces in faecal collection pot	1 day
Larval Culture	Parasite eggs are hatched and the larva examined		Fresh faeces in faecal collection pot	14 days
Faecal Sedimentation Baermann Test	To test for lungworm		Fresh faeces in faecal collection pot	2 days

Turnaround Time: 1-3 working days

All turnaround times are calculated on receipt of samples by accessioning

Tick	Test Includes	Sample Required
Canine Anaemia Panel	Babesia canis vogeli, Babesia gibsoni, Ehrlichia spp, Anaplasma spp, CBC & Coombs Test	1.3ml EDTA whole blood x 2
Comprehensive Tick Fever Panel	Babesia canis canis, Babesia canis vogeli, Babesia gibsoni, Ehrlichia canis, Anaplasma spp	1.3ml EDTA whole blood
Babesia Panel	Babesia canis vogeli Babesia gibsoni	1.3ml EDTA whole blood
Babesia vogeli		1.3ml EDTA whole blood
Babesia gibsoni		1.3ml EDTA whole blood
Ehrlichia canis		1.3ml EDTA whole blood
Ehrlichia spp		1.3ml EDTA whole blood
Anaplasma spp		1.3ml EDTA whole blood
Canine Specific PCR	Test Includes	Sample Required
Canine Diarrhoea Panel	Giardia intestinalis, Isospora/Cystoisospora , Penta- trichomonas hominis	1) 3g faeces or 2) rectal swab
Canine Comprehensive Diarrhoea Panel	Cryptosporidium parvum, Giardia intestinalis, Penta- trichomonas hominis, Isospora/Cystoisospora	1) 3g faeces or 2) rectal swab
Canine Distemper Virus		 1) 1.3ml EDTA whole blood or 2) 5ml urine or 3) nasal or conjunctival dry swab or 4) lung tissue
Canine Parvovirus		1) 3g faeces or 2) rectal swab
Faecal Parasites		
i doda i didokoo	A. caninum A. ceylanicum D. caninum T. canis T. vulpis U. stenocephala	3g faeces in faecal collection pot

For all PCR tests, please do not use bacterial gel swab for sampling.

Turnaround Time: 1-3 working days

All turnaround times are calculated on receipt of samples by accessioning

Feline Specific PCR	Test Includes	Sample Required
Bordetella bronchiseptica	B. bronchiseptica	1) Pharyngeal dry swab or 2) 1ml BAL in plain sterile tube
Candidatus Mycoplasma haemominutum		1.3ml EDTA whole blood
Chlamydophila felis		Ocular, conjunctiva dry swab
Feline Anaemia Panel	Mhf, CMhm	1.3ml EDTA whole blood
Feline Anaemia Panel Comprehensive	Mhf, CMhm, FIV, FeLV	1.3ml EDTA whole blood
Feline Anaemia Panel Plus CBC	Mhf, CMhm, CBC	1.3ml EDTA whole blood
Feline Anaemia Panel Plus Complete Blood Panel	Mhf, CMhm, CBC & Biochemistry	1.3ml EDTA whole blood and 1.3mL clotted whole blood in serum tube
Feline Coronavirus		1) 1.3ml EDTA whole blood 2) 2ml ascites or body fluid
Feline Calicivirus		1) Nasal or oropharyngeal dry swab or 2) nasal biopsy or 3) lung tissue
Feline Diarrhoea Panel	Cryptosporidium species, Giardia intestinalis, Feline coronavirus, Feline panleukopenia virus, Tritrichomonas foetus	1) 3g faeces or 2) rectal swab
Feline Herpesvirus		1) Nasal dry swab or 2) pharyngeal dry swab, or 3) oral dry swab or ocular (cornea) dry swab
Feline Immunodeficiency Virus (FIV)		1.3ml EDTA whole blood
Feline Leukemia Virus (FeLV)		1.3ml EDTA whole blood
Feline Panleukopenia Virus		1) 3g faeces or 2) rectal swab
Feline Respiratory Panel	Bordetella spp., Feline calicivirus, Chlamydophila felis, Feline herpesvirus, Mycoplasma felis	Oropharyngeal ± nasal ± ocular dry swab. Fresh respiratory tissue
Mycoplasma felis		Dry swab from respiratory system or ocular dry swab
Mycoplasma haemofelis		1.3ml EDTA whole blood
Toxoplasma gondii		1) 3g faeces in fecal collection pot or 2) fresh tissue

For all PCR tests, please do not use bacterial gel swab for sampling.

Turnaround Time: 1-3 working days

All turnaround times are calculated on receipt of samples by accessioning

PCR Others	Test Includes	Sample Required
Batrachochytrium dendrobatidis		Skin swab
Clostridium perfringens		1) 1g faeces or 2) rectal swab or 3) Colonic flush
Dermatophytosis Panel	M. canis M. gypseum	Plucked hair or skin scraping placed in plain sterile tube
Giardia intestinalis		3g faeces in faecal collection pot
Lawsonia intracellularis		3g faeces in faecal collection pot or 1.3mL EDTA whole blood
Microsporum canis		Plucked hair or skin scraping placed in plain sterile tube
Microsporum gypseum		Plucked hair or skin scraping placed in plain sterile tube
Mycobacterium species	Various mycobacterium spp.	Tissues from lymph nodes or faeces
Mycobacterium Tuberculosis Complex	M. tuberculosis M. africanu M. canetti M. bovis M. microti	Tissues from lymph nodes or faeces
Mycoplasma species	This PCR is designed to have the broadest detection profile possible to the respiratory Mycoplasma spp.	Dry oropharyngeal ± nasal ± ocular swab. Fresh respiratory tissue
Pan-fungal	Sanger sequencing if gel PCR positive	
Psittacine beak and feather disease virus		1) Plucked feather or 2) Blood
Tritrichomonas foetus		3g faeces in faecal collection pot

For all PCR tests, please do not use bacterial gel swab for sampling.

Turnaround Time: 1-3 working days

All turnaround times are calculated on receipt of samples by accessioning

Rodent Specific PCR	Test Includes	Sample Required
Aspiculuris tetraptera	Pinworm detection in faeces	5 faecal pellets min from individual or pooled from the cage
Syphacia obvelata	Pinworm detection in faeces	5 faecal pellets min from individual or pooled from the cage
Syphacia muris	Pinworm detection in faeces	5 faecal pellets min from individual or pooled from the cage
Mouse hepatitis virus (MHV)	MHV detection in faeces	5 faecal pellets min from individual or pooled from the cage
Pinworm panel (includes Aspiculuris tetraptera, Syphacia obvelata and Syphacia muris)	Pinworm detection in faeces	5 faecal pellets min from individual or pooled from the cage
Pinworm + MHV panel (includes Aspiculuris tetraptera, Syphacia obvelata, Syphacia muris and MHV)	Pinworm and MHV detection in faeces	5 faecal pellets min from individual or pooled from the cage

For all PCR tests, please do not use bacterial gel swab for sampling.

SEROLOGY TESTING

Turnaround Time: 1-3 working days

All turnaround times are calculated on receipt of samples by accessioning

Tests	Diagnostic Detection	Sample Required
Giardia	Antigen	3g faeces
Canine Dirofilaria immitis and D. repens	Antigen	1.3mL clotted whole blood in serum tube
Canine Vaccination Titre (Canine Infectious Hepatitis Virus, Parvovirus, Distemper Virus)	Antibody	1.3mL clotted whole blood in serum tube
Canine Antinuclear Antibody (ANA)	Antibody	1.3mL clotted whole blood in serum tube
Feline Toxoplasma gondii IgM	Antibody	1.3mL clotted whole blood in serum tube
Feline Toxoplasma gondii IgG	Antibody	1.3mL clotted whole blood in serum tube
Feline Vaccination Titre (Feline Panleukopenia Virus, Herpes Virus, Calici Virus)	Antibody	1.3mL clotted whole blood in serum tube
Rabbit Encephalitozoon cuniculi IgM	IFAT	1.3mL clotted whole blood in serum or plasma tube
Rabbit Encephalitozoon cuniculi IgG	IFAT	1.3mL clotted whole blood in serum or plasma tube

GENETICS TESTING(R)

Turnaround time: 2 weeks

All turnaround times are calculated on receipt of samples by accessioning

Single Genetic Disease

DNA test of a specific disease or trait and includes:

Canine

Canine	
Arrythmogenic Right Ventricular Cardiomyopathy	Cobalamin Malabsorption
Cone Degeneration	 Collie Eye Anomaly
Congenital Hypothyroidism	 Canine Leucocyte Adhesion Deficiency
Congenital Myotonia	 Canine Multifocal Retinopathy Type 1
Cyclic Neutropenia / Gray Collie Syndrome	 Congenital Stationary Night Blindness
Copper Toxicosis	Degenerative Myelopathy
Exercise Induced Collapse	Fucosidosis
Factor IX / Haemophilia B	Familial Nephropathy
Factor VII Deficiency	Globoid Cell Leukodystrophy/Krabbe's Disease
Gangliosidosis	Hereditary Cataracts
Hereditary Nephropathy	Hyperuricosuria
Juvenile Dilated Cardiomyopathy	 L-2-Hydroxyglutaric Acidiuria
Ivermectin and Multi Drug Sensitivity	Malignant Hyperthermia
Musladin-Lueke Syndrome	 Mucopolysaccharidosis
Mucopolysaccharidosis VII	Multifocal Retinopathy
 Narcolepsy 	 Neonatal Cortical Cerebellar Abiotrophy
Neuronal Ceroid Lipofuscinosis	 Neonatal Encephalopathy with Seizures
Osteogenesis Imperfecta	 Pyruvate Dehydrogenase Phosphatase 1 Deficiency
Phosphofructokinase Deficiency	Primary Hyperoxaluria
Pyruvate Kinase Deficiency	Primary Lens Luxation
Primary Open Angle Glaucoma	Severe Combined Immune Deficiency
 von Willebrand's Disease 	

Feline

Blood Group	 Familial Episodic Hypokalaemic Polymyopathy
 Familial Hypertrophic Cardiomyopathy 	 Familial Hypertrophic Cardiomyopathy
Gangliosidosis 1	 Gangliosidosis 2
 Polycystic Kidney Disease 	 Pyruvate Kinase Deficiency
 Progressive Retinal Atrophy 	 Progressive Retinal Atrophy
Spinal Muscular Atrophy	

Plus many more (contact lab to ask about other specific diseases/traits).

Plus many more (contact lab to ask about other specific diseases/traits).

Sample Required

EDTA blood or dry cheek swab

GENETICS TESTING(R)

Turnaround time: 2 weeks

All turnaround times are calculated on receipt of samples by accessioning

Genetics Testing	Test Includes	Sample Required
Breed Identification Test (Turnaround time 5-6 weeks)	DNA test to identify the breeds present in a mixed-breed dog. Can also be used to verify a breed.	Dry cheek swab (please contact lab for delivery of the swab)
Canine General Plan	Degenerative Myelopathy; Hereditary Cataract; Hyperuricosuria; Multi Drug and Ivermectin Sensitivity.	EDTA blood
Canine Comprehensive Plan	Cobalamin Malabsorption; Degenerative Myelopathy; Hereditary Cataract; Hyperuricosuria; Multi Drug and Ivermectin Sensitivity; von Willebrand's Disease.	EDTA blood
Canine Breeding Plan	Degenerative Myelopathy; Hyperuricosuria; Malignant Hyperthermia; Multi Drug and Ivermectin Sensitivity.	EDTA blood
Feline General Plan	Familial Hypertrophic Cardiomyopathy; Hyperoxaluria; Polycystic Kidney Disease; Vitamin D-dependent rickets.	EDTA blood
Feline Comprehensive Plan	Haemophilia B; Familial Hypertrophic Cardiomyopathy; Hyperoxaluria; Polycystic Kidney Disease; Progressive Retinal Atrophy; Vitamin D-dependent rickets.	EDTA blood
Feline Breeding Plan	Blood Group B; Haemophilia B; Familial Hypertrophic Cardiomyopathy; Polycystic Kidney Disease.	EDTA blood

EXPORT/QUARANTINE TESTING(R)

Turnaround time: 3 weeks

All turnaround times are calculated on receipt of samples by accessioning

Tests	Sample Required
Brucella canis SAT	minimum 1mL serum in plain tube
Ehrlichia canis IFAT	minimum 1mL serum in plain tube
Leishmania infantum IFAT	minimum 1mL serum in plain tube
Leptospira canicola MAT	minimum 1mL serum in plain tube
Rabies Virus FAVN	minimum 1mL serum in plain tube

Please contact us for details.

(R) = Referral Test







LinkedIn



Website



Submission Form

CityU Veterinary Diagnostic Laboratory

Y1710, 1/F, Yellow Zone, Yeung Kin Man Academic Building City University of Hong Kong

83 Tat Chee Avenue, Kowloon Tong, Hong Kong

P: 3442 4849 F: 3442 0819 E: info@cityuvdl.com.hk

Opening Hours

 Monday to Friday
 9:00am - 7:00pm

 Saturday
 9:00am - 5:30pm

 Sunday
 2:00pm - 5:30pm

Public Holiday Closed