

University of Queensland
School of Veterinary Science
Veterinary Laboratory Services

Veterinary Science Building (Building 8114)

University of Queensland

Gatton Campus

Gatton Qld 4343

Email vls@uq.edu.au

Phone 5460 1843

Price List

August 2020



GENERAL INFORMATION

Submission of samples

Samples should be submitted in a plastic biohazard bag and accompanied by the appropriate Veterinary Laboratory Services Test Request Form. All samples must be correctly labelled and the Request Form completed as fully as possible to avoid delays in processing. Each submission, i.e., each case, should be submitted in a separate biohazard bag and accompanied by a separate Request Form. Please do not submit samples in rubber gloves or in syringes with needles attached. Such samples pose an unacceptable safety risk to laboratory staff. Veterinary Laboratory Services reserves the right to refuse to process samples that are not submitted in an appropriate manner.

Operating hours and contact

The laboratory operates Monday to Friday from 8:30 am to 4:00 pm.

Please consider the **VLS email as the primary contact** as this is monitored most routinely by all staff.

Turnaround times (occasional delays may occur due to equipment or staffing issues)

- **Clinical pathology**

Tests are performed daily with urgent interim results available within 4h and finalised and/or pathologist reviewed results available within 24h from laboratory receipt and often within the day. Turnaround times for outsourced tests depend on the laboratory to which the sample(s) are sent.

- **Microbiology**

Tests are set up on the day of receipt. Although interim reports will be issued on a daily basis whenever possible, bacterial culture generally takes 2 days and may take up to 7 days to complete. Fungal cultures may take four weeks or longer to complete.

- **Cytology**

Cytology reports are available within 24h with interim results (e.g. cell counts and protein) often available within 4h of laboratory receipt. If cytology is outsourced, turnaround time is 24-72h.

- **Parasitology**

Samples are generally processed within 2-3 days of receipt.

- **Histology**

Properly fixed samples are usually processed overnight on the day of receipt. Reporting, depending on urgency and sample type, will usually take:

- Biopsies 24 - 48 hrs, outsourced biopsies 24-72h
- Paid post mortems 2 - 4 weeks from the date of necropsy
- Teaching post mortems up to 8 weeks from the date of necropsy*

Delays in reporting will occur due to improper sample fixation and/or the presence of calcified material. Please refer to page 6 for further details.

[* Timeframe is a guideline only due to student schedules and organisation of teaching cases]

CLINICAL PATHOLOGY

PROFILES

Comprehensive Health Profiles

Includes CBC and interpretation if abnormalities & MBA

Required Samples: EDTA or Lithium Heparin, Serum tube, direct blood smear (+/-urine)

Canine/Feline/Small mammal	\$110
Equine	\$115
Ruminant/Camelid	\$110
Avian/Reptile/Other species	\$110
Add-on SDMA (canine/feline/equine)	\$29
Add-on UA	\$30

Pre-Anaesthetic Profile

Includes: CBC, Pre-Anaesthetic MBA

Required Samples: EDTA or Lithium Heparin, Serum tube, direct blood smear

Canine/Feline	\$80
Equine/Ruminant/Camelid	\$80
Add-on SDMA (canine/feline/equine)	\$29
Add-on UA	\$30

HAEMATOLOGY

Complete Blood Count (CBC)

Includes: RBC, WBC, PLT, Hb, MCV, MCHC, MCH, HCT, blood smear evaluation, manual leucocyte differential, and absolute reticulocyte count (if app), fibrinogen (if app), manual PCV, TPP, pathologist interpretation

Required Samples: EDTA, Direct blood smear

Canine/Feline/Small Mammal	\$50
Equine/Ruminant	\$55
Avian/Reptile	\$60

Includes: Manual PCV, TPP, manual WBC and differential, blood smear evaluation and pathologist interpretation

Add on SAA and iron (include serum)	\$22
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Coagulation Profile	\$85
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Includes: aPTT (activated partial thromboplastin time) and PT (prothrombin time)

Required Samples: Citrated whole blood or plasma

Cross Match	\$85
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Includes: major and minor crossmatch for one donor animal per recipient

Required Samples: EDTA and serum from the recipient and donor animals

Additional donor	\$40
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CLINICAL PATHOLOGY

IMMUNOCOMB

Avian *Chlamydomydia psittaci* antibody test\$75
Required Sample: Whole blood, serum or Lithium-Heparin plasma

BIOCHEMISTRY

Full biochemistry panel (multiple biochemical analysis – MBA)

Required Sample: Serum or Lithium-Heparin plasma

Canine/Feline/Small mammal \$60
Equine \$70
Ruminant/Camelid..... \$65
Avian and Reptile \$65

Biochemistry (1 to 6 analytes) excluding SAA \$40
Required Sample: Serum or Lithium-Heparin plasma

Bile Acids

Required Sample: Serum or Lithium-Heparin plasma

single \$40
pre & post..... \$60

Lactate.....\$55
Required Sample: Sodium Fluoride – Potassium Oxalate Plasma; NOTE: Serum cannot be used

URINE ANALYSIS

Urine analysis..... \$55
Includes: Physical characteristics, USG, Dipstick analysis, sediment analysis, UP/UC ratio

Required sample: urine in a sterile specimen jar

Add-on urine cytology \$40
Add-on culture and sensitivity (Aerobic)..... \$45

UP/UC analysis alone \$40
Required sample: urine in a sterile specimen jar

Fractional excretion.....\$80
Includes: up to 5 urine and serum analytes for fractional excretion calculation with pathologist interpretation

Required sample: urine in a sterile specimen jar and concurrently collected serum / Li-hep sample

CLINICAL PATHOLOGY

ENDOCRINE ANALYSIS (Performed on Immulite 1000)

Insulin Single / baseline	\$70
Oral glucose tolerance test (2 x insulin + glucose)	\$100
Oral glucose tolerance test (3 x insulin + glucose)	\$115

Required sample: Serum, EQUINE ONLY

Cortisol Single / baseline	\$64
ACTH Stimulation Test (2x cortisol)	\$90
Dexamethasone Suppression Test (3 x cortisol)	\$115

Required sample: Serum/plasma, 1-3 samples as per test protocol

ACTH Single/baseline (endogenous)	\$110
Thyrotropin Releasing Hormone Stimulation Test (ACTH x 2)	\$160

Required sample: EDTA – Must be spun and separated ASAP, Collect 4 ml

CYTOLOGY

Fine needle aspirate and impression smears only	\$75
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Includes: Smears stained and reviewed by duty pathologist

Glass slides

[Note - multiple lymph nodes classed as 1 site]

Additional sites	\$45/site
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Synovial fluid analysis (Single joint)	\$85
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Includes: Total protein, cell counts, mucin clot analysis and Pathologist cytology and interpretation

Synovial fluid in sterile specimen jar

2 to 3 joints	\$140
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4 & more joints	\$180
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Cavitory fluid analysis (peritoneal, pericardial, pleural etc.)	\$80
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Includes: Site specific biochemical analysis, cell counts, and Pathologist cytology and interpretation

Fluid in sterile specimen jar

Tracheal Wash/BAL/Nasal flush/Urine cytology	\$80
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Includes: Pathologist cytology and interpretation and Perl's stain (equine BAL only)

Sterile fluid in sterile specimen jar

Cerebrospinal Fluid (CSF)	\$86
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Includes: CSF protein, CSF cell counts and Pathologist cytology and interpretation

CSF in sterile specimen jar

Complete Bone Marrow examination	\$125
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Includes CBC and bone marrow evaluation

Bone marrow in EDTA, Bone marrow smear, Blood in EDTA

MICROBIOLOGY

Aerobic culture & sensitivity *	\$75
Aerobic & Anaerobic culture & sensitivity	\$95
Aerobic & Anaerobic bacterial C&S and Fungal culture	\$120
Salmonella spp. only culture (per sample)	\$45
Dermatophyte culture & microscopy	\$60
Fungal culture	\$60
Mastitis culture & sensitivity	\$55
Blood culture	\$90
Blood to be submitted in blood culture enrichment bottles	
Equine Pre-mating (bulk discounts may apply)	\$55

It is important that adequate clinical history including any antimicrobial treatment be included on the submission form to allow the determination of clinical significance of bacterial growth.

EDTA tubes are not suitable specimen receptacles for culture. Please ensure specimens are submitted in either transport swabs or sterile specimen pots (e.g., yellow tops).

*Aerobic cultures may be upgraded to Aerobic and Anaerobic culture or Aerobic and fungal culture where clinically indicated.

%Add on C&S must be requested at the submission of the urine analysis to receive the discounted price.

PARASITOLOGY

Faecal Float	\$30
Faeces (small animals); Method - fecalizer	
Faecal Egg Count	\$30
Faeces (livestock & horses); Method – McMaster	
Multiple samples & bulk testing receive price discounting	
Larval Culture & identification	\$50
Faeces (livestock & horses)	
Cryptosporidium	\$50
Faeces; Method – Acid fast stain & zinc sulphate float	
Giardia	\$50
Faeces; Method – SNAP test & Zinc sulphate float	
Parasite Identification	\$40 min
<i>This can take some time depending on host, location etc</i>	
Baermann Technique	\$50
Faeces	
Fluke Egg Sedimentation	\$50
Faeces (livestock)	
Microfilaria test for Heartworm	\$50
EDTA Blood; Method - Knott’s test; buffy coat smear & PCV visibility	

ANATOMIC PATHOLOGY

HISTOPATHOLOGY TISSUE SPECIMENS

Includes: processing, any special stains deemed necessary and formal reporting by the duty pathologist.

1 Tissue	\$120
2 Tissues	\$140
3 Tissues	\$160
4 Tissues	\$180
>4 Tissues	\$210

Whole Organ (eg brain, eye, entire spleen, limb amputations) **\$180**

SUPPLEMENTAL FEES

IHC (REFER IHC FOR COMPLETE LIST) **\$65**

NOTE: If samples arrived unfixed or appear to be potentially improperly fixed, a Pathologist will require additional fixation times of approximately 12-48hrs before processing the sample.

Samples containing Calcium (Bone and Teeth) will require a decalcification period which is dependent on the sample type and size, additional delays of up to 1-2 weeks before processing can be expected.

SLIDE SCANNING

UQ Research slides **\$5/slide**

Scanned by VLS staff; must provide a hard drive for transfer of scanned slides

UQ Researchers **\$25/hour**

Must be trained by VLS staff first (book through VLS – 8am to 4pm Monday-Friday)

Must provide hard drive for transfer of scanned slides

IHC

Diagnostic **\$65/1st**

..... **\$45/2nd**

Includes Primary antibody, slide review and report

Non UQ Researcher **\$60/1st**

..... **\$40/2nd**

Excludes Primary antibody (to be provided) slide review and report

UQ Internal research (performed by VLS staff) **\$40/1st**

..... **\$30/2nd**

Excludes Primary antibody (to be provided). *For slide review and report contact specialist pathologists

UQ Internal research (performed by researcher) **\$20/1st**

..... **\$20/2nd**

Training by VLS is required.

Excludes Primary antibody (to be provided). *For slide review and report contact specialist pathologists

NECROPSIES

ALL CADAVERS MUST BE SUBMITTED BY A VETERINARIAN

- Results are only sent to the veterinarian [no correspondence with owner]
- Invoices will be sent to submitting veterinarian

Includes gross pathology, histology, routine disposal, special stains (deemed necessary), one culture and formal reporting by the duty pathologist.

Wildlife (state owned/conservation program)	\$150
Avian/Reptile (<1kg).....	\$200
Very Small animal (<10kg).....	\$250
Small animal (<50kg puppy/kitten –litter up to 3 animals)	\$400
Small animal (<50kg adult dog/cat)	\$450
RSPCA pup/ kitten special price.....	\$350
RSPCA/ QPS ‘Black tags’ forensics assessment companion animal.....	\$400
Medium animal (<200kg pig/calf/small ruminant- herd up to 3 animals)	\$480
Large Animal (>200kg production ox/adult pig).....	\$550
Large Animal (>200kg horse).....	\$750*
Insurance horse	\$1500*
Insurance foal	\$1000*
QRIC gross diagnosis only.....	\$550
RSPCA/ QPS forensic assessment large animal.....	\$550

NECROPSIES - SUPPLEMENTAL FEES

PCR testing.....	at cost
Additional tests (culture, CP, para, IHC)	at cost
Additional special stain requested by clinician	\$30 ea
Horse Hendra testing.....	\$190
Large animal neurological supplement (horse, cow, adult pig)	\$200**
Legal consultancies/ Expert 2 nd opinion (excludes RSPCA, QPS, Racing QLD)	\$200**
Post-mortem radiographs (2 plates +\$35/ extra plate).....	\$180
Post-mortem computer tomography.....	POA
Research tissue	POA
Toxicology testing.....	POA

All non-cadavers samples (biopsies) submitted should be fixed in 10% Neutral Buffered Formalin and adhere to IATA 650 packing instructions. Please contact our Pathologist for the correct submitting procedures.

****A current Hendra vaccination certificate or Hendra exclusion results must accompany all equine submissions for necropsy. Please contact the pathologist regarding this requirement prior to submission.***

*****Includes additional examinations, reporting, statutory declarations required for legal or insurance cases.***

For submission of cadavers arrangements must be through a Pathologist BEFORE the cadaver is submitted. The duty pathologist will discuss how and when and where to submit cadavers and any other relevant information. Cadavers should be kept refrigerated at 4 degrees C but NOT FROZEN. Please refer to relevant appendices attached.

Necropsies will not be performed until the paperwork is received. It is the clinician's responsibility to notify the pathology service of the autopsy request, location of the body and submit the required paperwork.

Submission of Samples for Necropsy

What to submit?

- Notify the PM Technician of submissions and their location (vls@uq.edu.au)
- Necropsy Request Form **MUST BE SUBMITTED** with ALL animals (wildlife, clinical, livestock)
- Authority to Purchase Form must be completed for all external to UQ clients.
- ALL relevant information must be detailed – incomplete forms will cause delays in necropsy
- **CLEARLY** write name, clinic & contact details
- When relevant, adhere patient sticker to form, otherwise provide owner & animal details
- Place form in protective plastic sleeve and attach to bag/animal

What service is required?

Teaching PM

- Performed by students, under pathologist supervision
- Not suitable for legal or insurance cases
- Results are not guaranteed
- Reports, when available, are prepared by students
- Will take at least 8 weeks from the time of necropsy

Paid PM

- Performed by pathologist
- Report usually within 4 weeks from the date of necropsy

What are the disposal options?

THIS OPTION MUST BE INDICATED ON REQUEST FORM

Deep burial Collected by waste contractor and buried in a communal pit
Certificates of deep burial can be requested

Private Cremation Must be clearly stated on submission form
Must be arranged and paid for by owner
After necropsy, VLS arranges collection by nominated company

Note: VLS can hold samples for a maximum of 1 week if the owner is deciding on private cremation but must be informed prior to receiving the carcass.

Any Further Information?

Contact	PM Technician	5460 1937 or 0427 083 538
	Anatomy Technician	5460 1871 or 0401 717 235
	Pathology Interns	5460 1872
	Email:	vls@uq.edu.au

TERMS AND CONDITIONS

Delivery of results

Upon delivery of samples in good order and condition UQ VLS will use its best efforts to meet standard turnaround times for resulting. UQ VLS laboratories will advise the submitter of any samples that we receive in damaged, contaminated, or improperly preserved condition or which do not meet the sample volume requirements prior to processing if possible. Results of diagnostic analyses will be returned only to the named veterinary surgeon(s) submitting the sample unless otherwise required by state or federal regulations. Specimens will not be received from members of the general public without prior approval and arrangement. For research samples results will be returned only to the named researcher(s) submitting the sample.

Sample

Specimen packaging is the responsibility of the submitter and must conform to IATA regulations, section 650, or other regulations as amended from time to time. UQ VLS reserves the right to charge for supplied shipping containers and IATA packaging materials supplied to submitters or used in the rerouting of specimens to external laboratories or institutions.

UQ VLS reserves the right to refuse to accept or to rescind acceptance of any sample which in the judgement of UQ VLS is likely to pose an unreasonable risk in handling or analysis. You represent and warrant that any sample containing any hazardous substance that is to be delivered to UQ VLS will be packaged, labelled, transported, and delivered in accordance with applicable laws.

We may at our option either dispose of or return to you unused portions of samples found or suspected to be hazardous or to contain hazardous materials according to state and federal guidelines at the completion of analytical work or on the suspension of analytical work after material is deemed to pose unacceptable risk in handling or analysis. We may invoice you for the reasonable cost of disposal or return of the sample.

Retention of samples

After we report analytical results, we routinely retain diagnostic samples in our laboratory for the following periods: Blood 1 month; serum a minimum of 5 years; blood smears or cytology slides a minimum of 3 years; samples for bacterial and fungal culture a minimum of one week following issue of final report; parasitology samples will be held for a minimum of 1 week, histopathology wet samples 1 month; histopathology blocks for a minimum of 5 years; histology slides a minimum of 1 year.

Animal remains destined for private cremation must have this clearly indicated on the accompanying paperwork at the time of sample accession. Animal remains will be held for a maximum of 5 working days post examination prior to disposal only with prior request of the submitter. Any animal remains where private cremation is not indicated will be sent for routine UQ bulk waste disposal on the next available shipment.

UQ VLS reserves the right to use deidentified diagnostic samples and specimens for teaching and research purposes.

Retention of reports

Unless otherwise agreed in writing, UQ VLS will retain copies of analytical reports for a minimum period of 5 years. UQ VLS stores all analytical reports in electronic format. A hard copy is available on request. UQ VLS reserves the right to charge for additional copies of reports once the original copy has been submitted. UQ VLS reserves the right to use the contents of deidentified analytical reports for teaching and research purposes.

Limited Warranty and Limits of Liability

In accepting analytical work, UQ VLS warrants the accuracy of the test results for the sample as submitted. We accept no legal responsibility for the purposes for which you use the test results. Where permitted by law, all terms, conditions, warranties and representations whether express or implied, statutory or otherwise, relating to the work are excluded and we will not be under any other liability in respect of any loss or damage (including consequential loss or damage) however caused (whether by negligence or otherwise) which may be suffered or which may arise directly or indirectly with respect of the work. Subject to law UQ VLS liability is limited to our option to supply the work again or the payment of the cost to resupplying the work.

