



### What are These “New” Bacteria?

Microbiology technology has changed dramatically in the past decade and the accuracy of bacterial isolate identification has subsequently increased. Bacterial isolation by inoculation of the sample on culture media plates remains a fundamental laboratory technique. Traditionally, microorganisms have been identified from culture plates by colony morphology and microscopic and biochemical characteristics. This method of identification is still the primary technique used and is essential for production of pure cultures for other identification methods. Two newer state-of-the-art techniques utilised by QML Pathology Vetnostics for accurate and rapid microbial identification are VITEK® and MALDI-TOF systems. The VITEK® is an automated testing system for bacteria and some yeasts. The cultured microorganism is loaded onto a reagent card with wells containing substrates for various biochemical tests. The results from these tests are then compared to a large database to identify the microorganism cultured.



A probability level is given for each species identified, allowing the microbiologist to critically assess the accuracy of the results before reporting. The VITEK® may also be used to determine minimum inhibitory concentrations (MICs) of some antibiotics (further information on MICs will follow in a future newsletter).



MALDI-TOF is an acronym describing an identification technique using mass spectrometry. The sample is ionized to release a cloud of proteins which are then accelerated with an electric charge. The “time of flight” (or-TOF) of these components is determined, whereby the spectrum of proteins detected is compared to a database to identify the microorganism.

Utilisation of these new technologies has resulted in greater accuracy and consistency of bacterial identification, including organisms that were previously only identified to the genus level. The additional information will assist in developing a greater understanding of normal microflora and potential pathogens.

Please contact the laboratory to speak with a pathologist if you have any questions regarding microbiology results.

Adapted from Vetpath, October 2016 Newsletter.

### Test Protocol Information Now Available on our Website

Information pertaining to test protocols as well as specific specimen handling/submission requirements are now available on our website ([vetqml.com.au](http://vetqml.com.au)). This information is located under **Products and Services** and the **News and Events** homepage menus.

This includes information relating to dynamic endocrine tests (including ACTH Stimulation and Low Dose Dexamethasone Suppression tests) as well as those tests requiring specific collection and handling techniques (eg: Ionised Calcium, Endogenous ACTH).



## Further Expansion of Molecular Testing Available at Vetnostics

We are very pleased to announce further expansion of the molecular testing armoury offered by QML Pathology Vetnostics. These panels are available immediately. Molecular diagnostics is a rapidly advancing field. PCR based tests are sensitive and specific and we plan to have more tests coming online in the future.

Test Name and Panel Inclusions	Test/ Panel Code	Price (ex. GST)
<b>Neurological PCR Canine</b> Cryptococcus sp., Toxoplasma gondii, Distemper virus, Neospora caninum, Angiostrongylus sp.	CNP	\$90.00
<b>Neurological PCR Feline</b> Cryptococcus sp., Toxoplasma gondii, Coronavirus	FNP	\$90.00
<b>Equine Breeding Panel PCR</b> Pseudomonas aeruginosa, Klebsiella pneumoniae capsule types 1, 2 & 5	EBP	\$60.00

## Do You Have Your QML Pathology Vetnostics Pricelist?

Ensure you know where your QML Pathology Vetnostics pricelist is located. The pricelist contains information that may readily answer queries without the need for contacting the laboratory further including, that pertaining to;

- Test pricing
- Result turnaround times
- Panel codes
- Required specimen tubes/containers
- Specific tests included in our blood and PCR profiles

If you require a hard or electronic copy of our current pricelist, please contact Vetnostics via email ([vetnostics@qml.com.au](mailto:vetnostics@qml.com.au)) or phone 1300 838 765 (1300 VET QML).



## MedWay Real-Time Results... Anytime, Anywhere

MedWay, QML Pathology's web-based application, provides you with real-time access as soon as results are available at the laboratory.

Medway enables you to view your clients' results quickly, efficiently and securely over the Internet. With no paper to handle, instantaneous delivery and secure access, MedWay ensures your clients' results are available real-time, anywhere, on time, all the time. To register, visit [www.medway.com.au](http://www.medway.com.au)

## Visit Our Website: [vetqml.com.au](http://vetqml.com.au)

The website is an excellent source of information regarding;

- test requirements
- test protocols
- previous newsletters and much more.
- contact details
- supply/stores requisition forms,

Please take some time to browse the website and provide any feedback you may wish to give regarding other content you would like to have added.



## 1300 VET QML

Please ONLY call your local courier/laboratory number to request sample collections or urgent stores/supplies.

For all other enquiries, please call 1300 VET QML.



1300 VET QML (1300 838 765)



[www.vetqml.com.au](http://www.vetqml.com.au)