Newsletter September 2017

Vetnostics | QML Pathology

Welcome Dr Kathryn Jenkins

Additional American (ACVP) Boarded Clinical Pathologist

We are excited to have Dr Kathryn Jenkins join us as an additional member of the QML Vetnostics pathologist team.

After moving to New Zealand from the UK with her Airforce family, Kathryn completed her BVSc at Massey University in 2002. Following a few years in practice and two children later, Kathryn then completed a residency in clinical pathology at Massey in 2011, where she undertook a Masters Research project on feline haemoplasmas. The family moved to Townsville for the next three years, where Kathryn was a lecturer in veterinary pathology at James Cook University. Whilst there, she achieved Membership of the Australian and New Zealand College of Veterinary Scientists in veterinary pathology. A move to the University of Melbourne followed in 2014, as a diagnostic pathologist and lecturer in clinical pathology, cementing Kathryn's passion for this exciting field. Living in Queensland made a lasting impression on the family, and they leapt at a chance to relocate back to the warmth and sunshine, with Kathryn joining QML Vetnostics in September 2017.

Kathryn enjoys all aspects of pathology, particularly clinical pathology and she has a particular interest in exotic species, haematology and cytology. Kathryn achieved board certification in clinical pathology with the ACVP in 2017.

MedWay Real-Time Results... Anytime, Anywhere

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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

Visit Our Website: vetqml.com.au

The website is an excellent source of information regarding;

- test information
- 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.

Intrinsic antibiotic resistance

Appropriate antibiotic selection is important in the treatment of bacterial infections. Knowledge regarding antibiotic resistance in certain organisms can be helpful in making the right therapeutic choice.

There are two types of bacterial resistance to antibiotics, acquired and intrinsic resistance. Acquired resistance arises through mutation or exchange of genetic material between bacteria. Intrinsic resistance is a natural insensitivity in bacteria that have never been susceptible to a particular antibiotic. All (or almost all) members of a particular bacterial genus or species will exhibit the same intrinsic (innate) resistance, which can be predicted from an organism's identity. For example, Pseudomonas aeruginosa is intrinsically resistant to many classes of antibiotics due to a low number of porins in its outer membrane, which means that many antibiotics cannot penetrate to the interior of the bacterial cell.

Some common examples of intrinsic resistance are shown in the adjacent table (based on Antimicrobial Therapy in Veterinary Medicine 4th edition, 2006. Giguere S, Prescott JF et al):

Knowledge of the intrinsic resistance of a bacterial isolate can be important in practice to choose the best first line antibiotic as well as avoid inappropriate therapy. QML Vetnostics does not test bacterial isolates against antibiotics to which they are intrinsically resistant, but indicates these resistances in the reports.

	Gram positive		Gram negative				
	Streptococcus sp	Enterococcus sp	Klebsiella sp	Enterobacter sp, Citrobacter sp, Morganella	Serratia marcescens	Proteus vulgaris, Proteus penneri	Pseudomonas aeruginosa
Ampicillin/amoxycillin			●	●	●	●	●
Amoxycillin-clavulanic acid				●	●		●
Cephalosporins (1st generation)		●		●	●	●	●
Cephalosporins (2nd, 3rd generation)		●					● [a]
Tetracycline/Doxycycline						●	●
Trimethoprim-sulfamethoxazole		●					●
Macrolides (e.g. erythromycin)			●	●	●	●	●
Lincosamides (e.g. clindamycin)		●	●	●	●	●	●
Aminoglycosides [b]	● [c]	● [c]					
Chloramphenicol (and florfenicol)							●
Polymyxin B	●	●			●	●	

a includes resistance to cefovecin (Convenia®). Exceptions include ceftazidime.
b e.g. gentamicin, neomycin, framycetin.
c resistant to low dose aminoglycoside therapy.

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.