Diagnostic accuracy of a rapid immunoassay for point-of-care detection of urinary tract infection in cats

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Validated by the University of Sydney: I have been using the RapidBac-VET urine infection test for a couple of months now, and it has become an essential component of both wellness and illness check-up in the cats I see. The test has been validated by a University, so I like to believe it is accurate. However, I have done my own cross-referencing and – it is for me.

UTIs in cats: I first ‘got interested’ in the rate of bacterial urinary infections in cats when I found this report; "Occult bacterial lower urinary tract infections in cats-urinalysis and culture findings" by Annette Litster, Susan Moss, Joanne Platell and D Trott: https://www.scienceopen.com/document?vid=29472045-98dd-4c3a-8ae4-aaa93c6a3ccf

Urine samples: I knew I was not finding nearly that many positive bacterial cultures even in cats with clinic symptoms. It is not hard to get a cystocentesis sample, but sometimes you can’t get one. With RapidBac-VET, even if you only get a ml of urine off the bench top from a cat peeing blood at home, or in the carrier on the way in, you can syringe up that sample and use it immediately to differentiate infected from uninfected. And the type of bacteria that it identifies gives you a better handle on the antimicrobial that is indicated, whether you find blood on the dipstick or not.

RapidBac-VET’s accuracy: Found blood in the urine from cystocentesis in a cat? Use the kit immediately to identify if there is infection or not. Although you can’t tell then if the blood is from iatrogenic cause or cystitis, you can continue checking the urine for sediment, stones and crystals, knowing you aren’t missing the bad bugs. Microscopy is the cornerstone of urinalysis (after SG and dipstick) – but how fresh is your DiffQuik or Gramstain? How accurate is your visual analysis? Debris or Bacteria? Even if you use the Sedivue from Idexx: http://www.idexx.com.au/pdf/en_au/smallanimal/SAH%20SediVue%20Dx%20Product.pdf, RapidBac-VET will tell you which bacterial ‘family’ the cocci and rods are from. Anything you can do to increase specific use of antimicrobials has to be saving vital medications for the future!

Symptoms: Females of all species are prone to bacterial bladder infections – and as we know, cats in particular hide their symptoms till they have a fulminating problem. In female cats over the age of 10 years, Dr Litster has shown the rate of bladder / urine infection is 50%, and most commonly associated with blood (including occult) and low USG. If you are not finding similar results using standard lab procedures, then RapidBac-VET will enlighten you. Helping you and your patients by providing a more empirical approach to antibiotic use. Keep a sterile sample aside for C&S – only send it once bacteria have been found.

RapidBac-VET protocols: Wouldn’t you like to save time and your client’s money by finding out if there are bacteria to culture in their pet’s urine? Even better – they can just bring in the sample if they want to – initially anyway. Then get the whole dog in to get a sterile sample. If you aren’t taking urine samples from every cat that needs a blood test – you should be! And then checking for infection in the likely subgroup. Being thorough is what it is about.

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How do you make money out of using RapidBac-VET? Whatever margin and extra fees you put on any internal lab test – your clients are going to love a rapid response to 'does she have an infection doc?' when their dog or cat has shown painful piddling. And like I said – if you are taking blood, you should always get urine, otherwise creatinine can't be easily interpreted.

Geriatric tests: Since urinary tract infections are right up there in the list of common problems – do the test as part of it. Price it properly. Once you start uncovering the occult bacterial infections, EVERYONE in your team is going to get behind the *and bring us some urine if you can to the geriatric consultation*.

Do I have an interest in RapidBac-VET? Only as a consumer. I have zero incentive – except to get a better set of data for my patients so my clients can look after their pets properly. And it fits right into my profiles – profitably.