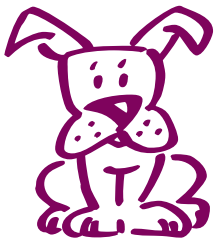
Frequently Asked Questions

becSCREEN™



What is becSCREEN™

becSCREEN is a biofilm susceptibility test which allows veterinarians with the help of Spectrum Labs, to determine wheather the tested clinical isolate from a chronic relapsing infection will be susceptible or resistant to a given antibiotic in the biofilm state, which exists in the body.

What is the difference between the is type of testing and the traditional MIC panel?

The becSCREEN susceptibility test is designed to determine the antimicrobial agent susceptibility of both planktonic (traditional media) and biofilm bacteria using state of the art technology. It provides Minimum Inhibitory Concentration (MIC, Planktonic susceptibility) as well as Minimum Biofilm Eradication Concentration (MBEC, biofilm) information.

Why is this form of testing so important?

With the advancement of antibiotics, bacteria have evolved out of shear survival. While we have continued to make strides in this area we have found ourselves at a place where we are playing catch up to the bacteria and "super bugs" like MRSA, Staph and Pseudomonas. With the advanced technology that becSCREEN allows us to tap into, we are able to provide therapeutic options for these infections in their more natural resistant state (biofilm) and create longer lasting relief for our patients who suffer.

Why does the pet seem to get better while on antibiotics and as soon as we stop he/she gets worse?

This is the true definition of recurrent chronic bacterial infection. Bacteria are in a constant state of evolution, their sheer survival depends on it. Even when seemingly dormant, bacteria in a biofilm continue to gather information and increase its genetic knowledge about threats and the environment that surrounds it. It is for this reason that with many recurrent bacterial infections, the animal improves while on treatment but gets worse as soon as that treatment has stopped. This phenomenon showcases why this testing and true eradication of the biofilm is so important.

Which antibiotics are you testing susceptibility to? Are they widely available?

The becSCREEN testing allows you to challenge an organism with 16 single antibiotics, and 35 antibiotic combinations at serum breakpoint concentrations.

How many days will it take to complete the test?

Because the incubation periods can range from 6-24 hours for gram staining as well as the biofilm portion of the testing, we will have the results in your hands within 1 week (or less) of receiving the sample.

Once we know what anitibiotics we can use for treatment, what are the next steps?

Once the results have been reported you can prescribe antibiotics in the recommended dosages.

What does a sample without growth indicate?

No growth on any of the agar plates will often indicate that there is no aerobic bacterial infection.

There may also be a possibility that the infection is bacterial, but the swab wasn't performed properly (swab should be hydrated with saline, for example before swabbing the infected site). It is also possible that the infection may be caused by yeast, or anaerobic bacteria, both of which will be further analyzed.

What are the options when a sample is resistant to all antibiotics?

In cases where bacteria are resistant to all single antibiotic treatment a secondary screen is run to allow for the testing of 35 antibiotic combinations to determine alternate treatment options. This testing is done automatically unless otherwise indicated by you, the veterinarian, at an additional cost.