BecScreen

INTERPRETING SINGLE ANTIBIOTIC RESULTS

Veterinary BioFilm Susceptibility Report

BecScreen

Lab Number			
Patient			
Order Date		Breed	**Golden Retriever**
Strain ID	**95.00% Escherichia coli**	Site Swab	
		Clinic Name	
Gram	**Negative**	Veterinarian	

Antibiotics	SIR Breakpoints	Minimum Inhibitory Concentration (MIC)		Minimum Biofilm Eradication Concentration (MBEC)	
Amikacin	S: ≤16, I: 32, R: ≥64	≤8	**S**	16	**S**
Amoxicillin + Clavulanate	S: ≤4/2, I: 8/4-16/8, R: ≥32/16	>32/16	R	>32/16	R
Ampicillin	S: ≤8, I: 16, R: ≥32	>32	R	>32	R
Azithromycin	S: ≤1, R: ≥2	8	R	>8	R
Cefazolin	S: ≤8, R: ≥32	8	**S**	>8	R
Cefovecin	S: ≤2, R: ≥4	8	R	>8	R
Cefpodoxime	S: ≤2, I: 4, R: ≥8	>8	R	>8	R
Ceftiofur	S: ≤2, I: 4, R: ≥8	>8	R	>8	R
Chloramphenicol	S: ≤8, I: 16, R: ≥32	≤4	**S**	>32	R
Ciprofloxacin	S: ≤1, I: 2, R: ≥4	≤0.5	**S**	≤0.5	**S**
Doxycycline	S: ≤4, I: 8, R: ≥16	≤2	**S**	>32	R
Enrofloxacin	S: ≤0.5, I: 1-2, R: ≥4	≤0.5	**S**	≤0.5	**S**
Gentamicin Sulfate	S: ≤2, I: 4, R: ≥8	≤2	**S**	4	I
Imipenem	S: ≤1, I: 2-8, R: ≥16	16	R	>16	R
Marbofloxacin	S: ≤1, I: 2, R: ≥4	≤0.5	**S**	≤0.5	**S**
Minocycline	S: ≤4, I: 8, R: ≥16	4	**S**	>16	R
Orbifloxacin	S: ≤1, I: 2-4, R: ≥8	≤1	**S**	≤1	**S**
Piperacillin	S: ≤16, I: 32-64, R: ≥128	>128	R	>128	R
Tetracycline	S: ≤4, I: 8, R: ≥16	≤2	**S**	>16	R
Ticarcillin / Clavulanate	S: ≤16/2, I: 32/2-64/2, R: ≥128/2	≤16/2	**S**	128/2	R
Tobramycin	S: ≤4, I: 8, R: ≥16	≤2	**S**	4	**S**
Trimethoprim / Sulfamethoxazole	S: ≤2/38, R: ≥4/76	≤0.5/9.5	**S**	4/76	R

FIGURE 1: These results indicate that there are 6 antibiotic options that can provide possible* treatment for the above infection in a biofilm state ***(SEE THOSE HIGHLIGHTED IN GREEN UNDER MBEC HEADER)***

The normal therapeutic dosage for a patient of this weight/size would be utilized, unless directed otherwise by your pharmacist or reference guide.

Note the vast increase in suggested antibiotics using standard culture and sensitivity (MIC), that would have suggested ineffective antibiotics.

*unless contraindicated

spectrum vet

S: Susceptible | I: Intermediate | R: Resistant

ility Testing is a qualitative, in-vitro diagnostic test designed for use in determining antimicrobial susceptibility of both planktonic and inary isolates. Minimum Inhibitory Concentration (MIC) results are for planktonic cells susceptibility and Minimum Biofilm Eradication results are for biofilms susceptibility. Results for each individual antibiotic may be applied to other antibiotics in the same class.

BecScreen

INTERPRETING ANTIBIOTIC COMBINATIONS RESULTS

Veterinary BioFilm Susceptibility Report

BecScreen

Lab Number
Patient Spot
Order Date
Strain ID Staphylococcus aureus

Breed Cocker Spaniel
Site Swab Skin
Clinic Name

Gram Positive

Antibiotics	SIR Breakpoints	Minimum Inhibitory Concentration (MIC)		Minimum Biofilm Eradication Concentration (MBEC)	
Amoxicillin:Clavulanate + Clindamycin	1:0.5/0.5 – 2:1/1	≤1:0.5/0.5	S	>2:1/1	R
Amoxicillin:Clavulanate + Imipenem	1:0.5/1 – 2:1/2	≤1:0.5/1	S	>2:1/2	R
Amoxicillin:Clavulanate + Orbifloxacin	1:0.5/1 – 2:1/2	≤1:0.5/1	S	2:1/2	I
Cefalexin + Clindamycin	1/0.5 – 2/1	≤1/0.5	S	>2/1	R
Cefalexin + Doxycycline	1/4 – 2/8	≤1/4	S	>2/8	R
Cefalexin + Gentamicin	1/2 – 2/4	≤1/2	S	≤1/2	S
Cefalexin + Imipenem	1/1 – 2/2	≤1/1	S	>2/2	R
Cefalexin + Orbifloxacin	1/1 – 2/2	≤1/1	S	2/2	I
Cefalexin + Trimethoprim/Sulfamethoxazole	1/2:38 – 2/2:38	≤1/2:38	S	>2/2:38	R
Chloramphenicol + Clindamycin	8/0.5 – 16/1	≤8/0.5	S	>16/1	R
Chloramphenicol + Erythromycin	8/0.5 - 16/1	≤8/0.5	S	>16/1	R
Chloramphenicol + Gentamicin	8/2 -16/4	≤8/2	S	≤8/2	S
Chloramphenicol + Orbifloxacin	8/1 -16/2	≤8/1	S	>16/2	R
Chloramphenicol + Trimethoprim/Sulfamethoxazole	8/2:38 – 16/2:38	≤8/2:38	S	>16/2:38	R
Chloramphenicol + Vancomycin	8/2 – 16/4	≤8/2	S	≤8/2	S
Clindamycin + Ampicillin	0.5/1 – 1/2	≤0.5/1	S	>1/2	R
Clindamycin + Imipenem	0.5/1 – 1/2	≤0.5/1	S	1/2	I
Clindamycin + Orbifloxacin	0.5/1 – 1/2	≤0.5/1	S	1/2	I
Clindamycin + Vancomycin	0.5/2 – 1/4	≤0.5/2	S	≤0.5/2	S
Doxycycline + Chloramphenicol	4/8 – 8/16	>8/16	R	>8/16	R
Doxycycline + Clindamycin	4/0.5 – 8/1	≤4/0.5	S	>8/1	R
Doxycycline + Erythromycin	4/0.5 – 8/1	≤4/0.5	S	>8/1	R
Doxycycline + Imipenem	4/1 – 8/2	≤4/1	S	>8/2	R
Erythromycin + Cefalexin	0.5/1 – 1/2	≤0.5/1	S	>1/2	R
Gentamicin + Amoxicillin/Clavulanate	2/1:0.5 – 4/2:1	≤2/1:0.5	S	≤2/1:0.5	S
Gentamicin + Cefalexin	2/1 – 4/2	≤2/1	S	≤2/1	S
Gentamicin + Ampicilllin	2/1 – 4/2	≤2/1	S	4/2	I
Gentamicin + Clindamycin	2/0.5 – 4/1	≤2/0.5	S	≤2/0.5	S
Gentamicin + Doxycycline	2/4 - 4/8	≤2/4	S	4/8	I
Gentamicin + Minocycline	2/4 – 4/8	≤2/4	S	4/8	I
Gentamicin + Orbifloxacin	2/1 – 4/2	≤2/1	S	≤2/1	S
Minocycline + Cefalexin	4/1 – 8/2	≤4/1	S	>8/2	R
Minocycline + Orbifloxacin	4/1 – 8/2	≤4/1	S	8/2	I
Orbifloxacin + Ampicillin	1/1 – 2/2	≤1/1	S	2/2	I
	1/4 – 2/8	≤1/4	S	2/8	I
	1/1 – 2/2	≤1/1	S	>2/2	R
illin/Clavulanate	2:38/1:0.5 - 2:38/2:1	≤2:38/1:0.5	S	>2:38/2:1	R
lin	2:38/1 - 2:38/2	≤2:38/1	S	>2:38/2	R
ycin	2:38/0.5 - 2:38/1	>2:38/1	R	>2:38/1	R
cline	2:38/4 - 2:38/8	≤2:38/4	S	≤2:38/4	S
icin	2:38/2 - 2:38/4	≤2:38/2	S	>2:38/4	R
em	2:38/1 - 2:38/2	>2:38/2	R	>2:38/2	R
xacin	2:38/1 - 2:38/2	≤2:38/1	S	≤2:38/1	S
ycin	2:38/2 - 2:38/4	≤2:38/2	S	≤2:38/2	S
	2/1:0.5 - 4/2:1	≤2/1:0.5	S	≤2/1:0.5	S
	2/1 - 4/2	≤2/1	S	≤2/1	S
	2/1 - 4/2	≤2/1	S	≤2/1	S

S: Susceptible | I: Intermediate | R: Resistant

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FIGURE 2: These results indicate that there are 14 antibiotic options that can provide possible* treatment for the above infection in a biofilm state ***(SEE THOSE HIGHLIGHTED IN GREEN UNDER MBEC HEADER)***

The normal therapeutic dosage for a patient of this weight/size would be utilized, unless directed otherwise by your pharmacist or reference guide.

Note the vast increase in suggested antibiotics using standard culture and sensitivity (MIC), that would have suggested ineffective antibiotics.

*unless contraindicated