

Table S1. Respiratory sampling technique, information on treatment outcome, prior antimicrobial treatment, bacterial culture and antimicrobial susceptibility results as well as information on antimicrobial treatment regimen of individual dogs (n=19) with bacterial pneumonia. “Initial antimicrobial” refers to the antibiotics administered prior to the availability of bacterial culture results and “Corrected antimicrobial” refers to possible changes made during the treatment. “Per oral antimicrobial” refers to the treatment dogs received at home after hospital discharge. Antimicrobial treatment was either discontinued 5–7 days after CRP normalization in (referred as “CRP guided”) or administered according to conventional recommendations.

BAL= Bronchoalveolar lavage, TTW= Transtracheal wash, TTA = Transthoracic aspirate AMC= Amoxycillin/Clavulanic acid, TMS= Trimethoprim/Sulfamethoxazole

Dog	Survived	Prior antibiotics	Sampling method	Bacterial culture results	Antimicrobial susceptibility	Initial antimicrobial	Corrected antimicrobial	Per oral antimicrobial	CRP guided
1	Yes	Yes	BAL	<i>Actinomyces coleocanis</i>	Penicillin S Ciprofloxacin R	Ampicillin 20 mg/kg iv. TID Enrofloxacin 5 mg/kg BID		AMC 22 mg/kg TID	No
2	Yes	Yes	BAL	<i>Nocardiosis spp.</i>		AMC 20 mg/kg po. BID Enrofloxacin 8 mg/kg po. SID		AMC 20 mg/kg BID Enrofloxacin 8 mg/kg SID	No
3	Yes	Yes	BAL	<i>Mycoplasma spumans</i>		AMC 22 mg/kg TID		AMC 21 mg/kg TID	No
4	Yes	Yes	TTA	<i>Str. canis</i>	Penicillin G S TMS S Erythromycin R Clindamycin R Doxycycline S Enrofloxacin R Ampicillin S	Ampicillin 22 mg/kg iv. TID		Amoxycillin 19 mg/kg TID	No
5	Yes	Yes	TTW	No growth		Ampicillin 22 mg/kg iv. TID Enrofloxacin 10 mg/kg iv. BID	At day 3: Doxycycline 7,5 mg/kg po BID	Doxycycline 9 mg/kg BID	No
6	Yes	No	BAL	<i>Str. zooepidemicus</i>	Ampicillin S Azithromycin S Cephalothin S Clindamycin S Doxycycline I Penicillin G S	Ampicillin 20 mg/kg iv		AMC 15 mg/kg TID	No
7	Yes	Yes	BAL	<i>Actinomyces canis</i>	AMC S Clindamycin S	AMC 22 mg/kg po.TID		AMC 22 mg/kg TID	No
8	Yes	No	TTW	No growth		AMC 22 mg/kg iv TID		AMC 22 mg/kg BID	No
9	Yes	Yes	BAL	<i>Pasteurella canis</i>	AMC S Ampicillin S Enrofloxacin S Doxycycline S TMS S	AMC 20 mg/kg po BID		AMC 20 mg/kg BID	No
10	Yes	No	BAL	<i>Pasteurella canis</i> , <i>Mycoplasma sp.</i>	AMC S Doxycycline S Enrofloxacin S Gentamicin I TMS S	Doxycycline 5 mg/kg po BID		Doxycycline 5 mg/kg BID	Yes
	Dog	Prior	Sampling	Bacterial culture results	Antimicrobial	Initial antimicrobial	Corrected	Per oral antimicrobial	CRP

		antibiotics	method		susceptibility		antimicrobial		guided
11	Yes	Yes	BAL	<i>E. coli</i>	Ampicillin I AMC S TMS S Enrofloxacin S Gentamicin S	Ampicillin 22 mg/kg iv. QID Enrofloxacin 10 mg/kg iv. BID		AMC 19 mg/kg TID Enrofloxacin 8,5 mg/kg BID	Yes
12	Yes	Yes	TTW	<i>Haemophilus sp.</i>	Ampicillin S Enrofloxacin S TMS S AMC S Gentamicin S	Ampicillin 22 mg/kg iv. TID Enrofloxacin 10 mg/kg iv. BID	At day 3: Doxycycline 8 mg/kg po. BID Cefuroxime 20 mg/kg iv. TID	Doxycycline 8 mg/kg BID Cefuroxime 20 mg/kg BID	Yes
13	Yes	No	TTW	<i>Str. canis</i>	Penicillin G S TMS R Erythromycin S Clindamycin S	Doxycycline 7,5 mg/kg po BID		Doxycycline 7,5 mg/kg BID	Yes
14	Yes	Yes	BAL	<i>E. coli</i>	Ampicillin S AMC S TMS S Enrofloxacin S Gentamicin S	Ampicillin 22 mg/kg iv. QID Enrofloxacin 10 mg/kg iv. BID		AMC 20 mg/kg TID	Yes
15	Yes	No	BAL	<i>Haemophilus sp.</i>	AMC S Doxycycline S Enrofloxacin S TMS S	Doxycycline 10 mg/kg po. BID		Doxycycline 10 mg/kg po. BID	Yes
16	Yes	No	TTW	<i>Pasteurella canis</i>	Ampicillin S AMC S TMS S Enrofloxacin S Gentamicin S Doxycycline S	AMC 22 mg/kg iv. TID		AMC 21 mg/kg TID	Yes
17	Yes	Yes	BAL	<i>Actinomyces canis</i>	Ampicillin S Doksicycline S Ciprofloxacin S Gentamycin S	AMC 22 mg/kg iv. TID		AMC 22 mg/kg BID	Yes
18	No	No	TTA	<i>E. coli</i>	Ampicillin I AMC I TMS S Enrofloxacin S Gentamicin S Doxycycline S	Ampicillin 22 mg/kg iv. QID Enrofloxacin 10 mg/kg BID			
19	No	Yes	Sputum	<i>E. coli</i> <i>Arcanobacter sp.</i>	Ampicillin R AMC R TMS R Enrofloxacin R Gentamicin R Cefpodoxime R Cefuroxime sodium R Doxycycline R Amikacin S Meropenem S	Ampicillin 22 mg/kg iv. TID Enrofloxacin 10 mg/kg iv. BID	At day 2: Ampicillin 22 mg/kg iv. TID Gentamycin 6,6 mg/kg SID		