Corrigendum

Corrigendum to “Application of PK/PD Modeling in Veterinary Field: Dose Optimization and Drug Resistance Prediction”

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In the article titled “Application of PK/PD Modeling in Veterinary Field: Dose Optimization and Drug Resistance Prediction” [1], there was an error in Table 3. Some antibiotic groups were not correctly classified in Table 3 as raised by Benini and Fumagalli in [2]. The correct statement is that ketolides exhibit concentration-dependent killing and have prolonged persistence and the PK/PD indices responsible for efficacy are AUC₂₄/MIC. Clindamycin and vancomycin exhibit time-dependent killing and have moderate to prolonged persistence and PK/PD indices responsible for efficacy are AUC₂₄/MIC. The corrected table is shown as follows (see Table 3).

TABLE 3: Classification of antibacterial drugs according to pharmacokinetics and pharmacodynamics indices: different groups of antibacterials, their bacterial effect, and PK/PD integration most closely related their clinical effect.

Group	Drugs	PK/PD indices	Activity	Bacterial effect	Duration of PAE	References
1	Aminoglycosides	C_{max}/MIC or AUC/MIC	Primarily bactericidal	Concentration-dependent	Prolonged	Martinez et al., 2014 [17]
	Fluoroquinolone	AUC/MIC	Bactericidal	Concentration-dependent	Prolonged	Martinez et al., 2014 [17]
	Enrofloxacin e	$C_{peak}/MIC/AUC : MIC$	Bacteriostatic bactericidal	Concentration-dependent		Balaje et al., 2013 [49]
	Azithromycin	AUC_{24}/MIC				
	Tetracycline	AUC_{24}/MIC	Bacteriostatic	Time-dependent	Prolonged	Martinez et al., 2014 [17]
	Colistin	AUC/MIC		Concentration-dependent	Short	Hengzhuang et al., 2012 [59]
	Metronidazole	$C_{peak}/MIC/AUC : MIC$		Concentration-dependent		Paul et al., 2005 [60]
2	Ketolides	AUC/MIC	Bacteriostatic or bactericidal	Concentration-dependent	Prolonged	Martinez et al., 2014 [17]
	Penicillins Carbapenems Cephalosporins	$\%T > MIC$	Bactericidal	Time-dependent	Non or brief against Gram-negative and prolonged against Gram-positive	Martinez et al., 2014 [17]
	Lincosamides (clindamycin)	AUC/MIC	Bacteriostatic	Time-dependent	Brief	Martinez et al., 2014 [17]
	Trimethoprim	$\%T > MIC$	Bacteriostatic alone and bactericidal with combination	Time-dependent	Brief	Martinez et al., 2014 [17]
	Glycopeptides (vancomycin)	AUC/MIC	Bactericidal	Time-dependent	Prolonged	Martinez et al., 2014 [17]

References

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