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Pharmacokinetic/pharmacodynamic modelling of antibacterials in vitro and in vivo using bacterial growth and kill kinetics: the minimum inhibitory concentration versus stationary concentration

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#	Paper	IF	Citations
119	Pharmacodynamic model to describe the concentration-dependent selection of cefotaxime-resistant <i>Escherichia coli</i> . 2005 , 49, 5081-91		31
118	Standardization of pharmacokinetic/pharmacodynamic (PK/PD) terminology for anti-infective drugs: an update. 2005 , 55, 601-7		387
117	Relationship between minimum inhibitory concentration and stationary concentration revisited: growth rates and minimum bactericidal concentrations. <i>Clinical Pharmacokinetics</i> , 2005 , 44, 767-8	6.2	17
116	Colistin methanesulfonate is an inactive prodrug of colistin against <i>Pseudomonas aeruginosa</i> . 2006 , 50, 1953-8		276
115	Antibacterial dosing in intensive care: pharmacokinetics, degree of disease and pharmacodynamics of sepsis. <i>Clinical Pharmacokinetics</i> , 2006 , 45, 755-73	6.2	205
114	Pharmacology of the fluoroquinolones: a perspective for the use in domestic animals. 2006 , 172, 10-28		250
113	Effect of treatment duration on pharmacokinetic/pharmacodynamic indices correlating with therapeutic efficacy of ceftazidime in experimental <i>Klebsiella pneumoniae</i> lung infection. 2006 , 50, 2919-25		22
112	Integration of pharmacokinetic and pharmacodynamic indices of marbofloxacin in turkeys. 2006 , 50, 3779-85		44
111	Mechanism-based pharmacodynamic models of fluoroquinolone resistance in <i>Staphylococcus aureus</i> . 2006 , 50, 2957-65		33
110	Integration of pharmacokinetic/pharmacodynamic modeling and simulation in the development of new anti-infective agents - minimum inhibitory concentration versus time-kill curves. 2007 , 2, 849-60		15
109	Concentration-effect relationship of ceftazidime explains why the time above the MIC is 40 percent for a static effect in vivo. 2007 , 51, 3449-51		51
108	Continuous infusion of beta-lactams. 2007 , 13, 598-606		81
107	Mechanism-based pharmacokinetic-pharmacodynamic modeling of antimicrobial drug effects. 2007 , 34, 727-51		87
106	The Hill equation: a review of its capabilities in pharmacological modelling. 2008 , 22, 633-48		479
105	Farmacocinética del metronidazol y la gentamicina en dosis única preoperatoria para profilaxis antibiótica quirúrgica en cirugía colorrectal. 2008 , 32, 77-82		1
104	Pharmacokinetics and pharmacodynamics in the development of anti-tuberculosis drugs. 2008 , 88 Suppl 1, S65-74		32
103	The Pharmacokinetics of Metronidazole and Gentamicin in a Single Preoperative Dose as Antibiotic Prophylaxis in Colorectal Surgery. 2008 , 32, 77-82		

102	Mechanism-based pharmacokinetic-pharmacodynamic models of in vitro fungistatic and fungicidal effects against <i>Candida albicans</i> . 2008 , 52, 937-43	27
101	Antibiotic resistance--what's dosing got to do with it?. 2008 , 36, 2433-40	239
100	Reassessment of recommended imipenem doses in febrile neutropenic patients with hematological malignancies. 2009 , 53, 785-7	33
99	Development and qualification of a pharmacodynamic model for the pronounced inoculum effect of ceftazidime against <i>Pseudomonas aeruginosa</i> . 2009 , 53, 46-56	81
98	A simple in vitro PK/PD model system to determine time-kill curves of drugs against <i>Mycobacteria</i> . 2009 , 89, 378-85	24
97	Pharmacokinetics and pharmacodynamics of antimicrobial drugs. 2009 , 5, 475-87	23
96	Functional relationship between bacterial cell density and the efficacy of antibiotics. 2009 , 63, 745-57	165
95	Pharmacokinetic issues for antibiotics in the critically ill patient. 2009 , 37, 840-51; quiz 859	598
94	Population dynamics of antibiotic treatment: a mathematical model and hypotheses for time-kill and continuous-culture experiments. 2010 , 54, 3414-26	53
93	Semimechanistic pharmacokinetic-pharmacodynamic model with adaptation development for time-kill experiments of ciprofloxacin against <i>Pseudomonas aeruginosa</i> . 2010 , 54, 2379-84	19
92	In vitro pharmacodynamic models to determine the effect of antibacterial drugs. 2010 , 65, 186-201	65
91	PA-824 exhibits time-dependent activity in a murine model of tuberculosis. 2011 , 55, 239-45	61
90	Pharmacological considerations for the proper clinical use of aminoglycosides. 2011 , 71, 2277-94	71
89	Relationship between pharmacodynamic indices and killing patterns in vitro. 2011 , 6, 613-6	3
88	A novel approach to pharmacodynamic assessment of antimicrobial agents: new insights to dosing regimen design. 2011 , 7, e1001043	28
87	Evaluation of pharmacokinetic/pharmacodynamic relationships of PD-0162819, a biotin carboxylase inhibitor representing a new class of antibacterial compounds, using in vitro infection models. 2012 , 56, 124-9	2
86	Mathematical model of plasmid-mediated resistance to ceftiofur in commensal enteric <i>Escherichia coli</i> of cattle. <i>PLoS ONE</i> , 2012 , 7, e36738	3-7 46
85	Importance of High Creatinine Clearance for Antibacterial Treatment in Sepsis. 2012 , 171-197	

84	Pharmacodynamic models: parameterizing the hill equation, Michaelis-Menten, the logistic curve, and relationships among these models. 2013 , 23, 648-61		23
83	Antimicrobial treatment of febrile neutropenia: pharmacokinetic-pharmacodynamic considerations. <i>Clinical Pharmacokinetics</i> , 2013 , 52, 869-83	6.2	9
82	Pharmacodynamics of marbofloxacin for calf pneumonia pathogens. 2013 , 94, 675-81		15
81	Pharmacokinetic-pharmacodynamic modeling of antibacterial drugs. 2013 , 65, 1053-90		192
80	Pharmacodynamics of florfenicol for calf pneumonia pathogens. 2013 , 172, 340		18
79	Optimization of anti-pseudomonal antibiotics for cystic fibrosis pulmonary exacerbations: VI. Executive summary. 2013 , 48, 525-37		24
78	Quantifying subpopulation synergy for antibiotic combinations via mechanism-based modeling and a sequential dosing design. 2013 , 57, 2343-51		56
77	Principles of Applied Pharmacokinetic-Pharmacodynamic Modeling. 2014 , 63-79		8
76	Continuous Infusion of Beta-lactam Antibiotics. 2014 , 223-255		0
75	Meropenem in children receiving continuous renal replacement therapy: clinical trial simulations using realistic covariates. 2014 , 54, 1421-8		14
74	Novel rate-area-shape modeling approach to quantify bacterial killing and regrowth for in vitro static time-kill studies. 2015 , 59, 381-8		11
73	Comparison of different in vitro tests to detect <i>Cryptococcus neoformans</i> not susceptible to amphotericin B. 2015 , 179, 359-71		7
72	Two mechanisms of killing of <i>Pseudomonas aeruginosa</i> by tobramycin assessed at multiple inocula via mechanism-based modeling. 2015 , 59, 2315-27		64
71	Time-kill kinetics of antibiotics active against rapidly growing mycobacteria. 2015 , 70, 811-7		49
70	The PK/PD Interactions of Doxycycline against <i>Mycoplasma gallisepticum</i> . <i>Frontiers in Microbiology</i> , 2016 , 7, 653	5.7	23
69	Distinguishing Antimicrobial Models with Different Resistance Mechanisms via Population Pharmacodynamic Modeling. 2016 , 12, e1004782		32
68	Personalised beta-lactam therapy: basic principles and practical approach. 2016 , 40,		2
67	General Concepts of Pharmacodynamics for Anti-infective Agents. 2016 , 3-27		4

66 Aminoglycoside Dosing in Obesity. **2016**, 39-44

65 Translational PK/PD of anti-infective therapeutics. **2016**, 21-22, 41-49 16

64 Pharmacodynamics and differential activity of nitrofurantoin against ESBL-positive pathogens involved in urinary tract infections. **2016**, 71, 2883-9 14

63 In vitro pharmacodynamic modelling of anidulafungin against *Candida* spp. *International Journal of Antimicrobial Agents*, **2016**, 47, 178-83 14.3 5

62 Pharmacokinetics and pharmacodynamics in antibiotic dose optimization. **2016**, 12, 93-114 35

61 Pharmacodynamics of Ceftazidime and Avibactam in Neutropenic Mice with Thigh or Lung Infection. **2016**, 60, 368-75 68

60 A multistate tuberculosis pharmacometric model: a framework for studying anti-tubercular drug effects in vitro. **2016**, 71, 964-74 33

59 Time-Kill Kinetics and In Vitro Antifungal Susceptibility of Non-fumigatus *Aspergillus* Species Isolated from Patients with Ocular Mycoses. **2016**, 181, 225-33 5

58 Prediction of in vivo and in vitro infection model results using a semimechanistic model of avibactam and aztreonam combination against multidrug resistant organisms. **2017**, 6, 197-207 20

57 Potentiation of ceftazidime by avibactam against β -lactam-resistant *Pseudomonas aeruginosa* in an in vitro infection model. **2017**, 72, 1109-1117 10

56 Optimizing β -lactams treatment in critically-ill patients using pharmacokinetics/pharmacodynamics targets: are first conventional doses effective?. **2017**, 15, 677-688 45

55 Pharmacodynamics of nitrofurantoin at different pH levels against pathogens involved in urinary tract infections. **2017**, 72, 3366-3373 9

54 Pharmacodynamics of fosfomycin against ESBL- and/or carbapenemase-producing Enterobacteriaceae. **2017**, 72, 3374-3381 19

53 Can a pharmacokinetic/pharmacodynamic (PKPD) model be predictive across bacterial densities and strains? External evaluation of a PKPD model describing longitudinal in vitro data. **2017**, 72, 3108-3116 14

52 Patient-specific modelling of regional tobramycin concentration levels in airways of patients with cystic fibrosis: can we dose once daily?. **2017**, 72, 3435-3442 11

51 Effects of intramuscularly administered enrofloxacin on the susceptibility of commensal intestinal *Escherichia coli* in pigs (*sus scrofa domestica*). **2017**, 13, 378 5

50 Monte Carlo Simulations Suggest Current Chlortetracycline Drug-Residue Based Withdrawal Periods Would Not Control Antimicrobial Resistance Dissemination from Feedlot to Slaughterhouse. *Frontiers in Microbiology*, **2017**, 8, 1753 5.7 7

49 Prophylactic cefazolin concentrations in morbidly obese patients undergoing sleeve gastrectomy: do we achieve targets?. *International Journal of Antimicrobial Agents*, **2018**, 52, 28-34 14.3 7

48	A mathematical model-based analysis of the time-kill kinetics of ceftazidime/avibactam against <i>Pseudomonas aeruginosa</i> . 2018 , 73, 1295-1304		17
47	Modeling the Emergence of Antibiotic Resistance in the Environment: an Analytical Solution for the Minimum Selection Concentration. 2018 , 62,		21
46	MIC-based dose adjustment: facts and fables. 2018 , 73, 564-568		150
45	The effects of major burn related pathophysiological changes on the pharmacokinetics and pharmacodynamics of drug use: An appraisal utilizing antibiotics. 2018 , 123, 65-74		27
44	Experimental design and modelling approach to evaluate efficacy of β -lactam/ β -lactamase inhibitor combinations. 2018 , 24, 707-715		12
43	Soup with or without meatballs: Impact of nutritional factors on the MIC, kill-rates and growth-rates. 2018 , 125, 23-27		9
42	PK/PD Approaches. 2018 , 1-23		1
41	Clinical Pharmacokinetics and Pharmacodynamics of Ceftazidime-Avibactam Combination: A Model-Informed Strategy for its Clinical Development. <i>Clinical Pharmacokinetics</i> , 2019 , 58, 545-564	6.2	14
40	Luminescent Nanosensors for Ratiometric Monitoring of Three-Dimensional Oxygen Gradients in Laboratory and Clinical <i>Pseudomonas aeruginosa</i> Biofilms. 2019 , 85,		7
39	A translational pharmacokinetic/pharmacodynamic model to characterize bacterial kill in the presence of imipenem-relebactam. 2019 , 89, 55-61		22
38	PK/PD Approaches. 2019 , 1-23		2
37	Optimizing dosing of nitrofurantoin from a PK/PD point of view: What do we need to know?. 2019 , 43, 1-9		10
36	Differential susceptibility to tetracycline, oxytetracycline and doxycycline of the calf pathogens <i>Mannheimia haemolytica</i> and <i>Pasteurella multocida</i> in three growth media. 2019 , 42, 52-59		5
35	Use of Supplemented or Human Material to Simulate PD Behavior of Antibiotics at the Target Site In Vitro. 2020 , 12,		3
34	Failure of target attainment of beta-lactam antibiotics in critically ill patients and associated risk factors: a two-center prospective study (EXPAT). 2020 , 24, 558		24
33	Evaluation of pooled human urine and synthetic alternatives in a dynamic bladder infection in vitro model simulating oral fosfomycin therapy. 2020 , 171, 105861		3
32	The pharmacokinetic/pharmacodynamic paradigm for antimicrobial drugs in veterinary medicine: Recent advances and critical appraisal. 2021 , 44, 172-200		14
31	Development of New Tuberculosis Drugs: Translation to Regimen Composition for Drug-Sensitive and Multidrug-Resistant Tuberculosis. 2021 , 61, 495-516		9

30	Antimicrobial pharmacokinetics and preclinical models to support optimized treatment approaches for uncomplicated lower urinary tract infections. 2021 , 19, 271-295		2
29	Direct-from-specimen microbial growth inhibition spectrums under antibiotic exposure and comparison to conventional antimicrobial susceptibility testing.		2
28	Evaluating a tylosin dosage regimen for treatment of <i>Staphylococcus delphini</i> infection in mink (Neovison vison): a pharmacokinetic-pharmacodynamic approach. 2021 , 52, 34		0
27	State of the art in cystic fibrosis pharmacology optimization of antimicrobials in the treatment of cystic fibrosis pulmonary exacerbations: III. Executive summary. 2021 , 56, 1825-1837		2
26	Therapeutic Drug Monitoring in Non-Tuberculosis Mycobacteria Infections. <i>Clinical Pharmacokinetics</i> , 2021 , 60, 711-725	6.2	2
25	Influence of the H1 Antihistamine Mepyramine on the Antibacterial Effect of Florfenicol in Pigs. 2021 , 8,		
24	Stochastic response of bacterial cells to antibiotics: its mechanisms and implications for population and evolutionary dynamics. 2021 , 63, 104-108		0
23	Pharmacometrics in Bacterial Infections. 2014 , 229-258		12
22	The pharmacodynamic inoculum effect from the perspective of bacterial population modeling.		2
21	Synergistic Antibacterial Potential and Cell Surface Topology Study of Carbon Nanodots and Tetracycline Against. 2021 , 9, 626276		0
20	Dose Adjustment and Pharmacokinetics of Antibiotics in Severe Sepsis and Septic Shock. 2007 , 122-146		
19	Dose Adjustment and Pharmacodynamic Considerations for Antibiotics in Severe Sepsis and Septic Shock. 2008 , 97-136		2
18	Modeling the emergence of antibiotic resistance in the environment: an analytical solution for the minimum selection concentration.		
17	Antibacterial Profile of a Microbicidal Agent Targeting Tyrosine Phosphatases and Redox Thiols, Novel Drug Targets. <i>Antibiotics</i> , 2021 , 10,	4.9	0
16	PK/PD Analysis by Nonlinear Mixed-Effects Modeling of a Marbofloxacin Dose Regimen for Treatment of Goat Mastitis Produced by Coagulase-Negative Staphylococci. <i>Animals</i> , 2021 , 11,	3.1	0
15	PK/PD Approaches. 2020 , 1047-1069		
14	Mathematical Modeling for an MTT Assay in Fluorine-Containing Graphene Quantum Dots.. <i>Nanomaterials</i> , 2022 , 12,	5.4	0
13	Direct-from-specimen microbial growth inhibition spectrums under antibiotic exposure and comparison to conventional antimicrobial susceptibility testing.. <i>PLoS ONE</i> , 2022 , 17, e0263868	3.7	1

12	Modelling the synergistic effect of bacteriophage and antibiotics on bacteria: killers and drivers of resistance evolution.		1
11	Pharmacodynamic Parameters of Pharmacokinetic/Pharmacodynamic (PK/PD) Integration Models.. <i>Frontiers in Veterinary Science</i> , 2022 , 9, 860472	3.1	1
10	Kinetics of Bacterial Adaptation, Growth, and Death at Didecyldimethylammonium Chloride sub-MIC Concentrations.. <i>Frontiers in Microbiology</i> , 2022 , 13, 758237	5.7	2
9	DataSheet1.docx. 2017 ,		
8	Table1.XLSX. 2017 ,		
7	Pharmacokinetic-pharmacodynamic models for time courses of antibiotic effects. <i>International Journal of Antimicrobial Agents</i> , 2022 , 106616	14.3	1
6	Mechanisms of <i>Listeria monocytogenes</i> disinfection with Benzalkonium chloride: from molecular dynamics to kinetics of time-kill curves.		
5	The evolution of spectrum in antibiotics and bacteriocins. 2022 , 119,		0
4	Population pharmacokinetics and pharmacodynamics of imipenem in neutropenic adult patients. 2022 ,		0
3	Pharmacokinetics, Pharmacodynamics, and Dosing Considerations of Novel β -Lactams and β -Lactam/ β -Lactamase Inhibitors in Critically Ill Adult Patients: Focus on Obesity, Augmented Renal Clearance, Renal Replacement Therapies, and Extracorporeal Membrane Oxygenation. 2022 , 11, 6898		2
2	Modelling the synergistic effect of bacteriophage and antibiotics on bacteria: Killers and drivers of resistance evolution. 2022 , 18, e1010746		0
1	The Use of Antibiotics and Antimicrobial Resistance in Veterinary Medicine, a Complex Phenomenon: A Narrative Review. 2023 , 12, 487		1