









THE UNIVERSITY



Workshop Lyon, France July 6-7, 2023



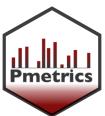
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Bridging microbiology and pharmacology: understanding Monte-Carlo simulations, Probability of Target Attainment, PK/PD breakpoints, and associated antibiotic dosages with Pmetrics

Organizers and sponsors

- Laboratory of Biometrics and Evolutionary Biology, University of Lyon, France
- University Hospitals of Lyon, Lyon France
- AP2POP association, Lyon, France
- Laboratory of Applied Pharmacokinetics and Bioinformatics, University of Southern California, Los Angeles, USA
- CRE RESPOND, University of Queensland, Brisbane, Australia





Faculty

- Michael Neely, Julian Otalvaro (USC)
- Sylvain Goutelle, Gérard Lina, Laurent Bourguignon, Romain Garreau (Lyon)
- Jean-Baptiste Woillard (Limoges)
- Anne-Grete Märtson (Liverpool)
- Jason Roberts, Xin Liu, Patty Mitre (UQ)

Workshop contacts

- Scientific contact: sylvain.goutelle@univ-lyon1.fr
- Secretariat: marc.grenet@univ-lyon1.fr

Venue: School of Medicine and Pharmacy, University Lyon 1, Rockefeller campus, 8 avenue Rockefeller, 69373 Lyon cedex 08, France

















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Target Audience: up to 30 physicians, pharmacists, clinical microbiologists, biomedical scientists or trainees with an interest in microbiology and pharmacology.

Workshop objectives

- Understanding the role of PK/PD in setting MIC breakpoints and associated antibiotic dosages
- Code a published population PK model into Pmetrics R package
- Run Monte-Carlo simulations with Pmetrics and analyze results for various dosage regimens
- Perform probability of target attainment (PTA) analysis with Pmetrics
- Identifying PK/PD breakpoints and associated standard and high dosages
- Assessing drug-related and patient-related factors influencing PTA and antibiotic dosages

Workshop agenda (may be subject to minor changes)

Thursday, 6 July 2023

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10:00	Welcome and review of pre-workshop material		
11:00	Course #1: Population PK models, nonlinear mixed-effects models		
12:00	Lunch		
13:15	Course #2 : Monte-Carlo simulations		
14:15	Hands-on #1: implementing a published model and running a Monte-Carlo		
	simulation with Pmetrics		
15:45	Coffee and tea break		
16:15	Course #3: PK/PD targets, MIC distributions, MIC breakpoints of antimicrobials		
17:00	Course #4: Probability of Target Attainment (PTA), Pharmacodynamic Index (PDI),		
	Cumulative fraction of Response (CFR), and PK/PD breakpoints		
17:30	Adjourn		

Friday, 7 July 2023

8:30	Hands-on #2: computing PTA for a basic PK model with Pmetrics		
10:00	Coffee and tea break		
10:30	Course #5: drug-related and patients-related factors influencing PTA results		
11:15	Hands-on #3: factors influencing PTA with Pmetrics		
12:15	Lunch		
13:30	Course #6: using PK/PD for defining standard and high dosage regimens		
14:15	Hands-on #4: identifying effective dosages regimens for continuous and intermittent		
	administration of a beta-lactam with Pmetrics		
15:30	Wrap-up and Q&A		
16:00	Adjourn		















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Workshop –July 6-7, 2023 – Lyon, France

REGISTRATION FORM

<u>Please fill out, scan and e-mail</u> this form to Marc Grenet <u>marc.grenet@univ-lyon1.fr</u> and contact@ap2pop.org.

If you claim for student registration (limited spots), join a copy of your 2022-2023 academic ID. Reservations will only be acknowledged and participation in the course guaranteed after receipt of both the registration form AND the registration fee.

<u>Cancellation policy</u>: there will be no refund of fees if registration is canceled 30 days or less before the course begins. Substitution of another person from the same organization is acceptable.

First name:		Last name:			
Title/degree:		Organization:			
Business address:					
City:		ZIP code:			
Country:		Phone number:			
E-mail address:					
Special diet:					
Registration (includes workshop sessions, course material, lunches, coffee/tea breaks)					
	☐ Regular = 500 €	☐ Student = 350 €			
Payment must	be made by bank transfer to	association AP2POP:			
IBAN: FR76 1450 6000 2272 8319 7386 383 ; BIC: AGRIFRPP845					



indicating "Workshop Lyon" and the participant's name.



