

RSS00.25 Introduction to Pharmacokinetic and Pharmacodynamic Analysis detailed program

Module 1 - General concepts of pharmacokinetics

5 hours of plenary sessions, 4-5 hours of group assignments, 3-4 hours of lectures

Monday 3rd July

- 9:00 – 10:00 General introduction PK Summer School
10:00 – 11:00 Pre-test
09:00 All lectures for Module 1 are available in Brightspace:
- General concepts of PK and PD, ADME (*by Godelief Janssen-van den Hurk*)
- Drug-drug interactions (*by David Burger*)
- PK in special patient populations (*by Saskia de Wildt*)

Thursday 6th July

- 9:00 – 09:45 General discussion and questions about the lectures
09:45 – 11:00 Presentations assignments Module 1

Module 2 – Understanding pharmacokinetic/pharmacodynamic modelling and simulation

1.5 hours of plenary sessions, 8-9 hours of plenary assignments, 3-4 hours of lectures

Monday 10th July

- 09:00 – 09:30 Introductions Module 2 PK Summer School
09:30 All lectures for Module 2 are available in Brightspace:
- Types of PK/PD relations (*by Rob ter Heine*)
- Compartmental versus non-compartmental analyses (*by Rob ter Heine*)
- General concepts in PK/PD modelling and simulation (*by Rob ter Heine*)
- General concepts of Physiologically Based PK modelling (*by Jolien Freriksen*)
- Application of PK modelling in establishing dose recommendations (*by Elin Svensson*)
- TDM-based model-informed dosage individualization (*by Thierry Buclin*)
- Computer-assisted bayesian inference for TDM (*by Yann Thoma*)

Wednesday 12th July

- 09:00 – 09:45 General discussion and questions about the lectures

Thursday 13th July

- 09.00 – 09.30 SimCyp PB-PK simulations lecture 1
09.30 – 10.45 Hands-on 1 in break-out rooms
10.45 – 11.15 Discussion 1 in break-out rooms
11.15 – 11.45 Break
11.45 – 12.15 PB-PK simulations lecture 2
12.15 – 13.30 Hands-on 2 in break-out rooms
13.30 – 14.00 Discussion 2 in break-out rooms

Friday 14th July

- 09.00 – 09.15 Introduction to hands-on assignment
09.15 – 12.15 Hands-on Tucuxi drug model implementation in break-out rooms
12.15 – 13.00 Break
13.00 – 14.30 Presentation of the results by the groups and discussion

Module 3 – Pharmacokinetic analyses

2.5 hours of plenary sessions, 5 hours of group assignments, 3 hours of lectures

Monday 17th July

09:00 – 09:30

Introductions Module 3 PK Summer School

09:30

All lectures for Module 3 are available in Brightspace:

- Non-compartmental PK analysis and bioequivalence (*by Angela Colbers*)
- Application of non-compartmental PK analysis (*by Elise Smolders*)
- Pharmacokinetic research in a resource-limited setting (*by Adrie Bekker*)
- Pharmacokinetic research from a regulatory perspective (*by Marc*

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Thursday 20th July

9:00 – 09:45

General discussion and questions about the lectures

10:00 – 11:30

Presentations assignments Module 3

Module 4 – Introduction to bioanalytical methods

2.5 hours of plenary sessions, 3-4 hours of individual assignments, 4 hours of lectures, 1 hour test

Monday 24th July

09:00 – 09:30

Introductions Module 4 PK Summer School

09:30

All lectures for Module 4 are available in Brightspace:

- Bioanalytical methods and regulatory aspects (*by Lindsey te Brake*)
- PK research and bioanalysis (*by Lindsey te Brake*)
- How to start a bioanalysis laboratory? (*by Rob Aarnoutse*)
- Therapeutic Drug Monitoring sample trail (*by Rob Aarnoutse*)

Thursday 27th July

9:00 – 09:45

General discussion and questions about the lectures

09:45 – 11:00

Discussion assignments Module 4

11:30 – 12:30

Final test