

**ECVPT Pharmacokinetics Workshop 2023: basic concepts for future professionals  
(foundation module) Tentative programme**

**DAY 1 Monday, 27th March 2023**

<b>Time</b>	<b>Activity</b>	<b>Activity description</b>	<b>Academic staff</b>
13:00-13:30		Meet and Greet - Overview of the course	
13:30-14:30	Lecture 1	<b>Rationale for the effective use of pharmacokinetics and pharmacodynamics in drug development</b>	VARIOUS LECTURERS (PLT)
14:30-15:00	Lecture 2	<b>What needs to be validated for an analytical technique;</b> Statistical methods to test Linearity, accuracy, precision, agreement... of an analytical technique	VARIOUS LECTURERS (LP)
15:00-15:30	Afternoon break, coffee		
15:30-16:00	Lecture 3	<b>Body clearance: underlying concepts</b>	VARIOUS LECTURERS (PLT)
16:00-17:30	Lecture 3	<b>Body clearance: an overview</b>	VARIOUS LECTURERS (PLT)
17:30-18:00	<i>Exercise 1 (start)</i>	<b>Building and validation of a calibration curve with Phoenix/WinNonlin;</b> Notion of residuals, weighting factors as proposed by Phoenix/WNL but also $1/X$ and $1/X^2$ using a user vector, back calculations, including with an equation having a quadratic components etc.	VARIOUS TUTORS (LP)
18:00	End of the day		
Evening exercise	<i>Exercise 1 (continuation)</i>	<b>Building and validation of a calibration curve with Phoenix/WinNonlin;</b>	VARIOUS TUTORS LP (access to room after 18h)

**DAY 2 Tuesday, 28th March 2023**

<b>Time</b>	<b>Activity</b>	<b>Activity description</b>	<b>Academic staff</b>
8:30-09:30	Lecture 4	<b>The half-life: an overview</b>	VARIOUS LECTURERS (LP)
09:30-10:30	Lecture 5	<b>Volume of distribution: an overview</b>	VARIOUS LECTURERS (PLT)
10:30-11:00	Morning break, coffee		
11:00-12:00	Lecture 6	<b>Bioavailability (rate and extent):</b> protocols (plasma, urine, metabolites), estimation, interpretation	VARIOUS LECTURERS (LP)
12:00-13:30	Lunch		
13:30-14:30	Lecture 7	<b>Non compartmental analysis</b>	VARIOUS LECTURERS (ABM)
14:30-16:00	<i>Exercise 2</i>	<b>A test exercise to illustrate NCA with physiological interpretation</b>	VARIOUS TUTORS (ABM LP PLT)
16:00-16:30	Afternoon break, coffee		
16:30-18:00	Lecture 8	<b>Plasma protein binding: an overview</b>	VARIOUS LECTURERS (ABM)
Evening	Dinner at the Brookmans park hotel		

### DAY 3 Wednesday, 29th March 2023

Time	Activity	Activity description	Academic staff
08:30-09:30	<i>Exercise 3</i>	<b>Estimation of Bmax, Kd</b> and NS using linear and Non Linear regression: <b>application to clinical situations</b>	VARIOUS TUTORS (PLT LP)
09:30-10h30	Lecture 9	<b>Modeling:</b> goal, main concepts, usefulness, limits ...of different classes of PK models (The primary goal is to review 1- and multi-compt models)	VARIOUS LECTURERS (PLT)
10:30-11:00	Morning break, coffee		
11:00-12:00	<i>Exercise 4 (start)</i>	<b>Phoenix WinNonlin: one compartment model</b> , IV dosing and oral dosing	VARIOUS TUTORS (LP PLT)
12:00-13:30	Lunch		
13:30-15:30	<i>Exercise 4 (continuation)</i>	<b>Phoenix WinNonlin: one compartment model</b> , IV dosing and oral dosing	VARIOUS TUTORS (LP PLT)
15:30-16:00		<b>End of the workshop / debriefing / evaluations</b>	LP PLT