UCL Université catholique de Louvain

# WFARM2241

*2015-2016*

# Pharmacokinetics and clinical biology

| 4.0 credits | 30.0 h + 15.0 h | 1q |
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| Teacher(s) : | Wallemacq Pierre (coordinator) ; Elens Laure ; |
| Language : | Français |
| Place of the course | Bruxelles Woluwe |
| Main themes : | Chronic administration, different dosage regimen, pathologies (renal or hepatic), age (children or elderly) and overdosing (toxicokinetics) will be discussed regarding the pharmacokinetics modifications involved. The different mechanisms causing drug interactions will be reviewed. Major analytical methods used in therapeutic drug monitoring including some pitfalls are described, together with the main pharmacological classes taking advantage of therapeutic drug monitoring (aminoglycosides, immunosuppressive drugs, antiepileptics, cardiotonics,<br>). |
| Aims : | The purpose of this lecture is to demonstrate and emphasized the clinical interest in optimizing some therapeutics. It is crucial for future health specialists to be aware that number of physiopathological situations may influence drug disposition (age, renal or hepatic insufficiency, drug interactions,<br>). The lecture will demonstrate that both pharmacokinetics and therapeutic drug monitoring are necessary in this approach.<br>*The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".* |
| Content : | The method is based on a 30h academic lecture. Chronic administration, different dosage regimen, pathologies (renal or hepatic), age (children or elderly) and overdosing (toxicokinetics) will be discussed regarding the pharmacokinetics modifications involved. The different mechanisms causing drug interactions will be reviewed. Major analytical methods used in therapeutic drug monitoring including some pitfalls are described, together with the main pharmacological classes taking advantage of therapeutic drug monitoring (aminoglycosides, immunosuppressive drugs, antiepileptics, cardiotonics,<br>). |
| Other infos : | Pre-requisite: lecture of general pharmacology including pharmacokinetics, drug metabolism, clinical biochemistry and general pathology.<br>Evaluation: written exam<br>Lectures are given with power-point slides shows accessible through the website iCampus |
| Faculty or entity in charge: | FARM |

## Programmes / formations proposant cette unité d'enseignement (UE)

| Intitulé du programme | Sigle | Credits | Prerequis | Acquis d'apprentissage |
|---|---|---|---|---|
| Master [120] in Biochemistry and Molecular and Cell Biology | BBMC2M | 4 | - | |
| Master [120] in Pharmacy | FARM2M | 4 | - | |