# ACTIVITY DESCRIPTION FORM (ADF)

**Accreditation Council for Pharmacy Education**

135 S. LaSalle Street, Suite 4100 Chicago, IL 60603-4810

Phone (312) 664-3575 Fax (312) 664-7008 http://www.acpe-accredit.org

**UNIVERSAL ACTIVITY NUMBER (UAN):** **0475-0000-18-033-L05-P**

**Provider Name:** European Association of Hospital Pharmacists (EAHP)

**Cancel**

**Joint Providership(s):** 0000 No Joint Providership (L)

**Activity Type:** Application

**Activity Title:** Therapeutic drug monitoring as a tool for therapy optimisation

**Learning Objectives:**
(Pharmacists)

At the completion of this activity, the participant will be able to:
• recognise characteristics of drugs that make them good candidates for TDM
• describe appropriate indications for TDM
• understand the factors that may affect measured concentrations
• list and discuss the importance of information needed when requesting drug concentration
• interpret measured drug concentrations
• adjust dose based on TDM
• apply basic concept of clinical pharmacokinetics to TDM
• understand indications for TDM
• understand the importance of time sampling
• understand factors that might affect drug concentrations
• describe analytical needs for therapeutic drug monitoring
• understand the importance of pharmacogenomics biomarkers
• understand the importance of genetic factors in the response to drugs
• describe a pharmacokinetic model for a drug using terms of Volume of distribution, elimination rate constant, renal clearance
• explain the error and residual error in the used population model
• describe the pharmaconynamic properties of beta lactam antibiotics
• describe the pharmacodynamic properties of aminoglycoside antibiotics
• describe the pharmacodynamic properties of the fluoroquinolone antibiotics
• explain why and how TDM should be used in psychiatry and neurology
• differentiate between therapeutic and dose related reference ranges
• explain how genotyping may be combined with TDM
• use TDM for identification of pharmacokinetic abnormalities
• understand basic clinical pharmacokinetics of oncolytics and immunosuppressants
• comprehend the rationale for TDM of oncolytics and immunosuppressants
• understand that TDM software tools affect efficiency not effectiveness
• understand the interaction between TDM processes, people and tools
• gain insight in how software tools support the TDM process cycle
• understand the key components of TDM software tools
• evaluate TDM software tools current available on the market (long/short list)
• assess the need for dose adjustment
• adjust the dose of drugs based on the results of TDM
• interpret measured drug concentration
• develop a Plan for therapeutic drug monitoring
• provide TDM service
• know how population pharmacokinetic models are developed
• know how population pharmacinetic values are calculated into individual values
• interprete drug concentrations in blood and give recommendations for clinical decision making
• give recommendations in case of adverse drug reactions
• find out if low drug concentrations are due to poor adherence or due to rapid clearance
• decide if the dose should be maintained in spite of high drug concentrations
• understand current TDM concepts of oncolytic and immunosuppressive agents
• implement TDM of oncolytics and immunosuppressants
• interpret measured drug concentrations based on patient's characteristics
• understand the need for dose adjustment
• describe the difficulties and solutions for the implementation of a TDM program in an environment of scarce resources
• describe, present and discuss a business plan to implement such a program in their own hospital setting

**Activity Length:** 13.1 **Contact Hours Or** 1.31 **CEUs.**

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**Target Audience:** Pharmacists

**Home Study Format(s):**

**Keyword(s):**
Administration
Antimicrobial Stewardship
Certification
Drug Dosing
Drug Information
Drug Manufacturing
Education
Ethics
Health Literacy
Infectious Disease
Managed Care
Medication Therapy Management
Metrics
Monitoring
New Drugs
Pharmacodynamics
Pharmacokinetics
Safety
Technology

**Initial Release Date:** 10/19/2018

**Planned Expiration Date:** 10/21/2018

**Originally Submitted By:** Jennie De Greef

**Submission Date:** 07/12/2018

**Last Modified By:** Jennie De Greef

**Modification Date:** 07/30/2018

| Date | Location | Date Entered | Format | Cosponsor | Listed in P.L.A.N ® | Cancel |
|---|---|---|---|---|---|---|
| 10/19/2018 | Warsaw, Poland, | 07/12/2018 | Seminar | No Joint Providership | | |
| 10/20/2018 | Warsaw, Poland, | 07/12/2018 | Seminar | No Joint Providership | | |