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): **0475-0000-19-037-H05-P**

Provider Name: European Association of Hospital Pharmacists (EAHP)

Cancel

Joint Providership(s): 0000 No Joint Providership (H)

Activity Type: Knowledge

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: 5.4 **Contact Hours Or** 0.54 **CEUs.**

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

Target Audience:	Pharmacists
Home Study Format(s):	Video/Film Recording
	Website (Url https://learning.bmj.com/learning/course-intro/.html?courseId=10064435&locale=en_GB)
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:	07/25/2019
Planned Expiration Date:	07/25/2022
Originally Submitted By:	Jennie De Greef
Submission Date:	04/25/2019
Last Modified By:	Jennie De Greef
Modification Date:	07/24/2019