CME COURSE TITLE	**Problem solving in psychopharmacotherapy using pharmacokinetic and pharmacogenetic tests**
COURSE DIRECTORS	**Course director:** Prof. Pierre Baumann, SWITZERLAND **Co-directors:** Mrs. Eveline Jaquenoud Sirot, SWITZERLAND, Prof. Dr. Christoph Hiemke, GERMANY, Prof. Dr. med. Finn Bengtsson, SWEDEN
COURSE LEVEL	Basic
EDUCATIONAL OBJECTIVES	Clear learning objectives are: Acquire a basic knowledge about the metabolism of psychotropic drugs by cytochrome P-450 and other polymorphic enzymes. Distinction between poor, extensive and ultrarapid metabolisers. Acquire a good knowledge about the practical procedure to carry out TDM and pharmacogenetic tests (e.g. how to use TDM for dose optimising, for recognition of pharmacokinetic interactions, for testing compliance, how to avoid mistakes resulting in useless TDM, etc); use of a decision tree for the combination of TDM and pharmacogenetic tests; use of Consensus guidelines (e.g. how to interpret the value of reference ranges).
COURSE DESCRIPTION	Many problems such as non-response, pharmacokinetic interactions with clinical consequences and adverse effects (pharmacovigilance) may be observed in patients submitted to psychopharmacotherapy (1, 2). Therapeutic drug monitoring and pharmacogenetic tests represent useful tools for optimising therapy. This course will be centered on the following issues: 1. Introduction: Definition of TDM in psychiatry, theoretical background, practical recommendations; cytochrome P-450: polymorphisms, clinical consequences of a genetic particularity in metabolism, practical recommendations (genotyping, phenotyping); 2) **Presentation of cases and situations, interactive**: TDM alone and in combination with pharmacogenetic tests: general situations; situations of interactions, combination treatments; in special populations (elderly, adolescents, somatically ill patients); pharmacovigilance (3). **Outlook - future.** There will be oral presentations of each speaker, general presentation and presentation of cases and situations, interactive (eg questions by the audience concerning special situations experienced in their practice). As major instruments, the following material will be used for the course: 1) Hiemke C, Baumann P, Bergemann N, Conca A, Dietmaier O, Egberts K, Fric M, Gerlach M, Greiner C, Gründer G, Haen E, Havemann-Reinecke U, Jaquenoud Sirot E, Kirchherr H, Laux G, Lutz UC, Messer T, Müller MJ, Pfuhlmann B, Rambeck B, Riederer P, Schoppek B, Stingl J, Uhr M, Ulrich S, Waschgler R, Zernig G, AGNP TDM group (2011) AGNP consensus guidelines for therapeutic drug monitoring in psychiatry: Update 2011. Pharmacopsychiatry 44: 195-235 2) Jaquenoud Sirot E, Van der Velden JW, Rentsch K, Eap CB, Baumann P (2006). Therapeutic drug monitoring and **8** pharmacogenetic tests as tools in pharmacovigilance. Drug Safety 29 (9):735-768.
PREREQUISITE KNOWLEDGE	None
COURSE METHODS AND MATERIAL	Case studies; debate; slides; handouts
RECOMMENDED READINGS	It could be useful to read the following TDM Guidelines before the course. They will be sent by e-mail to registered participants before the EPA congress 2013, but they are also freely available at any time on the website: www.agnp.de : Hiemke C, et al., AGNP TDM group (2011) AGNP consensus guidelines for therapeutic drug monitoring in psychiatry: Update 2011. Pharmacopsychiatry 44: 195-235
TARGET AUDIENCE	Psychiatrists or other medical doctors, pharmacists, psychologists working in psychiatric hospitals or in private practice, in liaison psychiatry, residents, .. Staff from pharmaceutical companies.
LANGUAGES	English, German, French, Swedish, Italian