

AGENDA

Drug Development Committee – Interest Group Meeting

Date: October 23, 2017

Time: 10:00 - 11:30

Venue: Austria Center Vienna (ACV), Bruno-Kreisky-Platz 1, 1220 Vienna, Austria

Room: Room -2.32-3 (Meeting Room 5)

Level: -2

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1. Welcome

Introduction and opening remarks (Antony Gee, Chair of the Committee)

2. Approval of agenda

3. Who we are: DDC in the EANM - Mission, interaction and involvements

4. Recent activities within the committee: Education/ESMIT, Scientific programme, External collaborations

5. Meet the Expert: Use of PET to assess the impact of transporters on drug disposition

by Oliver Langer, PhD (Department of Clinical Pharmacology & Department of Biomedical Imaging and Image-guided Therapy, Medical University of Vienna, Vienna, Austria; Center for Health and Bioresources, AIT Austrian Institute of Technology GmbH, Seibersdorf, Austria) followed by audience feedback and discussion

This talk will give examples how PET can be used to assess drug-transporter interactions in different organ systems (e.g. brain and liver) both in preclinical species and in humans. Nuclear imaging techniques, such as PET and SPECT, play a well-established role in drug development. One very commonly employed and particularly powerful approach is the use of imaging to perform target occupancy studies (“dose finding studies”). A less commonly employed, but potentially also very powerful approach is to directly radiolabel the drug of interest and use imaging to assess its distribution within the body (“microdosing” or “phase 0” studies). There is an increasing awareness that membrane transporters belonging to the solute carrier (SLC) or adenosine triphosphate-binding cassette (ABC) families exert a pronounced impact on drug disposition. Changes in the activities of these transporters may lead to changes in the disposition of substrate drugs, which can have a severe impact on drug safety and efficacy. Consequently, regulatory authorities (e.g. EMA, FDA) require drug developers to assess the interaction of their drug candidates with key transporters playing a critical role in drug disposition. Nuclear imaging with radiolabeled drugs is an emerging translational tool to assess the influence of drug transporters on drug disposition in vivo and may in the future complement currently used approaches in drug development.

6. Other items (New members; New ideas for the committee; Suggestions regarding next meetings; Important dates etc.)

7. How to join the Interest group?

8. Closing Remarks