

Vienna, Austria

Annual Congress of the
European Association of Nuclear Medicine
October 21 –25, 2017
Vienna, Austria

CME 5 (EANM/SNMMI)

Monday, October 23, 08:00-09:30

Session Title

Theranostics and Companion Drugs

Chairs

Cathy Cutler (SNMMI, Upton)

Jacek Kozirowski (Linköping)

Programme

08:00 - 08:30 Hans-Jürgen Wester (Munich): Theranostic Concepts, Exemplified on PSMA and CXCR4

08:30 - 09:00 Cathy Cutler (SNMMI, Upton): Development of Novel Theranostics

09:00 - 09:30 Jacques Barbet (Nantes): Pretargeting in the Context of Theranostics and Companion Diagnostics

Educational Objectives

- 1) Audience will learn the current state of theranostic pairs.
- 2) Examples will be presented of the use of theranostic pairs in optimizing patient treatment.
- 3) Audience will learn the current state of pretargeting approaches in theranostics.
- 4) Examples will be presented of the use of theranostic pairs and quantitative analysis of tissue and tumour uptake in optimizing patient treatment.
- 5) Audience will gain knowledge on the benefit of theranostics.
- 6) Gain knowledge on future availability of novel radionuclides.

Summary

The session will highlight the benefit of using theranostics for in-vivo assessing parameters that determine, affect, limit or predict the outcome of one or alternative treatment options. Consequently, the session will show how theranostics aid in treating the right patient at the right time with the right approach, intensity and spatial extension. Further it will highlight the development of new radionuclides, radiopharmaceuticals and conceptual strategies towards theranostics.

The session will also highlight the benefit of using antibody pretargeting for evaluating the expression of potential target antigens using short lived positron emitters. In addition, the use of imaging to determine uptake and clearance of pretargeted radionuclides in a theranostic approach to assess the feasibility of pretargeted therapy, select the most appropriate radionuclides and plan optimized treatment schedule will be demonstrated by preclinical and clinical examples.

Key Words

Companion diagnostics, Novel, Pretargeting, Radioisotopes, Radionuclides, Theranostics