

*Barcelona, Spain*

### **Pre-Congress Symposium 3**

Radiopharmacy + Oncology & Theranostics + Dosimetry Committee

**Saturday, October 12, 09:00-12:00**

#### **Session Title**

**Alpha Therapy - Practical Aspects on Chemistry and Applications**

#### **Chairpersons**

Meltem Ocak (Istanbul, Turkey)

Frank Bruchertseifer (Karlsruhe, Germany)

#### **Programme**

09:00 - 09:25 Frank Bruchertseifer (Karlsruhe, Germany): An Overview of Production and Radiochemistry of Alpha-Emitting Radionuclides

09:25 - 09:50 Søren Holm (Copenhagen, Denmark): Safe Handling of Alpha-Emitting Radionuclides During Preparation and Application of Radiopharmaceuticals

09:50 - 10:15 Martina Benesova (Heidelberg, Germany): Stability of Alpha-Emitting Radiopharmaceuticals - Impact on TATs

#### **10:15 - 10:45 Coffee Break**

10:45 - 11:05 Nicolas Chouin (Nantes, France): Recoil Effect and its Impact on TATs Dosimetry

11:05 - 11:25 Sandra Heskamp (Nijmegen, Netherlands): Antibody Derivatives as a Vehicle for TAT - Advantages, Disadvantages, Future Prospects

11:25 - 11:45 Matthias Miederer (Mainz, Germany): Future Directions for Targeted Alpha Therapy Beyond Prostate Cancer

11:45 - 12:00 Discussion

#### **Educational Objectives**

1. General information on production, radiochemistry and safe handling of alpha-emitting radionuclides
2. General information on stability of alpha-emitting radiopharmaceuticals and impacts on TAT dosimetry
3. General review on current developments in alpha-emitting antibody-based radiopharmaceuticals and future directions in TAT beyond prostate cancer.

#### **Summary**

In this symposium practical aspects on chemistry and applications of targeted alpha therapy (TAT) included production, radiochemistry and safe handling of alpha emitting radionuclides & radiopharmaceuticals will be discussed. A state-of-the art overview of the development of alpha radiopharmaceuticals and effects of their stabilities on dosimetry will be covered. Furthermore, current developments and future directions in TAT beyond prostate cancer will be reviewed from clinical perspective.

#### **Key Words**

Alpha-emitting radionuclides & radiopharmaceuticals, stability, dosimetry