CME Session 2
Translational Molecular Imaging & Therapy + Oncology and Theranostics + Radiopharmaceutical Sciences Committee
**Sunday, September 10, 09:45-11:15**

Session Title
**FAP - Moving Towards Therapy**

Chairpersons
Chiara M Grana (Milan, Italy)
Pedro Fragoso Costa (Essen, Germany)

Programme
09:45 - 10:05  Jacopo Millul (Basel, Switzerland): FAP inhibitors and substrates
10:05 - 10:25  Wolfgang Fendler (Essen, Germany): Dosimetric Aspects in FAP Radioligand Therapies
10:25 - 10:45  Cristina Nanni (Bologna, Italy): RLT Using Cancer-Associated Fibroblasts as Target in Solid Tumors: First Clinical Experiences
10:45 - 11:05  Frank Rösch (Mainz, Germany): Theranostic FAP Inhibitors: From Monomers for Diagnosis to Dimers for Therapy?

Educational Objectives
1. To know the basis of these new theranostic radiopharmaceuticals in oncology
2. To understand what can be the possible therapeutic approaches together dosimetric evaluations and knowledges
3. To give practitioners an overview of what can be the future of theranostic FAP inhibitors

Summary
In this CME about past, present and future of FAP, we will explored, in order to give an update on new strategies of imaging and therapy.

Exploring the tumor microenvironment (TME) by molecular imaging is an attractive field of investigation in oncology (and not only in oncology) and PET imaging with FAPI-PET is now gaining attention as “pan-tumoral” radiopharmaceuticals, also because it can lead to a better comprehension of the tumor heterogeneity.

The first interesting imaging results have brought to the evaluation of the feasibility of radioligand therapy with FAPI inhibitors, targeting the TME in different tumor subtypes.

This session starts with an update about different radiopharmaceuticals, then it moves toward clinical therapeutical applications, based also on dosimetric studies.

We will conclude with a glance to the future of new and different molecules, remembering that the discover and then the clinical use of a radiopharmaceutical comes from an important team work, in order to assess the efficacy of FAPI-based imaging and therapy and to understand if, and when, the translation into clinical practice of this new promising approach would be feasible.
Key Words
infection; Tumor Microenvironment, FAP, FAP-i, functional imaging, radioligand therapy