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Exploring tumor heterogeneity targeting cancer cell and tumor micro-environment

SCIENTIFIC DIRECTORS

Francesco Ceci - Laura L. Travaini



Introduction

Molecular imaging to identify specific oncological targets, such as prostate cancer, neuroendocrine tumors, or breast cancer is gaining attention. At present, the most promising developments in clinical research are related to the prostate-specific membrane antigen (PSMA). PSMA represents an ideal target both for imaging and therapy, namely in the advanced stages of hormone-resistant prostate cancer as well as in early stages with hormone-sensitive disease.

New molecular targets have recently been identified to explore the tumor-microenvironment, especially towards cancer-associated fibroblasts (CAFs).

In this scenario, radiopharmaceuticals for PET imaging (FAPi PET) have recently been developed. These new tracers consist of small peptide inhibitors targeting the fibroblast activation protein (FAP). Therefore, the study of the tumor micro-environment with molecular imaging, and any future developments as theranostic agents, represents one of the areas of greatest scientific interest in nuclear medicine.

Faculty

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Silvia Telo

Neospecialist of Nuclear Medicine, University of Bologna

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Programme

Friday, May 27th 2022

- 9.00 Greetings from IEO Scientific Director and Director of Oncology and Hemato-Oncology Department of Milan's University - R. Orecchia, G. Vago
- 9.15 Conference Introduction - F. Ceci, L.L. Travaini
- Session I: Tumor Heterogeneity in NET and Prostate Cancer**
Moderators: F. Ceci, L. L. Travaini
- 9.30 Overview on novel PET radiopharmaceuticals targeting cancer cells and tumor micro-environment - M. Riondato
- 9.45 Targeting the somatostatin receptor in Neuroendocrine Tumors. Advances in molecular imaging and peptide-receptor radionuclide therapy - V. Ambrosini, N. Fazio
- 10.15 Discussion
- 10.30 Coffee Break
- 10.45 New therapeutic approaches in prostate cancer. PSMA radioligand therapy vs. new target therapies - S. Bracarda, A. Gafita
- 11.15 Exploring tumor heterogeneity in prostate cancer with PET imaging and whole-body MRI - P. Castellucci, G. Petralia
- 11.45 Discussion
- Hands-On Session I: reporting PSMA-PET in advanced prostate cancer**
Moderators: L. Muraglia
- 12.00 How to report PSMA-PET in advanced prostate cancer. A survival guide for residents in nuclear medicine - Nuclear Medicine Residents, University of Milan
- 12.30 Lunch
- Session II: Tumor Heterogeneity and Tumor Micro-Environment**
Moderators: P. Castellucci, S. Bracarda
- 13.30 Exploring the tumor micro-environment. From genetics and molecular pathology to new drug development - R. Danesi, G. Curigliano
- 14.00 New approaches in the definition of treatment planning: the role of artificial intelligence and radiomics - S. Volpe, G. Baroni
- 14.30 Discussion
- 15.00 Molecular mechanisms in the tumor microenvironment: the role of Cancer Associated Fibroblasts - S. Pece
- 15.30 Imaging the Cancer Associated Fibroblasts with FAPi PET image - F. Giesel
- 16.00 Discussion
- Hands-On Session II: practical introduction to FAPi PET image interpretation**
Moderators: F. Mattana
- 16.15 Let's try to report some FAPi PET. Can we make it? - S. Telo
- 16.45 Wrap-Up

Registration's fee

Registration is free of charge subject to availability

Certificate of attendance and CME credits

The course is accredited ECM (JUST FOR ITALIAN PARTICIPANTS) for:

Medical Oncology, Nuclear Medicine, Radiology, Radiotherapy, Urology, General Surgery

Provider IEO ID 207-347328

Credits: 6

We remind you that in order to be entitled to ECM training credits it is compulsory to: attend 90% of the training hours, fill in the event evaluation questionnaire, take and pass the learning test.



Location
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