ESMO ADVANCED COURSE PROGRAMME
BIOMARKERS FOR PRECISION CANCER MEDICINE
Zurich, Switzerland
25-26 November 2022

CO-CHAIRS: Samra Turajlic, United Kingdom
Benedikt Westphalen, Germany

SPEAKERS: Philippe G. Aftimos, Belgium
Michael von Bergwelt, Germany
Bernd Bodenmiller, Switzerland
Sebastian Försch, Germany
Valerio lebba, France
Kevin R. Litchfield, United Kingdom
Umberto Malapelle, Italy
Nirupa Murugaesu, United Kingdom
Noelia Tarazona Llavero, Spain
Daniela S. Thommen, Netherlands
Emile E. Voest, Netherlands

LEARNING OBJECTIVES

- To recognize the different modalities of molecular assays needed for contemporary practice of precision oncology
- To determine the different technologies available for biomarker testing and the context where these technologies are most effective, depending on the nature of the biomarker and the availability of biological samples
- To comprehend the different modalities of cfDNA testing and their applications in disease monitoring, development of resistance, and minimal residual disease assessment
- To recognize the applications of multiplex immunophenotyping, spatial transcriptomics and artificial intelligence applied to tissue samples
- To define the contribution of multidisciplinary teams and tumour boards for therapy decision making

Friday, 25 November 2022

09:00-09:10 Welcome and introduction
10’ Welcome and Learning Objectives Introduction
Samra Turajlic, UK and Benedikt Westphalen, DE

09:10-10:40 Session 1 – Emerging technologies to enable precision cancer medicine
20’ Pre-clinical models to predict clinical outcomes (avatar, organoid and explants, co-clinical trials, etc...)
Daniela S. Thommen, NL

20’ Multiplexed immunophenotyping and transcriptomics
Bernd Bodenmiller, CH
20’  AI in clinical decision making (*not limited to pathology, including challenge of clinical adoption, black box, etc.*)
Sebastian Försch, DE

30’  Discussion

10:40-11:10  *Coffee break*

11:10-12:10  **Session 2 — Liquid biopsies**

20’  Experimental and translational techniques (*cell-free tumour DNA, plasma, urine, CSF*)
Umberto Malapelle, IT

20’  Present clinical applications (*including differentiation of I/O responses*)
Noelia Tarazona Llaver, ES

20’  Discussion

12:10-13:10  *Lunch*

13:10-14:30  **Session 3 — Embedding precision oncology into clinical practice: What is needed & what is possible**

20’  The DRUP experience: Clinically relevant genomic biomarkers beyond drug-target relationships
Emile E. Voest, NL

20’  100K Genome project
Nirupa Murugasu, UK

40’  Discussion

14:30-15:00  *Coffee break*

15:00-16:30  **Session 4 — Emerging and investigational biomarkers Immuno-Oncology**

20’  Personalised immunotherapy (*emerging biomarkers, beyond PDL-1, prediction of responsive resistance, side effects adoptive cell therapy, future proofing for immuno-oncology*)
Kevin R. Litchfield, UK

20’  Immune checkpoint blockade
Michael von Bergwelt, DE

20’  Biomarkers in microbiome approaches
Valerio Lebba, FR

30’  Discussion

19:00  *Networking dinner*
Saturday, 26 November 2022

09:00-12:30  **Workshop sessions**

Three parallel workshop sessions with 20 delegates in each group (delegates will attend all 3 sessions on a rotational basis)

- 15’ Introduction based on clinical cases presented by speakers
- 40’ Discussion
- 5’ Break

**Workshop 1**  How to set up a translational research platform  
Samra Turajlic, UK

**Workshop 2**  Precision oncology into daily practice, what do you need to know?  
Philippe G. Attimos, BE

**Workshop 3**  How to develop a molecularly guided precision oncology trial  
Benedikt Westphalen, DE

11:00-11:30  *Coffee break*

11:30-12:30  **Workshops continuation**

12:30-13:00  **Feedback on the workshops from each group**

13:00-13:15  **Synthesis and wrap-up**  
Samra Turajlic, UK, Benedikt Westphalen, DE

13:15-14:15  *Lunch*