ESMO ADVANCED COURSE PROGRAMME
EGFR exon 20 insertion mutations in NSCLC: Optimising patient diagnosis and management

Singapore
5-6 December 2022

CO-CHAIRS: Sanjay Popat, United Kingdom
Ross A. Soo, Singapore

SPEAKERS: Federico Cappuzzo, Italy
Yoon-La Choi, Republic of Korea
Anne-Marie C. Dingemans, Netherlands
Pasi A. Jänne, United States
Se-Hoon Lee, Republic of Korea
Sun Min Lim, Republic of Korea
Yingting Mok, Singapore
Daniel S. W. Tan, Singapore
Min-Han Tan, United States
Shaun S. S. Teo, Singapore

LEARNING OBJECTIVES

- To understand the function and biology of EGFR and exon 20 insertion mutations in normal and malignant lung epithelial cells.
- To gain insights in the spectrum of atypical EGFR molecular aberrations, platforms and strategies for molecular testing.
- To provide information and in-depth discussion on the state-of-the-art and emerging therapeutic strategies integrating EGFR exon 20 insertion mutation inhibition in non-small-cell lung cancer.
- To present novel data on biomarkers of benefit, mechanisms of resistance and combinatorial therapeutic strategies of EGFR exon 20 mutation inhibition.

Monday, 5 December 2022

09:00-09:20 Welcome and introduction

09:20-10:40 Session 1 – Biology of EGFR mutations
20’ The structure, function and role of EGFR in normal cell homeostasis
Yoon-La Choi, KR

20’ EGFR exon 20 insertion (E20I) mutations: Incidence and biology across tumours with emphasis in lung cancer
Sanjay Popat, UK

20’ Other atypical molecular aberrations of EGFR exon 20 in NSCLC and review of structure-based classifications of EGFR molecular aberrations
Federico Cappuzzo, Italy
20' Discussion

10:40-11:10 Coffee break

11:10-12:45 Session 2 – EGFR E20I mutations inhibitor drug development

20' Preclinical development of EGFR E20I inhibitors: Mechanisms of action
Pasi A. Jänne, US

20' Phase I Clinical development of EGFR E20I inhibitors: Proof of principle studies
Se-Hoon Lee, KR

20' Phase II Clinical development of EGFR E20I inhibitors and emerging evidence from RWD and ongoing trials
Sun Min Lim, KR

20' Presentation of clinical cases of patients with advanced NSCLC bearing EGFR E20I mutations:
Considerations of access to diagnostics and molecular therapeutics
Anne-Marie C. Dingemans, NL

15' Discussion

12:45-13:45 Lunch

13:45-15:05 Session 3 – Detecting EGFR E20I mutations: Diagnostic issues and challenges

20' Molecular tissue testing of NSCLC for EGFR E20I mutations: How, when?
Yoon-La Choi, KR

20' The role of liquid biopsies for EGFR E20I mutation testing in NSCLC: Sensitivity, specificity and implementation algorithms
Min-Han Tan, US

20' Beyond the science: Bottlenecks in implementation of EGFR molecular testing in NSCLC
Anne-Marie C. Dingemans, NL

20' Discussion

15:05-15:35 Coffee break

15:35-16:55 Session 4 – Clinical challenges

20' Optimal management of toxicity in patients with advanced NSCLC treated with EGFR E20I inhibitors: Are they all similar?
Ross A. Soo, SG

20' Are all EGFR E20I mutations similar and are all inhibitors of comparable efficacy?
Se-Hoon Lee, KR
Emerging mechanisms of resistance to EGFR E20I inhibitors and research on combinations of EGFR E20I inhibitors with cytotoxic chemotherapy or novel targeted therapeutics
Federico Cappuzzo, IT

20’

Discussion

17:30 Networking cocktail reception

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**Tuesday, 6 December 2022**

**09:00-10:20 Session 5 – Optimising use of EGFR E20I mutations**

20’ Optimal positioning and sequencing of EGFR E20I inhibitors: Research perspectives for (neo-)adjuvant use and 1st line of advanced disease
Pasi A. Jänne, US

20’ The role of Molecular Tumour Boards for optimal interpretation of molecular reports and tailoring of therapeutic strategies in patients with advanced NSCLC
Daniel S. W. Tan, SG

20’ Presentation of clinical cases of advanced NSCLC patients treated with immunotherapy and subsequent diagnosis of EGFR E20I mutations: Considerations of efficacy and safety
Sun Min Lim, KR

20’ Discussion

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**10:20-10:50 Coffee break**

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**10:50- 12:50 Workshop sessions**

Two workshop sessions with 30 delegates in each group (delegates will attend both sessions on a rotation basis)

**Workshop 1**
60’ Serial NGS testing for advanced NSCLC mutational profiling and impact on therapeutic planning: How to optimise implementation and how to tailor therapies?
Daniel S. W. Tan, SG

**Workshop 2**
60’ Accreditation, Quality and Audit for Tissue NGS test providers
Yingting Mok, SG
Shaun S. S. Teo, SG

12:50-13:10 **Synthesis and wrap-up**

13:10-14:10 **Lunch**