ESMO ADVANCED COURSE PROGRAMME

NTRK GENE FUSION:
A NEW TARGET IN PRECISION TREATMENT OF CANCER

Barcelona, Spain
21-22 October 2019

CO-CHAIRS: Elena Garralda, Spain
            Caterina Marchiò, Italy

SPEAKERS:  Jorge Camarero, Spain
            Ulrik N. Lassen, Denmark
            Joaquin Mateo, Spain
            David Planchard, France
            Santiago Ramon y Cajal, Spain
            Ana Vivancos, Spain

LEARNING OBJECTIVES

• Acquire knowledge of the TRK family members and their roles in ontogenesis
• Understand the mechanisms of gene fusion and the different fusion partners involved
• Learn how TRK receptors are structured and how their activation impacts signal transduction
• Review the epidemiology of NTRK gene fusion in human tumours
• Understand the methodology to identify NTRK gene fusion and the challenges of testing
• Update knowledge on the present outcome obtained with NTRK inhibitors, their toxicities and clinical management

ACCREDITATION

The programme of this event has been accredited with 9 ESMO-MORA category 1 points.

Recertification is necessary for medical oncologists to remain professionally certified by ESMO. Recertification guarantees that a certified medical oncologist has continued to update her/his knowledge and continues to possess the necessary skills and standards for the practice of medical oncology. For further details, please refer to esmo.org.

ACKNOWLEDGEMENTS

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ORGANISATION AND CONTACTS

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Monday, 21 October 2019

09:00-09:10 Welcome and introduction
Elena Garralda, ES
Caterina Marchiò, IT

09:10-10:10 Session 1: Keynote lecture
Gene fusion in human cancer
60’
Mechanisms of gene fusion, fusion partners and consequences in oncogenesis
Description, structure and function of TRK and NTRK in ontogenesis
Ana Vivancos, ES

10:10-10:40 Session 2
Epidemiology and distribution of NTRK gene fusion in human tumours
Santiago Ramon y Cajal, ES

10:40-11:10 Coffee break

11:10-11:55 Session 3
Identification/testing methodologies and challenges
Caterina Marchiò, IT

11:55-13:00 Lunch

13:00-13:30 Session 4
Detection of gene fusion within the ESMO Scale for Clinical Actionability of molecular Targets (ESCAT)
Joaquin Mateo, ES

13:30-17:00 Session 5
Clinical development of NTRK inhibitors
30’
Tolerance profile and recommendation for use
David Planchard, FR

30’
Present results with larotectinib
Ulrik N. Lassen, DK

30’
Analysis of regulatory agencies approval
Jorge Camarero, ES

15:00-15:30 Coffee break

45’
Multi Kinases inhibitors with NTRK as a possible target
David Planchard, FR

45’
Acquired resistance to NTRK inhibitors and development of inhibitors targeting resistance mutations
Ulrik N. Lassen, DK

20:00 Networking dinner
Tuesday, 22 October 2019

09:00-12:30  **Workshop sessions**  
Two parallel workshop sessions with around 30 delegates in each group  
(1 dedicated workshop for medical oncologists & 1 dedicated workshop for pathologists)

**Workshop 1**  
90’  
**Workshop for medical oncologists**  
Ulrik N. Lassen, DK  
Structure:  
- Presentation of 3 clinical cases by speakers (3 different NTRK tumours type)  
- Discussion & questions

**Workshop 2**  
90’  
**Workshop for pathologists**  
Caterina Marchiò, IT  
Structure:  
- Technical aspects of NTRK diagnosis technics (theoretical aspects, methods)  
- Discussion & questions

10:30-11:00  **Coffee break**

11:00-12:30  **Workshop 1 & 2 continuation**

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

13:00-13:15  **Conclusion and farewell**  
Elena Garralda, ES  
Caterina Marchiò, IT

13:15-14:15  **Lunch**