

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

ESMO Head Office
Education Department
Via Ginevra 4
6900 Lugano
Switzerland
Email: courses@esmo.org
www.esmo.org



Monday, 21 October 2019

- 09:00-09:10** **Welcome and introduction**
10' 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**
30' **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**
45' **Identification/testing methodologies and challenges**
 Caterina Marchiò, IT
- 11:55-13:00* *Lunch*
- 13:00-13:30** **Session 4**
30' **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** **Workshop for medical oncologists**
90' Ulrik N. Lassen, DK
- Structure:
- Presentation of 3 clinical cases by speakers (3 different NTRK tumours type)
 - Discussion & questions
- Workshop 2** **Workshop for pathologists**
90' 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**
15' Elena Garralda, ES
Caterina Marchiò, IT
- 13:15-14:15* *Lunch*