

ESMO VIRTUAL ADVANCED COURSE PROGRAMME

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

23-24 November 2020

CO-CHAIRS: Caterina Marchiò, Italy
David S. P. Tan, Singapore

SPEAKERS: Kenneth T. E. Chang, Singapore
Cheng Ean Chee, Singapore
Ulrik N. Lassen, Denmark
Joline Lim, Singapore
Herbert Loong, Hong Kong
Joaquin Mateo, Spain
Daniel S. W. Tan, Singapore
Makoto Tahara, Japan
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 **6 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

This event is supported by an unrestricted educational grant from



ORGANISATION AND CONTACTS

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



All timings are to be considered GMT+8

Monday, 23 November 2020

| | |
|--------------------|--|
| 15:00-15:05 5' | Welcome and introduction Caterina Marchiò, IT David S. P. Tan, SG |
| 15:05-15:35 | Session 1: Keynote lecture Gene fusion in human cancer |
| 20' | Mechanisms of gene fusion, fusion partners and consequences in oncogenesis Description, structure and function of TRK and NTRK in ontogenesis Ana Vivancos, ES |
| 10' | Discussion |
| 15:35-16:05 20' | Session 2 Epidemiology and distribution of NTRK gene fusion in human tumours Herbert Loong, HK |
| 10' | Discussion |
| 16:05-16:35 20' | Session 3 Identification/testing methodologies and challenges Caterina Marchiò, IT |
| 10' | Discussion |
| 16:35-16:45 | <i>Break</i> |
| 16:45-18:10 | Session 4 Clinical development of NTRK inhibitors – Part 1 |
| 30' | Multi Kinases inhibitors with NTRK as a possible target Makoto Tahara, JP |
| 20' | Tolerance profile and recommendation for use Joline Lim, SG |
| 20' | Present results with larotrectinib Ulrik N. Lassen, DK |
| 15' | Discussion |

Tuesday, 24 November 2020

| | |
|--------------------------|--|
| 15:00-15:30 20' | Session 5 Detection of gene fusion within the ESMO Scale for Clinical Actionability of Molecular Target (ESCAT) Joaquin Mateo, ES |
| 10' | Discussion |
| 15:30-16:10 | Session 6 Clinical development of NTRK inhibitors – Part 2 |
| 30' | Acquired resistance to NTRK inhibitors and development of inhibitors targeting resistance mutations Ulrik N. Lassen, DK |
| 10' | Discussion |
| 16:10-16:20 | <i>Break</i> |
| 16:20-17:50 | 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 Cheng Ean Chee, SG and Daniel S. W. Tan, SG Structure: <ul style="list-style-type: none">• Presentation of 3 clinical cases by speakers (3 different NTRK tumours type)• Discussion & questions |
| Workshop 2 90' | Workshop for pathologists Caterina Marchiò, IT and Kenneth T. E. Chang, SG Structure: <ul style="list-style-type: none">• Technical aspects of NTRK diagnosis techniques (theoretical aspects, methods)• Discussion & questions |
| 17:50-18:05 15' | Synthesis and wrap-up |
| 18:05-18:20 15' | Conclusion and farewell Caterina Marchiò, IT David S. P. Tan, SG |