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.

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ORGANISATION AND CONTACTS

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All timings are to be considered GMT+8

Monday, 23 November 2020

15:00-15:05  Welcome and introduction
5’
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  Session 2
20’
Epidemiology and distribution of NTRK gene fusion in human tumours
Herbert Loong, HK

10’
Discussion

16:05-16:35  Session 3
20’
Identification/testing methodologies and challenges
Caterina Marchiò, IT

10’
Discussion

16:35-16:45  Break

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 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 Break

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 Workshop for medical oncologists
Cheng Ean Chee, SG and Daniel S. W. Tan, SG

90' Structure:
• Presentation of 3 clinical cases by speakers (3 different NTRK tumours type)
• Discussion & questions

Workshop 2 Workshop for pathologists
Caterina Marchiò, IT and Kenneth T. E. Chang, SG

90' Structure:
• Technical aspects of NTRK diagnosis technics (theoretical aspects, methods)
• Discussion & questions

17:50-18:05 Synthesis and wrap-up

18:05-18:20 Conclusion and farewell
Caterina Marchiò, IT
David S. P. Tan, SG