Personalized therapy for NSCLC: Biomarker testing, treatment and management in the presence of MET alterations

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A conversation between:

Dr Yasushi Goto

Assistant Chief
Division of Thoracic Oncology
National Cancer Center Hospital
Tokyo, Japan

Prof. Paul Paik

Associate Attending Physician
Memorial Sloan Kettering Cancer Center
New York, USA

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Agenda

- Evolving landscape of biomarker testing in advanced NSCLC
- Identifying *MET*ex14 skipping mutations in NSCLC
- Targeting *MET*ex14 skipping mutations in advanced NSCLC

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*MET*ex14 skipping mutations in advanced NSCLC

Recommendations for biomarker testing[1,2]

Biomarkers	NCCN guidelines	Pan-Asian guidelines
EGFR	✓	✓
ALK	✓	✓
ROS1	✓	✓
BRAF	✓	✓
PD-L1	✓	✓
***MET*ex14**	✓	✗
NTRK1/2/3	✓	✗
KRAS	✓	✗
RET	✓	✗
ERBB2/HER2	✓	✗

Prevalence of oncogene mutations in NSCLC[3]

Mechanism of action of MET inhibitors[4,5]

*EGFR mutations are prevalent in 10–16% of patients with NSCLC in Western populations and 40–50% in Asian populations.[3]

ALK, anaplastic lymphoma kinase; BRAF, v-raf murine sarcoma viral oncogene homolog B; EGFR, epidermal growth factor receptor; ERBB2, erb-b2 receptor tyrosine kinase 2; ex14, exon 14; HER2, human epidermal growth factor receptor 2; KRAS, Kirsten rat sarcoma; MET, mesenchymal-epithelial transition; NCCN, National Comprehensive Cancer Network; NSCLC, non-small cell lung cancer; NTRK, neurotrophic receptor tyrosine kinase; PD-L1, programmed death-ligand 1; RET, rearranged during transfection; ROS1, c-ros oncogene 1.

1. National Comprehensive Cancer Network (NCCN Guidelines®). Version 3.2023. Available at: https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf (accessed 17 April 2023); 2. Wu YL, et al. *Ann Oncol.* 2019;30:171–210; 3. Fois SS, et al. *Int J Mol Sci.* 2021;22:612; 4. Wu YL, et al. *Cancer Treat Rev*. 2021;95:102173; 5. Hong L, et al. *Ther Adv Med Oncol.* 2021;13:1758835921992976.

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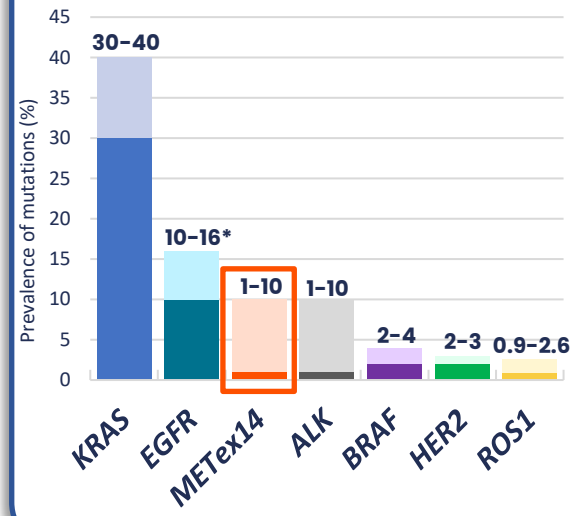

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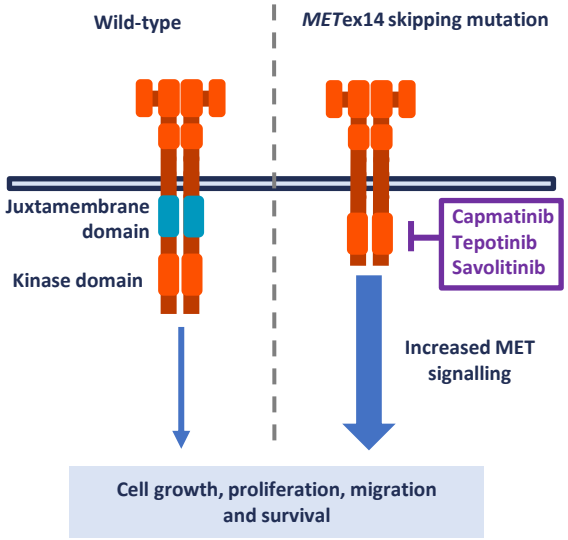

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