

**14P The characteristics of MET exon 14 skipping mutations in Chinese non-small cell lung cancer: A retrospective analysis**

Y. Zhu<sup>1</sup>, C. Xu<sup>2</sup>, W. Wang<sup>3</sup>, Q. Zhang<sup>4</sup>, W. Zhuang<sup>4</sup>, G. Chen<sup>4</sup>, M. Fang<sup>3</sup>, T. Lv<sup>5</sup>, Y. Song<sup>5</sup>

<sup>1</sup>Zhejiang Rongjun Hospital, Zhenjiang, China, <sup>2</sup>Pathology, Fujian Cancer Hospital, Fuzhou, China, <sup>3</sup>Zhejiang Cancer Hospital, Zhenjiang, China, <sup>4</sup>Fujian Cancer Hospital, Fuzhou, China, <sup>5</sup>Jinling Hospital, Nanjing, China

**Background:** MET exon 14 skipping is a potential driver alteration in lung cancer targetable. Treatment with crizotinib can cause dramatic responses in patients whose cancers have MET exon 14 skipping. The current study was aiming to determine the clinical and pathological characteristics in non-small cell lung cancers (NSCLC).

**Methods:** A total of 2926 patients with NSCLC were recruited between July 2012 and 2015. The status of MET exon 14 skipping and other genes were detected by next generation sequencing.

**Results:** MET exon 14 skipping rate was 1.06% (31/2926) in NSCLC, including X1009\_splice (10 patients), X963\_splice (6 patients), D1010H (5 patients), D1010N (3 patients), X1008\_splice (1 patient), X1006\_splice (1 patient), X1007\_splice (1 patient), D1010Y (1 patient), Y1003S (1 patient), D1002G (1 patient), P1008A (1 patient). Among them, EGFR mutations+ MET skipping [7 patients (2 patients with 19 del+ 5 patients with L858R)], ALK fusion+ MET skipping (2 patients) and ROS1 fusion+ MET skipping (1 patient).

**Conclusions:** MET exon 14 skipping defined a new molecular subset of NSCLC with identifiable clinical characteristics. The therapeutic crizotinib might be an alternative treatment for patients with MET exon 14 skipping NSCLC.

**Legal entity responsible for the study:** The authors.

**Funding:** Has not received any funding.

**Disclosure:** All authors have declared no conflicts of interest.