

Supplementary Table S2. The targeted genetic status in the younger and older groups.

Age groups	The younger group	The older group	P
	≤45	>45	
EGFR mutation	49	47	0.651
KRAS mutation	3	17	0.002
ALK arrangement	14	1	<0.001
BRAF mutation	3	1	0.362
MET mutation	0	2	0.497
RET arrangement	1	1	1.000
ROS1 arrangement	0	3	0.246
^a HER2 mutation	5	2	0.272
CDKN2A mutation	1	0	0.492
^b HER2 amplification	1	0	0.492
HRAS mutation	1	0	0.492
MAP2K1 mutation	1	0	0.492
^c STK11 mutation	0	3	0.246
Unknown	8	13	0.355
Total	87	90	

a, b and c: Most of the targeted genetic alterations, including EGFR, KRAS, ALK, BRAF, MET, RET and ROS1, are exclusive genotypes and don't overlap each other. While more than one actionable alteration was identified in partial patients, only the actionable alteration with the most optimal clinical option, such as on-label agents will be counted. The younger group vs. the older group: P<0.05.