

Biomarker Analysis and the Implications for the Treatment of Non-Small Cell Lung Cancer

THE CORRECT ANSWER IS INDICATED WITH YELLOW HIGHLIGHTING.

1. A recent survey of 25 clinical investigators regarding the sequencing of systemic therapy for metastatic NSCLC revealed that for patients with squamous histology and a PD-L1 TPS greater than 50%, the preferred first-line treatment option was _____.

 - a. Carboplatin/*nab* paclitaxel
 - b. Carboplatin/pemetrexed/bevacizumab
 - c. Pembrolizumab
2. Primary results of the global Phase III ALEX study evaluating alectinib versus crizotinib for treatment-naïve, advanced ALK-positive NSCLC demonstrated a significant improvement in favor of alectinib with respect to _____.

 - a. Progression-free survival
 - b. Overall survival
 - c. Incidence of CNS progression
 - d. All of the above
 - e. Both a and c
3. Recent studies presented at ASCO 2017 demonstrated that T-DM1 elicited a higher response rate for patients with HER2-mutant lung cancer than for those with HER2-overexpressed disease.

 - a. True
 - b. False
4. Mechanisms of acquired resistance to EGFR TKIs include _____.

 - a. Development of the T790M mutation
 - b. MET amplification
 - c. HER2 amplification
 - d. All of the above
5. The incidence of RET fusion in patients with lung adenocarcinomas is approximately _____.

 - a. 1% to 2%
 - b. 5%
 - c. 10%
6. Which of the following statements is true regarding MET exon 14 alterations?

 - a. They may result from a splice variant that increases MET signaling
 - b. They respond well to crizotinib
 - c. They do not occur concomitantly with MET amplification
 - d. All of the above
 - e. Both a and b
7. In the survey of 25 clinical investigators analyzing the sequencing of systemic therapy for metastatic NSCLC, for patients with BRAF V600E mutation-positive NSCLC a majority of the investigators chose _____ as the preferred option in the first-line setting, irrespective of TPS.

 - a. Anti-PD-1/PD-L1 antibodies
 - b. Chemotherapy
 - c. Dabrafenib/trametinib
8. Patients with EGFR mutation-positive NSCLC are _____ to respond to immunotherapy than are patients who do not have targetable mutations.

 - a. More likely
 - b. Less likely
9. Recent data suggest that _____ is a mutation that confers resistance to alectinib in patients with ALK-rearranged NSCLC.

 - a. G1202R
 - b. T790M
 - c. C797S
10. The third-generation EGFR TKI osimertinib _____.

 - a. Demonstrates activity in patients with or without the EGFR T790M mutation
 - b. Is effective for patients with brain metastases
 - c. Both a and b