

Virtual Molecular Tumor Board: Role of Genomic Profiling for Patients with Solid Tumors and the Optimal Application of Available Testing Platforms

THE CORRECT ANSWER IS INDICATED WITH YELLOW HIGHLIGHTING.

1. Which of the following agents would be most effective for a patient with salivary gland cancer and an NTRK3 gene fusion who has no satisfactory treatment alternative?
 - a. Trastuzumab deruxtecan
 - b. Erdafitinib
 - c. Larotrectinib
2. The FDA recently approved pembrolizumab for patients with unresectable or metastatic solid tumors, disease progression after therapy, no satisfactory alternative treatment options and which level of tumor mutation burden?
 - a. One or more mutations per megabase
 - b. Five or more mutations per megabase
 - c. 10 or more mutations per megabase
3. Which of the following are advantages of liquid biopsy versus tissue biopsy in the detection of genetic alterations in patients with cancer?
 - a. Higher sensitivity and higher chance of detecting gene fusions
 - b. Ease of sample collection and the fact that most actionable mutations are easily detected
4. What would be the most appropriate targeted therapy to combine with fulvestrant for a postmenopausal woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA mutation who has experienced disease progression on an endocrine-based regimen?
 - a. Trastuzumab deruxtecan
 - b. Alpelisib
 - c. Erdafitinib
5. Which of the following genetic alterations is targetable by an approved or investigational targeted therapy?
 - a. KRAS G12C mutation
 - b. PIK3CA mutation
 - c. HER2 amplification
 - d. All of the above