1. Which of the following is true about how targeted therapies differ from traditional cytotoxic drugs?
   a. Targeted therapies have narrow therapeutic indices
   b. Targeted therapies are more available in intravenous dosage form
   c. Targeted therapies are not specific to the cancer cell
   d. None of the above

2. What is the mechanism of action of kinase inhibitors?
   a. Inhibit protein-protein interaction
   b. Inhibit RNA synthesis
   c. Inhibit ATP binding
   d. Inhibit DNA synthesis

3. What mutation predicts response of CML patients to imatinib?
   a. BCR-ABL fusion protein
   b. KIT mutation
   c. ERBB2 amplification
   d. None of the above

4. Which of the following targeted therapies comes with a genetic test to guide its clinical use?
   a. Bevacizumab
   b. Trastuzumab
   c. Erlotinib
   d. None of the above

5. Which of the following proteins are mutated in the majority of GISTs?
   a. KIT
   b. PDGFRA
   c. All of the above
   d. None of the above

6. Which of the following malignancies can be treated with imatinib?
   a. ALL
   b. CML
   c. GIST
   d. All of the above

7. Erlotinib and gefitinib are FDA approved for the treatment of which malignancy?
   a. Breast cancer
   b. Colorectal cancer
   c. Lung cancer
   d. Skin cancer

8. Which altered protein was found to be present in responders to gefitinib and erlotinib?
   a. EGFR
   b. ERBB2
   c. ERBB3
   d. VEGFR

9. Which of the following kinase inhibitors is administered intravenously?
   a. Imatinib
   b. Erlotinib
   c. Gefitinib
   d. Trastuzumab

10. Which of the following is false about the development of resistance to targeted therapies?
    a. Patients who respond to targeted therapies do not develop resistance
    b. Most patients on targeted therapies develop resistance
    c. Resistance mutations can occur in the target kinase to which the drug binds
    d. Resistance mutations can occur in other kinases, not necessarily the ones to which the drug binds