Chapter 90, Self-Assessment Questions

1. All of the following scenarios are consistent with a recommendation to be screened with a low-dose CT scan for lung cancer (according to the recent guidelines)?
   A. A 45-year-old man who has smoked a pack a day since the age of 13 years
   B. A 65-year-old woman with a 40 pack–year smoking history, who quit smoking 10 years ago
   C. A 50-year-old coal miner whose father and brother died of lung cancer in their 60s
   D. All of the above fit the screening criteria
   E. None of the above fit the screening criteria
2. Treatment options for a patient with stage IIIb adenocarcinoma and an ECOG PS score of 3 may include all of the following EXCEPT:
   A. Palliative radiotherapy
   B. Surgical resection of a distant metastasis
   C. Platinum-containing doublet chemotherapy
   D. Single agent targeted agent
   E. Treatment of comorbidities to improve performance
3. A well-performing stage IV adenocarcinoma NSCLC patient with a mutation in exon 19 of the EGFR gene should be treated with:
   A. Cetuximab
   B. Cisplatin-gemcitabine
   C. Afatinib
   D. Bevacizumab
   E. Radiotherapy
4. Premedications to prevent nausea and vomiting with cisplatin vinorelbine should include:
   A. A neurokinin inhibitor
   B. Metoclopramide
   C. Promethazine
   D. A benzodiazepine
   E. Diphenhydramine
5. Which of the following is NOT considered to be an acceptable regimen for advanced stage squamous cell NSCLC?
   A. Carboplatin/paclitaxel
   B. Cisplatin/vinorelbine
   C. Gemcitabine/paclitaxel
   D. Pemetrexed/cisplatin
   E. Gemcitabine/docetaxel
6. Which of the following is a reasonable premedication for an EGFR-targeted therapy?
   A. Dexamethasone

B. Doxycycline
C. Fosaprepitant
D. Folate and vitamin B_{12}
E. None of the above

7. What is the standard method of evaluating NSCLC response:
A. Tumor volume calculation (based on bidimensional measurements)
B. RECIST criteria (longitudinal sum of lesions)
C. Change in PET scan intensity (metabolic changes in tumor cells)
D. Based on biomarker or genetic changes
E. Change in Veterans Administration Lung Cancer Study Group stage

8. What are the goals of treatment for a patient with stage IIIb squamous histology lung cancer?
A. Improvement of quality of life
B. Alleviation of symptoms
C. Prolong life
D. All of the above
E. Cure disease

9. Which of the following is optimally treated with chemoradiotherapy?
A. Stage IA squamous NSCLC
B. Stage IIB large cell NSCLC
C. Stage IIIA adenocarcinoma NSCLC
D. Limited stage SCLC
E. Extensive stage SCLC

10. Which of the following improves survival of limited stage SCLC?
A. Maintenance methotrexate
B. Prophylactic cranial radiation
C. Adjuvant platinum doublet and bevacizumab
D. Neoadjuvant (induction) ceritinib
E. All of the above

11. Which of the following patients is the best candidate for bevacizumab combined with chemotherapy?
A. Extensive stage SCLC
B. Stage IIb adenocarcinoma
C. Stage IV large cell NSCLC
D. Stage IIIB squamous cell NSCLC
E. None of the above

12. What is the prerequisite genetic mutation for ceritinib therapy?
A. BRAF mutations
B. EGFR mutations
C. KRAS mutations
D. ALK translocations or rearrangements
E. EGFR amplifications

13. Which patient is the best candidate for adjuvant cisplatin/vinorelbine?
A. 40-year-old white woman with recently resected stage IA adenocarcinoma.
B. 45-year-old African American man with recently resected stage IIB squamous cell carcinoma and negative surgical margins.

C. 63-year-old Caucasian woman with a PS of 3 and recently resected stage Ia large cell NSCLC. The patient was found to have a mutation in the KRAS gene in the resected tumor.
D. 65-year-old Caucasian man with a PS of 2 and recently resected stage IB adenocarcinoma. The patient was found to have an ALK translocation in the resected tumor.
E. 45-year-old African American man with a PS of 1 and recently diagnosed stage IIIB adenocarcinoma with positive surgical margins and no identifiable mutations in the KRAS, EGFR, or ALK genes.

14. Which subtype of NSCLC is not genotyped for a targetable EGFR or ALK mutation?
A. Neuroendocrine.
B. Large cell.
C. Squamous cell.
D. Adenocarcinoma.
E. Genotyping is not a standard for any of the above.

15. What is the most common toxicity of afatinib?
A. Neutropenia
B. Diarrhea
C. Hepatotoxicity
D. Ocular toxicity
E. Electrolyte abnormalities

Answers

1. **B**
2. **C**
3. **C**
4. **A**
5. **B**
6. **A**
7. **B**
8. **D**
9. **D**
10. **B**
11. **C**
12. **D**
13. **B**
14. **C**
15. **B**