

## Chapter 91, Self-Assessment Questions

1. Which of the following is the main risk factor for the development of colon cancer?
  - A. Age
  - B. Familial adenomatosis polyposis (FAP)
  - C. Family history
  - D. Gender
  - E. Diabetes
  
2. Which of the following is a common presenting sign and symptom for colon cancer?
  - A. Infection
  - B. High white blood cell count
  - C. Change in bowel habits
  - D. Shortness of breath
  - E. Elevated serum creatinine
  
3. In which stage of colon cancer has adjuvant chemotherapy been proven to have no clinical benefit?
  - A. Stage I
  - B. Stage II
  - C. Stage III
  - D. Stage IV
  
4. Stage II colon cancer with which of the following patient or tumor characteristics would likely benefit from treatment with chemotherapy?
  - A. Younger patients
  - B. EGFR-positive tumors

C. Patient presents with bowel perforation

D. KRAS mutant positive tumors

E. Patient presents with a T3 lesion

5. The preferred treatment option for a patient with stage III colon cancer is:

A. Combined chemotherapy and radiation followed by complete surgical resection

B. Chemotherapy followed by complete surgical resection

C. Complete surgical resection followed by adjuvant chemotherapy

D. Curative radiation followed by adjuvant chemotherapy

E. Complete surgical resection with no adjuvant therapy

6. A 68-year-old man diagnosed with stage IV colon cancer (positive for *KRAS* mutation) is scheduled to receive chemotherapy consisting of the FOLFOX regimen. Which of the following statements regarding his treatment regimen is correct?

A. The bolus schedule of 5-fluorouracil (FU) is preferred because it is associated with a higher response rates compared with infusional 5-FU.

B. EGFR inhibitors, such as cetuximab, should be added to the FOLFOX regimen.

C. FOLFIRI is the preferred regimen for first-line treatment of metastatic disease because it has superior overall survival to FOLFOX.

D. The leucovorin is administered after the 5-FU in attempt to “rescue” the patient from 5-FU–associated toxicity.

E. Bevacizumab should be added to the FOLFOX regimen.

7. Which of the following treatment regimens can be used for the treatment of stage III colon cancer?

- A. FOLFOX (folinic acid, 5-FU, oxaliplatin)
- B. FOLFOX + bevacizumab
- C. FOLFIRI (folinic acid, 5-FU, Irinotecan)
- D. FOLFIRI + bevacizumab

8. Which of the following statements regarding capecitabine-associated toxicity is correct?

- A. Hand-foot syndrome and diarrhea are common toxicities.
- B. Skin rashes that develop on capecitabine are associated with increased response rates.
- C. Leukopenia occurs most frequently when capecitabine is administered intravenously.
- D. Leucovorin is used in combination with capecitabine to prevent toxicities.
- E. All of the above are correct.

9. All of the following are goals of treating metastatic colon cancer *except*:

- A. Treatment strategies should be designed to improve quality of life.
- B. Treatment plans should be designed with the intent to cure the patient.
- C. Treatment strategies should be designed to allow for exposure to all active agents.
- D. Preventing complications from therapy is an important end point.
- E. Treatment has been shown to reduce symptoms and improve survival.

10. A 72-year-old woman with relapsed metastatic colon cancer after FOLFIRI therapy presents to the clinic. The decision is made to start salvage irinotecan + cetuximab chemotherapy. Which of the following is true regarding these agents?

- A. Patients with mutated *KRAS* genes have increased response rates to cetuximab.
- B. Patients who develop diarrhea have decreased response rates to cetuximab.
- C. Irinotecan should not be given because the patient has already failed irinotecan as part of FOLFIRI.

- D. Cetuximab is more effective with irinotecan than when used as a monotherapy agent.
- E. EGFR status by immunohistochemistry will assist in predicting response to therapy.

11. Which of the following pharmacogenetic tests may be useful in predicting toxicity from irinotecan?

- A. DPD activity
- B. CEA levels
- C. UGT1A1 activity
- D. EGFR status
- E. KRAS status

12. For the treatment of colorectal cancer, ziv-aflibercept is FDA approved as:

- A. A single agent for adjuvant therapy in colorectal cancer
- B. A single agent therapy in metastatic colorectal cancer
- C. Combination therapy with FOLFIRI-based chemotherapy
- D. Combination therapy with bevacizumab-based chemotherapy
- E. Combination therapy with FOLFOX-based chemotherapy

13. Which of the following drugs requires close monitoring for the development of neuropathy during the course of therapy?

- A. Bevacizumab
- B. Cetuximab
- C. Oxaliplatin
- D. Capecitabine
- E. Irinotecan

14. The dose of regorafenib would need likely need to be decreased in a patient which of the following conditions:

- A. Elevated serum creatinine
- B. Elevated bilirubin
- C. On a known CYP3A4 inducer
- D. On concurrent antihypertensive therapy
- E. Elevated blood glucose

15. The following is the appropriate screening recommendation for a 52-year-old man with an average risk of colon cancer?

- A. Fecal occult blood test (FOBT) annually with no further tests needed unless positive
- B. FOBT and flexible sigmoidoscopy both performed every 5 years
- C. FOBT annually and colonoscopy performed every 10 years
- D. FOBT and CEA levels both performed annually with colonoscopy every 5 years
- E. FOBT and stool DNA testing both with annual computed tomographic colonography

**Answers**

1. A

2. C

3. A

4. C

5. C

6. E

7. A

8. A

9. B

10. D

11. C

12. C

13. C

14. B

15. C