**Secondary Cancers SAQs**

1. Which of the following types of anticancer agents increase the risk for the development of secondary acute myeloid leukemia?
   1. Cytarabine
   2. Etoposide
   3. Tamoxifen
   4. Vemurafenib
2. Which of the following is associated with an increased risk of squamous cell carcinoma in patients receiving BRAF inhibitors?
   1. Recent treatment initiation
   2. Hereditary predisposition
   3. Use of sunscreen
   4. Younger age
3. Dual liposomal encapsulation daunorubicin/cytarabine for the treatment of secondary AML improves which of the following outcomes compared with standard of care regimen 7+3?
   1. 1-year survival rate but not 5-year survival rate
   2. 1-year survival rate and 5-year survival rate
   3. Overall remission rate and 1-year survival rate but not 5-year survival rate
   4. Overall remission rate, 1-year survival rate, and 5-year survival rate
4. Which of the following statements about dual liposomal encapsulation daunorubicin/cytarabine is true?
   1. Approved for both de novo AML and therapy-related AML
   2. Can be substituted for the 7+3 regimen with appropriate dose conversions
   3. Copper overload can occur, particularly in those with Wilson’s disease
   4. Rash is the most common adverse event
5. Which of the following treatments is associated with development of basal cell carcinoma?
   1. Olaparib
   2. Sorafenib
   3. Vismodegib
   4. Tamoxifen
6. A 34-year patient who was treated during young adulthood for Hodgkin lymphoma who received chemotherapy and radiation therapy to the inguinal area. Which of the following is an appropriate follow-up for this patient who is at risk of secondary cancers?
   1. Annual physical examination yearly until 5 years, then stop
   2. Breast screening with mammogram beginning at age 45 yr
   3. Complete blood count annually
   4. Yearly thyroid stimulating hormone
7. A survivor of breast cancer comes into your pharmacy and asks you for a recommendation about the best multi-vitamin to use as she heard this can help prevent a secondary cancer. Which of the following statements is true?
   1. Routine use is recommended for cancer control, better absorbed than vitamins from food sources in patients who have completed anticancer therapy
   2. Could be used if the patient has a documented deficiency in vitamins or minerals
   3. Data supports use for all patients because anticancer agents often cause deficiency
   4. Multi-vitamin is not recommended; individual vitamin supplements are preferred
8. A post-menopausal woman at high risk of developing breast cancer has been taking tamoxifen as risk reduction. She develops endometrial cancer. What is the appropriate action for her tamoxifen?
   1. Discontinue until endometrial cancer is treated and then resume
   2. Discontinue permanently as risk continues after treatment is completed
   3. Continue tamoxifen; risk only occurs in premenopausal women
   4. Dose reduce tamoxifen as risk is dose related
9. Which of the following healthy lifestyle recommendations can be made by pharmacist who is educating a survivor of cancer?
   1. Minimize alcohol intake; no more than2 drinks/day in women and 3 drinks/day in men
   2. Practice sun safety – ensuring at least UVA protection of SPF 15 or greater and apply every 2 hr
   3. Ensure adequate amount of sleep per day (recommended 9 hr/day for women and 8 hr/day for me)
   4. Achieve and maintain healthy weight with diet high in vegetables, fruit and whole grains
10. Treatment of which of the following malignancies is NOT treated the same as a primary cancer at the same origin
    1. Acute myelogenous leukemia
    2. Lung cancer
    3. Sarcoma
    4. Squamous cell carcinoma