

PHYSICIAN'S COURSE TEST

Do not write your name on your answer sheet. The test is anonymous and the data will only be used to examine the effectiveness of this course as a learning tool. Completion of this test is an essential component of this course. Certificates of attendance will be given when pre and post test answer sheets have been returned.

Please do not guess. If you do not know the answer, please choose 'U' on the answer sheet for "not known". Thank you.

*****All answers are to be recorded on the attached answer sheet (choose pre or post test sheet as appropriate).***

****Read each question carefully for the instructions***

1. In the past 25 years, the survival rate from breast cancer in BC has done which one of the following? (*choose one, select U if you do not know*)
 - a) Improved by 5 %
 - b) Improved by 10%
 - c) Improved by 20%
 - d) Remained Stable
 - e) Worsened by 5%
 - f) Worsened by 10%

2. A woman has a 3 cm invasive breast cancer. Her axilla is clinically negative. She has a palpable supraclavicular node that is positive for cancer on FNA. Her clinical staging would be which one of the following? (*choose one, select U if you do not know*)
 - a) T1N3Mx
 - b) T2N3MX
 - c) T2N0M1
 - d) T2N2M1
 - e) T2N3M1
 - f) T1N2M1
 - g) T1N0M1
 - h) T3N0M1

3. What percentage of women are under 50 years of age at the diagnosis of breast cancer? (choose one, select U if you do not know)
- a) 5%
 - b) 10%
 - c) 15%
 - d) 20%
 - e) 25%
 - f) 30%
 - g) 35%
 - h) 40%
4. What percentage of breast cancers are found by women themselves? (choose one, select U if you do not know)
- a) 10%
 - b) 20%
 - c) 30%
 - d) 40%
 - e) 50%
 - f) 60%
5. If a patient is managed appropriately with breast conserving surgery for invasive breast cancer, including adjuvant therapy, the expected rate of local recurrence per year is which one of the following? (choose one, select U if you do not know)
- a) 0.5%
 - b) 1%
 - c) 2%
 - d) 3%
 - e) 5%
 - f) 10%
6. A close margin is defined as which one of the following? (choose one, select U if you do not know)
- a) A margin which the tumour touches only focally
 - b) A margin that is less than 5 mm
 - c) A margin that is less than 3 mm
 - d) A margin that is less than 10 mm
 - e) None of the above
7. Regarding patients with close margins, boost radiation therapy to the tumour bed has which one of the following effects on local recurrence rate? (choose one, select U if you do not know)
- a) Results in a recurrence rate equal to that obtained by clear surgical margins
 - b) Results in a recurrence rate which is not as good as that obtained by clear surgical margins
 - c) Has no impact on local recurrence rate

8. Which one of the following is **not** associated with an increased risk of local recurrence after breast conserving surgery? (*choose one, select U if you do not know*)
- a) A close surgical margin
 - b) Extensive intraductal component (EIC)
 - c) Older patient age
 - d) Lymphatic/vascular invasion
 - e) High grade tumour
9. Which of the following is not a useful screening test for breast cancer in a BRCA positive patient? (*choose one, select U if you do not know*)
- a) Clinical Breast Examination
 - b) Annual Mammography
 - c) Breast Ultrasound
 - d) Breast MRI
 - e) PET scanning
10. Beneficial procedures in BRCA positive patients include which of the following? (*choose the appropriate **combination**, select U if you do not know*)
- A) Tamoxifen therapy
 - B) Annual Transvaginal ultrasound
 - C) Ca 125 testing
 - D) Prophylactic mastectomy
- a) A and C
 - b) A, B and C
 - c) B and D
 - d) D only
11. PET scanning is useful for all of the following except which one? (*choose one, select U if you do not know*)
- a) Evaluation for local recurrence
 - b) Assessment of distant metastases
 - c) Differentiating benign from malignant lesions
 - d) Evaluating response to chemotherapy
 - e) Assessment of microscopic metastases in the axilla
12. All of the following are considered contraindications to Sentinel Lymph Node Biopsy except which one? (*choose one, select U if you do not know*)
- a) T3 tumour
 - b) Locally advanced tumour
 - c) Multifocal tumour
 - d) Clinically positive axillary nodes
 - e) Previously excised tumour

13. Which one of the following best defines the axillary sentinel node(s)? (*choose one, select U if you do not know*)
- The hottest (most radioactive) lymph node in the axilla
 - The lymph node in the axilla that is closest to the breast tumour
 - All of the radioactive nodes in the axilla
 - All of the blue nodes in the axilla
 - The radioactive or blue node that is closest to the breast tumour
 - All of the radioactive or blue nodes in the axilla
 - All of the radioactive nodes with counts >10% of the most radioactive node and any blue nodes in the axilla
14. The correct technique for Sentinel Lymph Node Biopsy may involve all of the following except which one? (*choose one, select U if you do not know*)
- Injection of radiotracer and blue dye around the breast tumour
 - Injection of radiotracer and blue dye around a biopsy cavity
 - Injection of radiotracer and blue dye into a biopsy cavity
 - Injection of radiotracer and blue dye into the dermis overlying the tumour
 - Injection of radiotracer and blue dye in a periareolar location
15. Indications for breast MRI include all of the following except which one? (*choose one, select U if you do not know*)
- Evaluation of the breast in a woman with an axillary node positive for carcinoma and a negative mammogram and ultrasound
 - Assessment of the extent of local disease in a patient with confirmed cancer
 - Assessment of recurrent disease post breast conserving surgery
 - As a screening test for breast cancer
 - Evaluation of the problem mammogram
16. A 46 year old premenopausal woman has a 4 cm, grade 2, ER positive, invasive lobular cancer, with a 1 mm posterior margin, 15 of 15 nodes positive (largest 1.7 cm, extranodal extension), a positive right supraclavicular node, negative CXR, negative abdominal ultrasound and negative bone scan. An indurated site in breast lateral to the surgical scar is positive for cancer on FNA. Which of the following statements are true regarding this patient? (*choose the appropriate **combination**, select U if you do not know*)
- Her stage is T2N3cM0 (stage 3C)
 - Overall survival at 10 years with a positive supraclavicular node is 25-30%
 - Appropriate treatment for this patient is 6 months of chemotherapy, followed by radiation therapy, surgery and hormonal therapy
 - Appropriate treatment for this patient is hormonal therapy alone as she is incurable
- A and C
 - B and D
 - A, B and C
 - D only

17. Which of the following statements are true regarding aromatase inhibitors in the adjuvant therapy of ER positive breast cancer? (choose the appropriate **combination**, select U if you do not know)

- A) Adjuvant aromatase inhibitors have been shown to improve disease free survival when compared to adjuvant Tamoxifen
- B) Adjuvant aromatase inhibitors have been shown to improve overall survival when compared to Tamoxifen
- C) Side effect of aromatase inhibitors include decrease bone density when compared to Tamoxifen
- D) Aromatase inhibitor therapy is associated with an increased risk of venous thrombosis when compared to Tamoxifen

- a) A and C
- b) B and D
- c) A, B, and C
- d) A, B, C and D
- e) D only

18. Important prognostic factors in breast cancer include which of the following? (choose the appropriate **combination**, select U if you do not know)

- A) Lymph node positivity
- B) Presence of vascular/lymphatic invasion
- C) Greater tumour size
- D) ER negative status
- E) Her 2 neu overexpression

- a) A and C
- b) B and D
- c) A, B and C
- d) A, B, C and D
- e) A, B, C, D and E

19. All of the following are contraindications to intra-operative radiation therapy, except which one? (choose one, select U if you do not know)

- a) Node positivity
- b) Lobular cancer
- c) Extensive intraductal component
- d) Large breast size

20. A woman undergoes an image guided core biopsy for indeterminate calcifications seen on mammogram. She has mildly nodular breasts. The pathology report states, 'extensive fibrocystic change with epithelial hyperplasia and sclerosing adenosis and lobular carcinoma in situ (LCIS)'. The most appropriate management of this patient would be which one of the following? (choose one, select U if you do not know)
- a) Wire guided wide excision to obtain clear margins on the LCIS
 - b) Repeat Biopsy
 - c) Repeat Mammogram in 6 months
 - d) Repeat Mammogram in 12 months
21. A woman with a mammogram showing a 1 cm cluster of indeterminate calcifications is best managed by which one of the following? (choose one, select U if you do not know)
- a) Image guide core biopsy
 - b) Fine wire guided excision biopsy
 - c) Vacuum assisted core biopsy
 - d) Repeat mammogram in 6 months
22. With regards to Sentinel Lymph Node Biopsy, the false negative rate is defined as which one of the following (FN= false negative, TN= true negative, TP= true positive, FP=false positive)? (choose one, select U if you do not know)
- a) FN / TP
 - b) $\text{FN} / (\text{FN} + \text{TN})$
 - c) $\text{FN} / (\text{FN} + \text{TP})$
 - d) $\text{FN} / (\text{FN} + \text{FP})$
23. Which of the following is a benefit of a standard axillary node dissection? (choose the appropriate combination, select U if you do not know)
- A) Provides accurate staging for determining prognosis
 - B) Improves local control
 - C) Provides information regarding the need for adjuvant therapy
 - D) Improves Survival
- a) A and C
 - b) A, B, and C
 - c) A, B, C and D
 - d) D only
 - e) None of the above