

Case #1 An irregular breast mass was found on self examination by a 46-year-old female. A FNA was performed and representative images are shown for this case, which highlight cells with atypical cytology that are discohesive and in a clean background. What is the best diagnosis?

- A. Fibroadenoma
- B. Medullary carcinoma
- C. Lymphoma
- D. Invasive breast cancer
- E. None of the above

Case #2 During pregnancy a 36-year-old female noted an enlarging breast mass 4 cm in greatest dimension. A FNA was performed and representative cytologic images are shown. Based on these findings, what is the best diagnosis?

- A. Fibroadenoma
- B. Medullary carcinoma
- C. Lymphoma
- D. Invasive breast cancer
- E. None of the above

Case #3 Multiple masses are noted in the breast of a 40-year-old female. To reassure the patient, an excision was performed and a representative image of the histology is shown. Based on these findings, what is the best diagnosis?

- A. Fibrocystic changes
- B. Ductal carcinoma in situ with apocrine change
- C. Apocrine carcinoma
- D. Elongated a lobular units with columnar cell alteration (ELUCA)
- E. None of the above

Question #1 All the following are direct or obligate precursors to breast carcinoma EXCEPT:

- A. Complex sclerosing lesion
- B. Radial scar
- C. Sclerosing adenosis
- D. Papilloma

Question #2 After fibroadenoma, what is the most common focal mass lesion of the breast?

- A. Papilloma
- B. DCIS
- C. Fibrocystic Disease
- D. Phyllodes tumor
- E. Sclerosing adenosis

Question #3 All the following are true with regards to fibroadenomas EXCEPT:

- A. More common in Afro-Caribbean women
- B. The most common mass lesion in the breast
- C. Most common in women in their 20s-30s
- D. Are differentiated from fibroadenomatoid hyperplasia by the presence of a capsule

**Question #4** In a phyllodes tumor the breast, what is the usual mitotic rate found in a borderline tumor?

- A. <10 mitoses/10 hpf
- B. 5-10 mitoses/10 hpf
- C. 10-20 mitoses/10 hpf
- D. 10-<20 mitoses/50 hpf
- E. 5-10 mitoses/50 hpf

**Question #5** All of the following are positive in pseudo-angiomatous stromal hyperplasia EXCEPT:

- A. Vimentin
- B. Actin
- C. CD34
- D. CD31
- E. All the above are positive

**Question #6** All the following are associated with fibromatosis of the breast EXCEPT:

- A. Pregnancy
- B. Neurofibromatosis type 1
- C. Trauma
- D. Gardner syndrome

**Question #7** The malignant cells and Paget's disease may stain with all of the following EXCEPT:

- A. EMA
- B. CEA
- C. High molecular weight cytokeratins
- D. PAS
- E. ER/PR

**Notes for question set:**<sup>1</sup>

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<sup>1</sup> PathMD strives for the highest quality and accuracy. However, the *PathMD: Board Review Letter* is for review purposes and not meant for clinical decision making. It should not be used in place of review of primary reference texts and the current medical literature. If inaccuracies are identified, please notify us so that a correction may be published. (info@PathMD.com)