Other Breast Cancers

- Tubular Carcinoma
  - Low grade, Well differentiated tumor
  - Best prognosis overall
  - "Tear drop"/ angulated glands (H&E)
  - "Arrowhead" arrangement of cells
  - Apocrine snouts

- Angiosarcoma
  - Rapid growth; Skin discoloration
  - Inc blood vessels with anastomosing channels
  - Primary in young
  - Secondary to radiation in old
  - Secondary to lymphedema= Stuart-Treves

- Triple Negative Cancers:
  - Adenoid Cystic
  - Medullary
  - Metaplastic
  - Secrotory

- Papillary Adenocarcinoma
  - Older patient; Favorable prognosis
  - Papillae with columnar shaped cells

- Colloid (Mucinous) Carcinoma
  - Abundant mucin with tumor cells "floating" within it
  - Can have high grade cytology

- Adenoid Cystic Carcinoma
  - Cystic spaces with "gumballs" of hyaline basement membrane material

- Medullary Carcinoma
  - Tumor + Abundant lymphocytes
  - BRCA1 mutation; Triple negative
  - Can be high grade

- Secretory Carcinoma
  - Pleomorphic; Triple negative
Single cell population (NO myoepithelial cells), Monotonous, Plasmacytoid cells in clusters + scattered single cells, PROMINENT NUCLEOLI, vague ductal structures

Ductal Carcinoma In Situ (DCIS)

Invasive Ductal Carcinoma (IDC)

Plasmacytoid, monotonous population of ductal cells, NO myoepithelial cells

Normal myoepithelial cells are football shaped or spindled & often in doublets

NOTE: Ductal proliferations can sometimes have mucin droplets or targetoid bodies, but much more common in lobular proliferations.

Smaller cells with variation in size; contain mucin droplets

Targetoid Body (Mucin) & Intracytoplasmic Lumen (ICL) EM

"Single Filing"

Single cell population (NO myoepithelial cells), Smaller cell size, Cytoplasmic vacuole/mucin droplet = "targetoid body" - Intracellular lumen (ICL) favors lobular over ductal "Single file" lining up of cells

Lobular Carcinoma In Situ (LCIS)

Invasive Lobular Carcinoma (ILC)

Atypical Lobular Hyperplasia (ALH)

Lobular Hyperplasia