SPECIFIC HISTOLOGIC DIAGNOSES

Ductal carcinoma (ICD-O-3 morphology code 8500) is the most common type of adenocarcinoma of the breast, comprising 70 – 80% of all breast cancers. Ductal carcinoma tends to be unilateral. Ductal carcinoma can be either in situ (DCIS) or invasive. An individual primary tumor will often have both in situ (intraductal) and infiltrating (ductal) components described by the pathologist. Invasive ductal carcinoma has spread beyond the duct and into the surrounding tissue. Invasive ductal carcinoma is usually hard to the touch. These tumors can spread to the axillary lymph nodes even when small, so the prognosis of invasive cancer at diagnosis is less favorable than non-invasive cancer. The most common duct carcinoma may be referred to as "no special type" or "no specific type" (NST).

The many specific subtypes of ductal carcinoma have undergone extensive review and discussion in recent years. The following histologies are defined as invasive ductal subtypes or variants for the purposes of the 2007 histology coding rules:

- Pleomorphic carcinoma (8022)—a rare variant of high grade ductal carcinoma, NOS having specific pathologic criteria
- Carcinoma with osteoclast-like giant cells (8035)—a ductal tumor containing cells that resemble bone-dissolving cells in other organs
- Comedo (8501)—a ductal subtype with a unique appearance on gross examination; poorer prognosis than other ductal subtypes
- Secretory carcinoma (8502)—rare; also called juvenile carcinoma; excellent prognosis
- Intraductal papillary adenocarcinoma with invasion (8503)—also called invasive or infiltrating papillary adenocarcinoma; forms papillary excrescences in breast duct; good prognosis
- Cystic hypersecretory carcinoma (8508)—very rare; usually low grade but may metastasize

Duct carcinoma in situ (DCIS) is a precursor to invasive ductal CA. Cancer cells line the breast ducts but do not invade through the basement membrane into breast stroma. DCIS lesions can be quite extensive, sometimes involving an entire section of the breast. On mammography, DCIS can appear as clustered microcalcifications. DCIS can also present with a palpable mass or nipple discharge. About 30% of DCIS tumors will develop an invasive ductal CA. DCIS represents a small but important group of preinvasive breast cancers that can almost always be cured by local-regional therapy. The extent of DCIS is a factor in determining treatment modality.

Specific subtypes of intraductal carcinoma (ICD-O-3 morphology code 8500/2) include:

- Cribriform (8201)—described as sieve-like in appearance; generally low-grade
- Solid (8230)—tumor completely fills the duct; usually low grade
- Apocrine (8401)—showing apocrine features in more than 90% of cells; no prognostic importance
- Comedo (8501)—unique appearance as noted above; poorer prognosis than other intraductal subtypes
- Papillary (8503)—forms papillary projections in breast duct
- Intracystic (8504)—papillary ductal carcinoma variant that develops as a breast cyst
- Micropapillary/clinging (8507)—smaller papillary projections than papillary carcinoma

The remaining 10% of breast cancers include a variety of **adenocarcinoma** subtypes. Among the more common glandular cell types are:

- Tubular—cancerous ducts lined with a single layer of tumor cells; favorable prognosis
- Scirrhous–fibrous tumor with a gritty consistency