

**University of Iowa Hospitals and Clinics Multidisciplinary Breast Service
Guidelines for Targeted Intraoperative Radiation Therapy
Following Breast-conserving Surgery**

Eligibility Criteria*

- 1) Age 50 yrs or older
- 2) Invasive ductal carcinoma or ductal carcinoma in situ (no lobular cancer)
- 3) T1 and T2 tumors (<3.5cm in size) for invasive cancer, or <3.0cm for DCIS
- 4) No more than focal lymphovascular space invasion (LVSI) on core biopsy
- 5) Estrogen and progesterone receptor positive tumors only
- 6) No evidence of multicentric disease by clinical examination or imaging that may preclude excision with negative margins with a single lumpectomy
- 7) No clinical or radiologic evidence of axillary nodal involvement
- 8) Unilateral breast cancer only at the time of diagnosis (metachronous cancers on the contralateral side are eligible if they meet all other criteria)
- 9) No history of neoadjuvant systemic therapy to treat the current cancer
- 10) No prior history of ipsilateral breast cancer or radiation
- 11) No known BRCA 1 / 2 or other high risk mutation

Criteria for whole breast irradiation after IORT (following final pathology review)*

- 1) Margins positive or <2mm
- 2) More than focal LVSI found on final pathology
- 3) Invasive lobular carcinoma found on final pathology
- 4) Tumor involving axillary lymph nodes
- 5) Tumors > 3cm with extensive intraductal component (EIC) i.e. >25% of an invasive ductal cancer consisting of DCIS

**These are guidelines only. Final decisions regarding individual patient care will be guided by consensus following case presentation and group discussion at the Multidisciplinary Breast Tumor Board*