ARRO Contour
Ductal Carcinoma In-Situ

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Radiation Dose

• Whole Breast Dose: 50 Gy in 2 Gy fractions
• Tumor Bed Boost: 10 Gy in 2 Gy fractions
Radiation Planning

• CT Simulation
  – Supine with arms up on a 15-20 degree breast board
    • Goal is to bring sternum parallel to the table
  – Wire palpable breast tissue, clinical breast borders and lumpectomy incision
    • Medial border → mid sternum
    • Lateral border → 2 cm lateral to palpable breast tissue (mid axillary line)
    • Inferior border → 2 cm below the inframammary fold
    • Superior border → head of the clavicle or 2nd intercostal space
Treatment Volumes

- **GTV:** Surgical cavity from lumpectomy. Contour using all available clinical and radiographic information including the cavity volume, lumpectomy scar, seroma and surgical clips.
- **CTV:** Takes into account clinical borders at the time of CT simulation. Generally, posteriorly to the anterior surface of the chest wall:
  - Medial border → mid sternum
  - Lateral border → 2 cm lateral to palpable breast tissue (mid axillary line)
  - Inferior border → 2 cm below the infra-mammary fold
  - Superior border → head of the clavicle or 2\textsuperscript{nd} intercostal space
Treatment Volumes

• PTV: Breast CTV + 7 mm expansion
  – Used for beam aperture generation

• PTV-EVAL: Clipped 5 mm into skin anteriorly and no deeper than the anterior surface of the ribs posteriorly (excludes boney thorax and lung)
  – Used for DVH analysis