

# *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

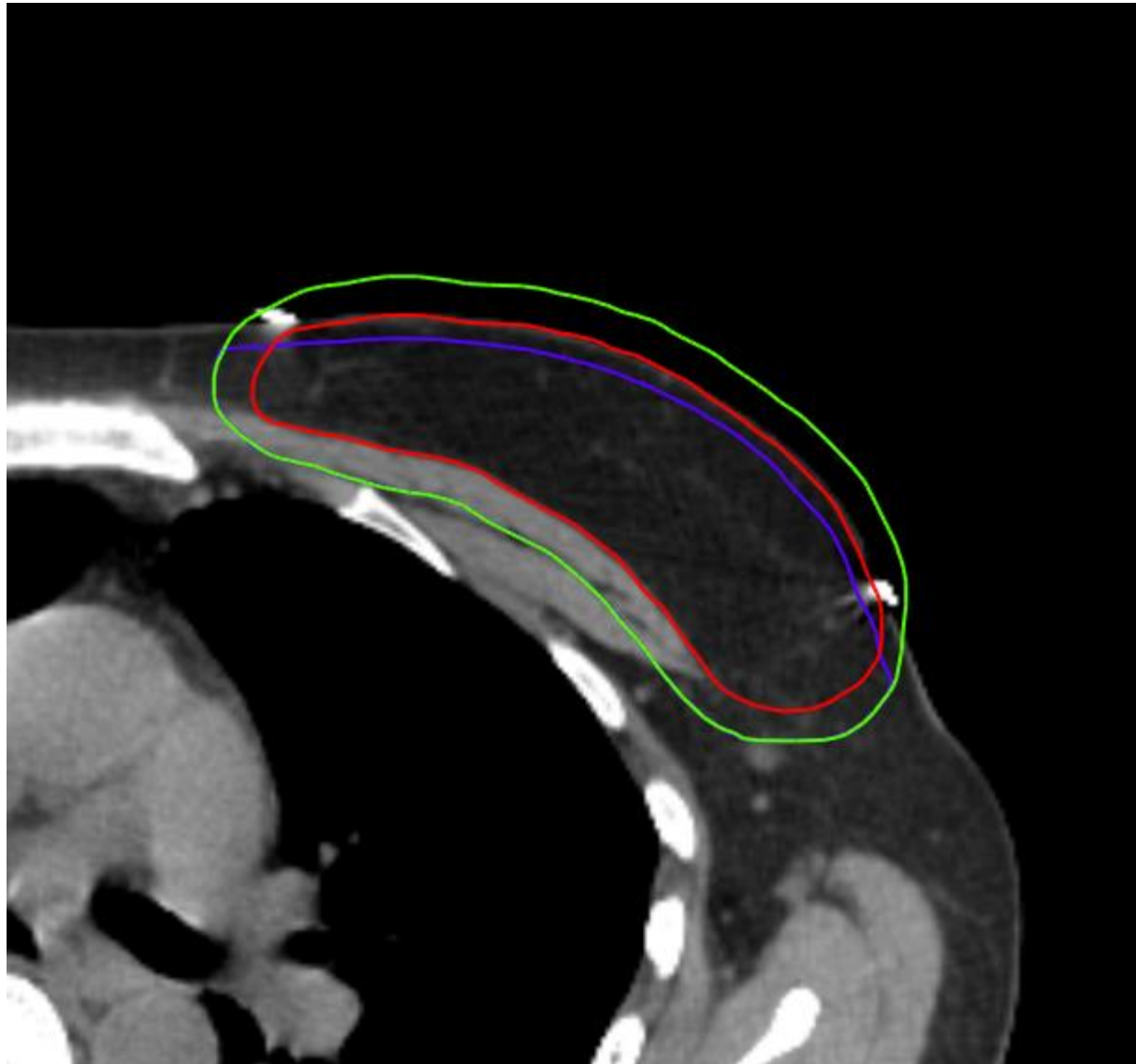
- CT Simulation
  - Supine with arms up on a 15-20 degree breast board
    - Goal is to bring sternum parallel to the table
  - Wire palpable breast tissue, clinical breast borders and lumpectomy incision
    - Medial border → mid sternum
    - Lateral border → 2 cm lateral to palpable breast tissue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

# Treatment Volumes

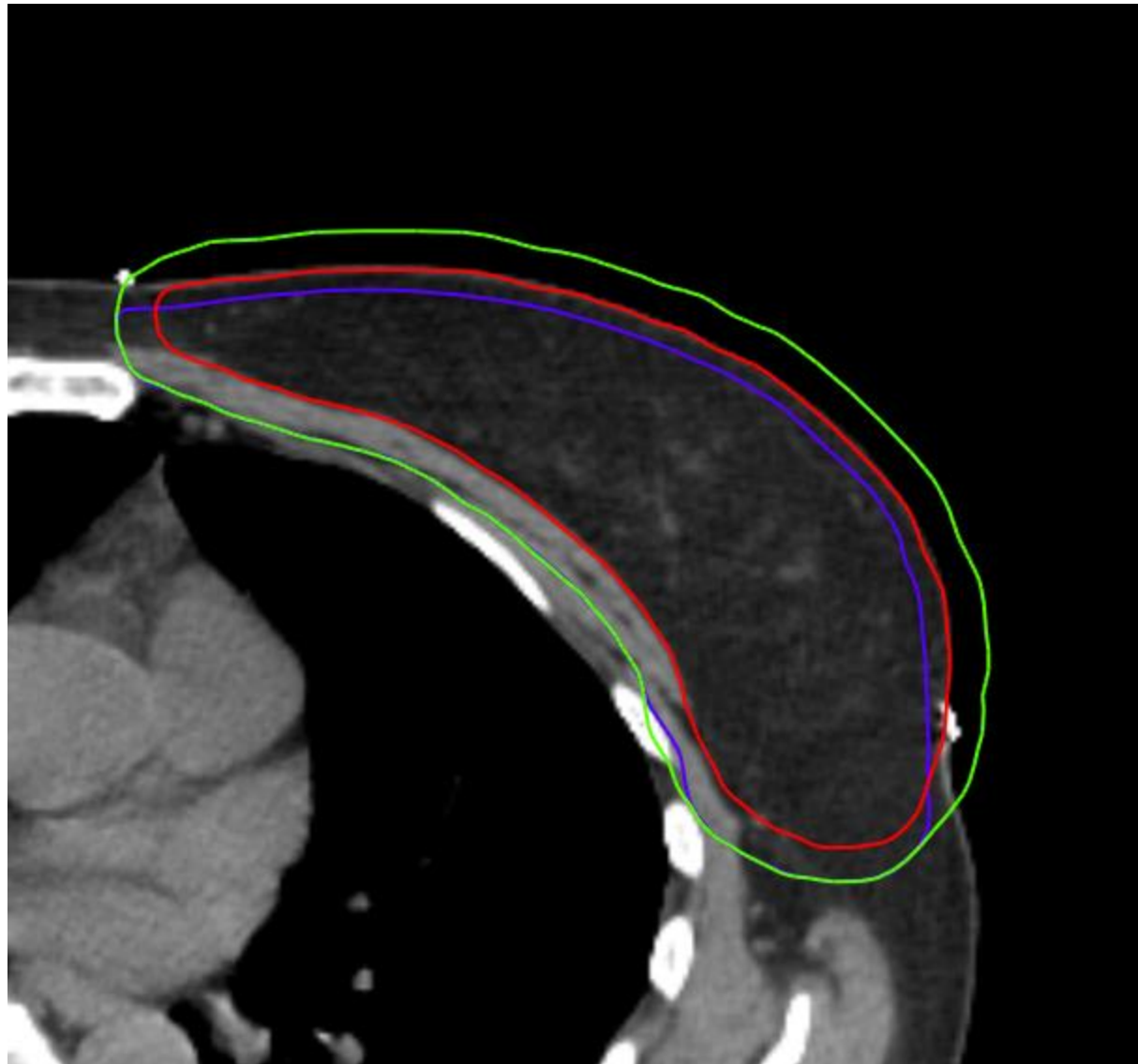
- PTV: Breast CTV + 7 mm expansion
  - Used for beam aperture generation
- PTV-EVAL: Clipped 5 mm into skin anteriorly and no deeper than the anterior surface of the ribs posteriorly (excludes boney thorax and lung)
  - Used for DVH analysis



GTV  
CTV  
PTV  
PTV-EVAL

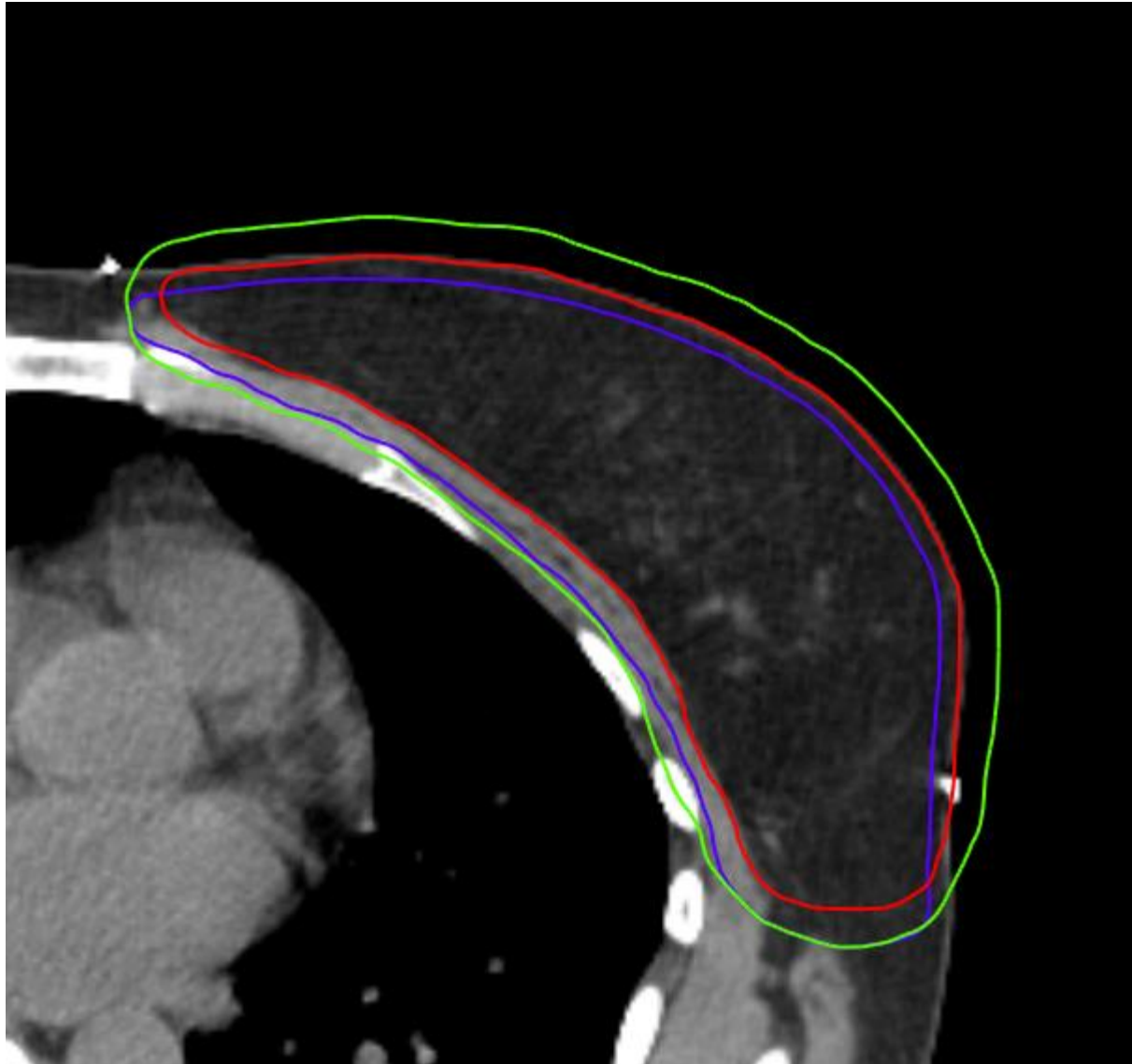


GTV  
CTV  
PTV  
PTV-EVAL



GTV  
CTV  
PTV  
PTV-EVAL





GTV  
CTV  
PTV  
PTV-EVAL



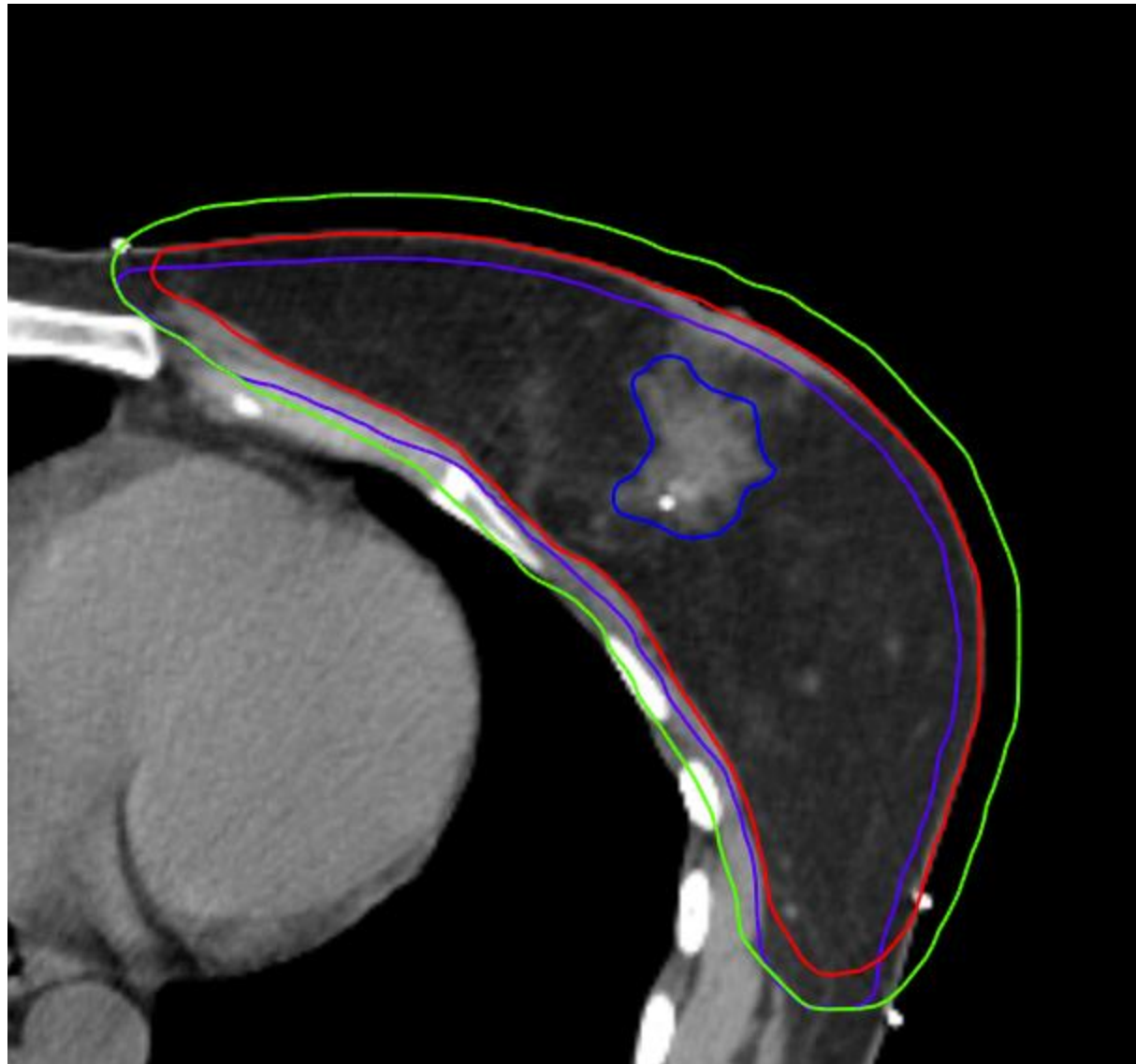
GTV  
CTV  
PTV  
PTV-EVAL



GTV  
CTV  
PTV  
PTV-EVAL



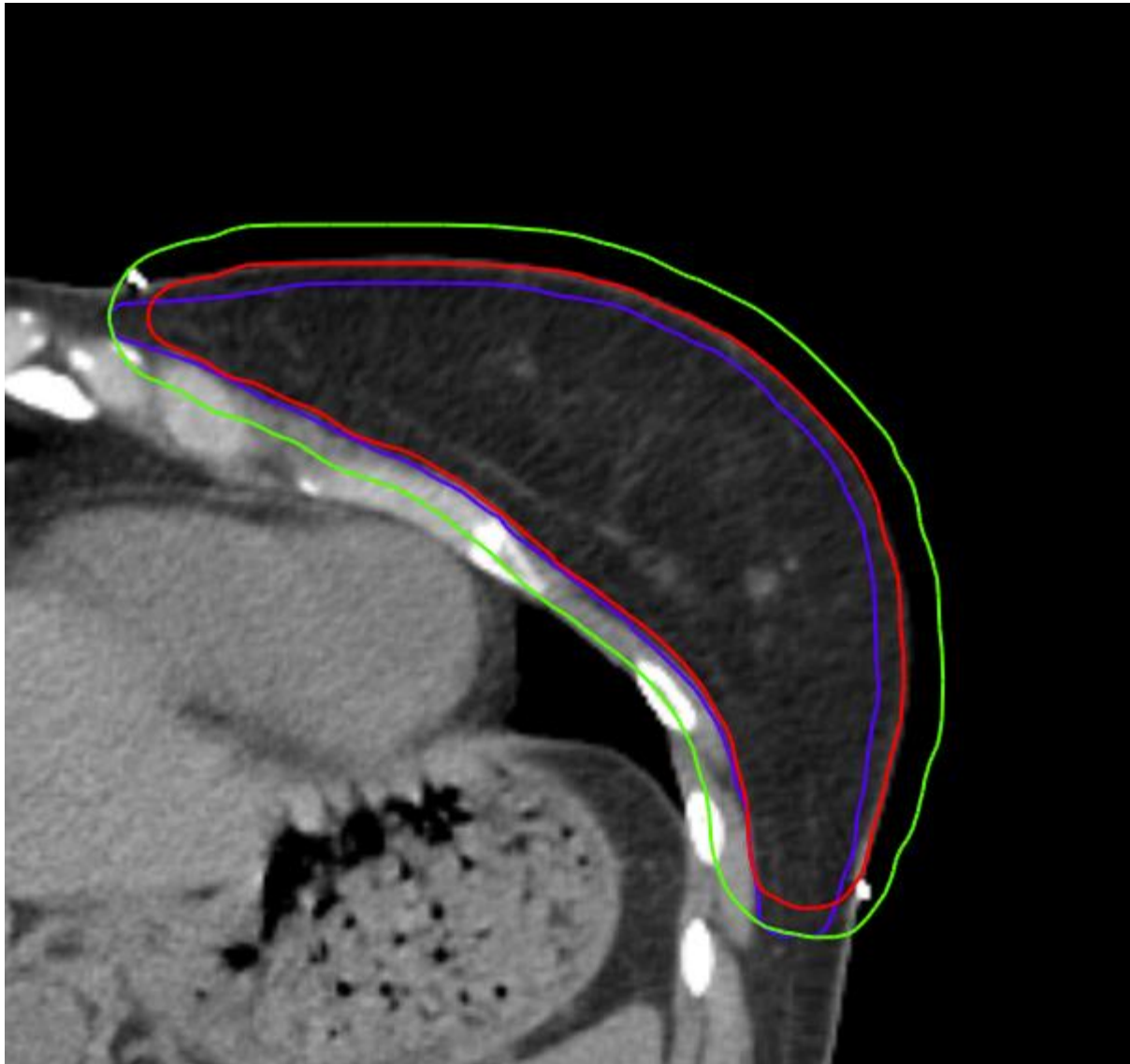
GTV  
CTV  
PTV  
PTV-EVAL



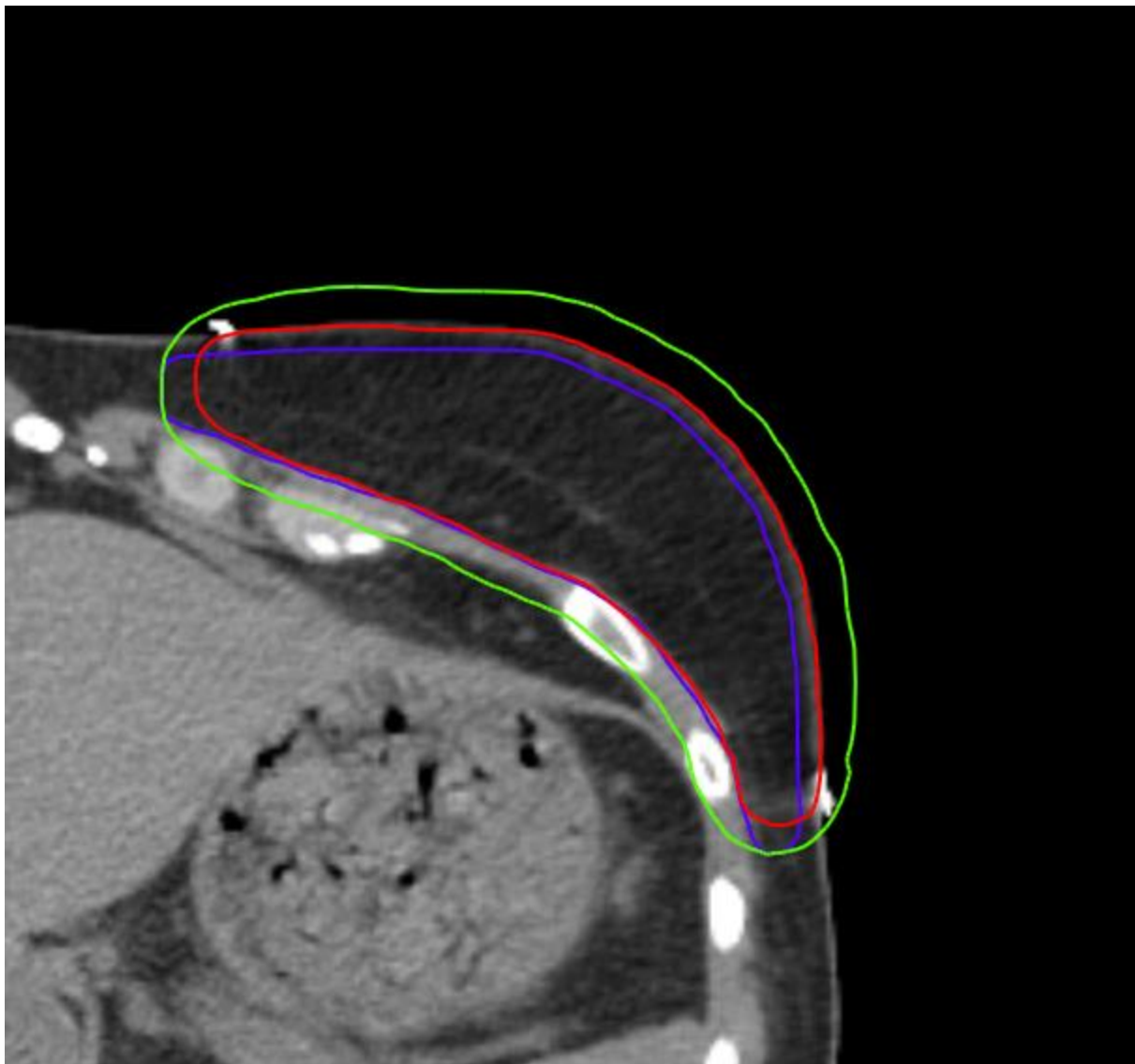
GTV  
CTV  
PTV  
PTV-EVAL



GTV  
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PTV-EVAL



GTV  
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GTV  
CTV  
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PTV-EVAL