

ARROContour

Esophageal Cancer

Mark Zaki, MD

Michael Dominello, DO

Faculty Advisor: Steven Miller, MD

Detroit Medical Center

Wayne State University School of Medicine

Karmanos Cancer Center

Detroit

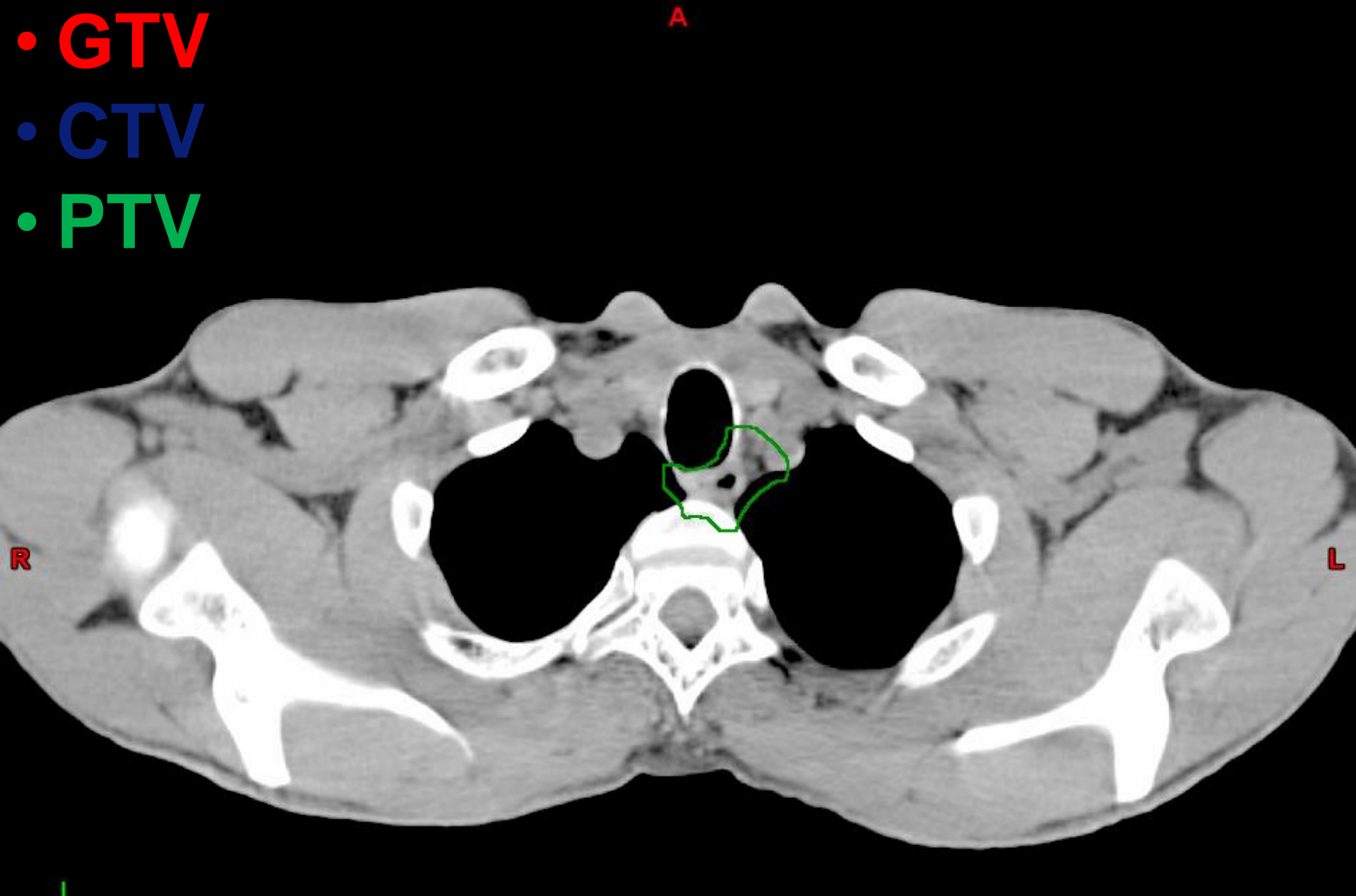
Treatment Planning

- CT Simulation
 - Esophageal contrast optional
 - Arms above head to maximize number of beam arrangements
 - Consider 4-D CT for GE junction tumors

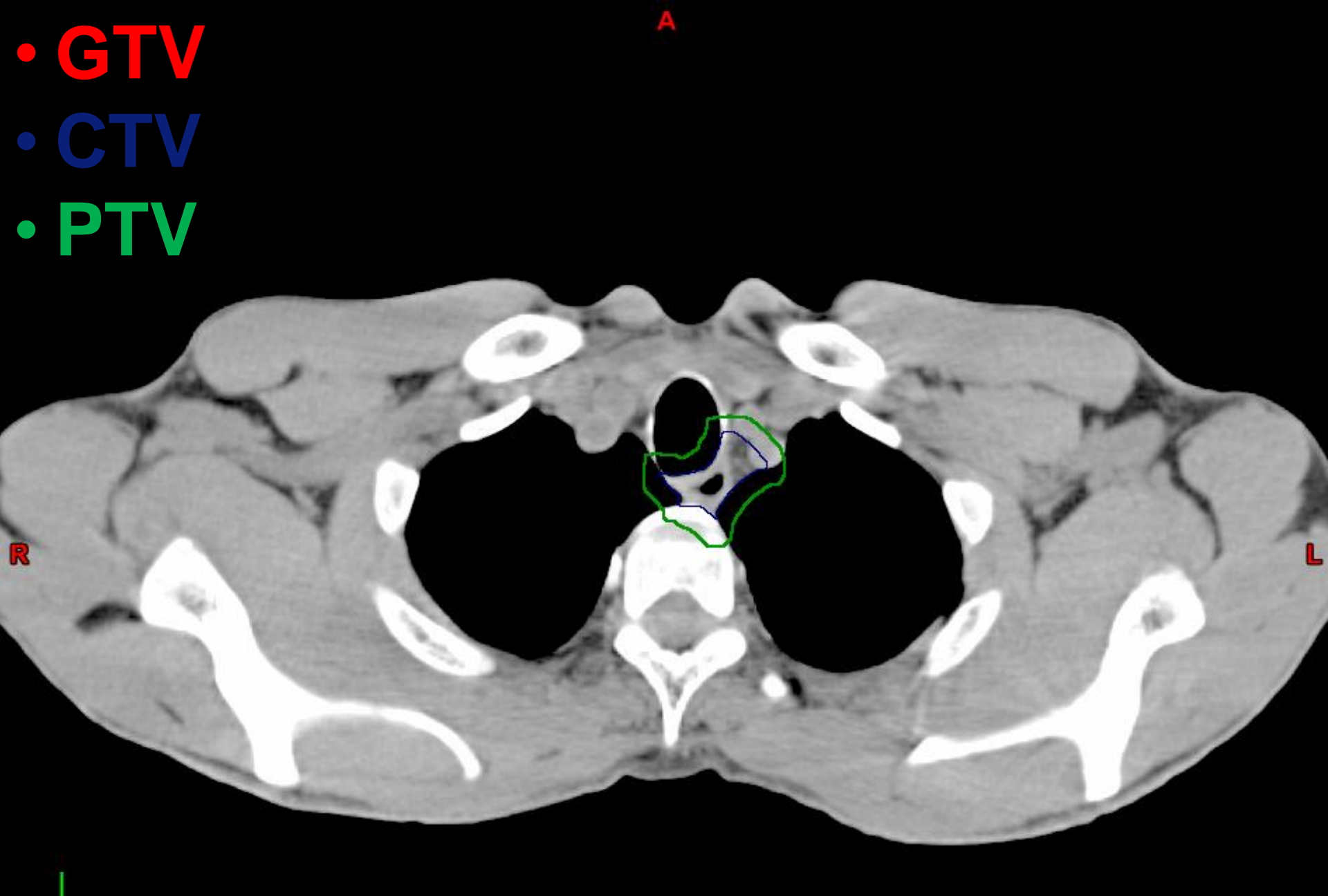
Target Volumes

- GTVp: primary tumor in the esophagus
- GTVn: grossly involved regional lymph nodes
- CTV = GTVp with a 4 cm expansion sup/inf along the length of the esophagus and gastric cardia and a 1.0-1.5 cm radial expansion (plus the GTVn with a 1.0-1.5 cm expansion in all dimensions)
- The celiac axis should be covered for tumors of the distal esophagus or GE junction
- PTV (45Gy) expansion should be 0.5 to 1.0 cm and does not need to be uniform in all dimensions
- Boost PTV (50.4Gy) = GTVp and GTVn with an expansion of 0.5 to 1.0 cm

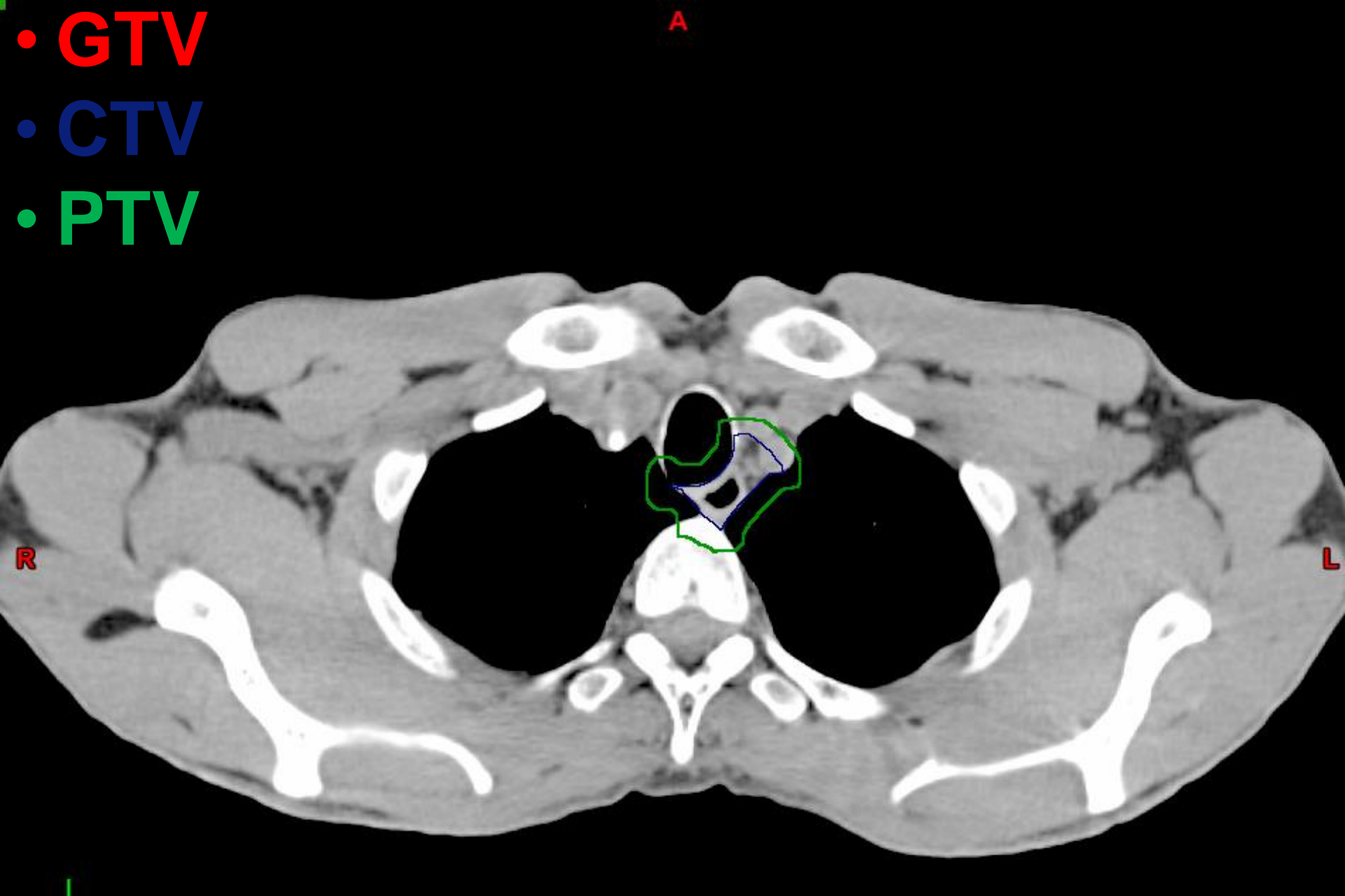
- GTV
- CTV
- PTV



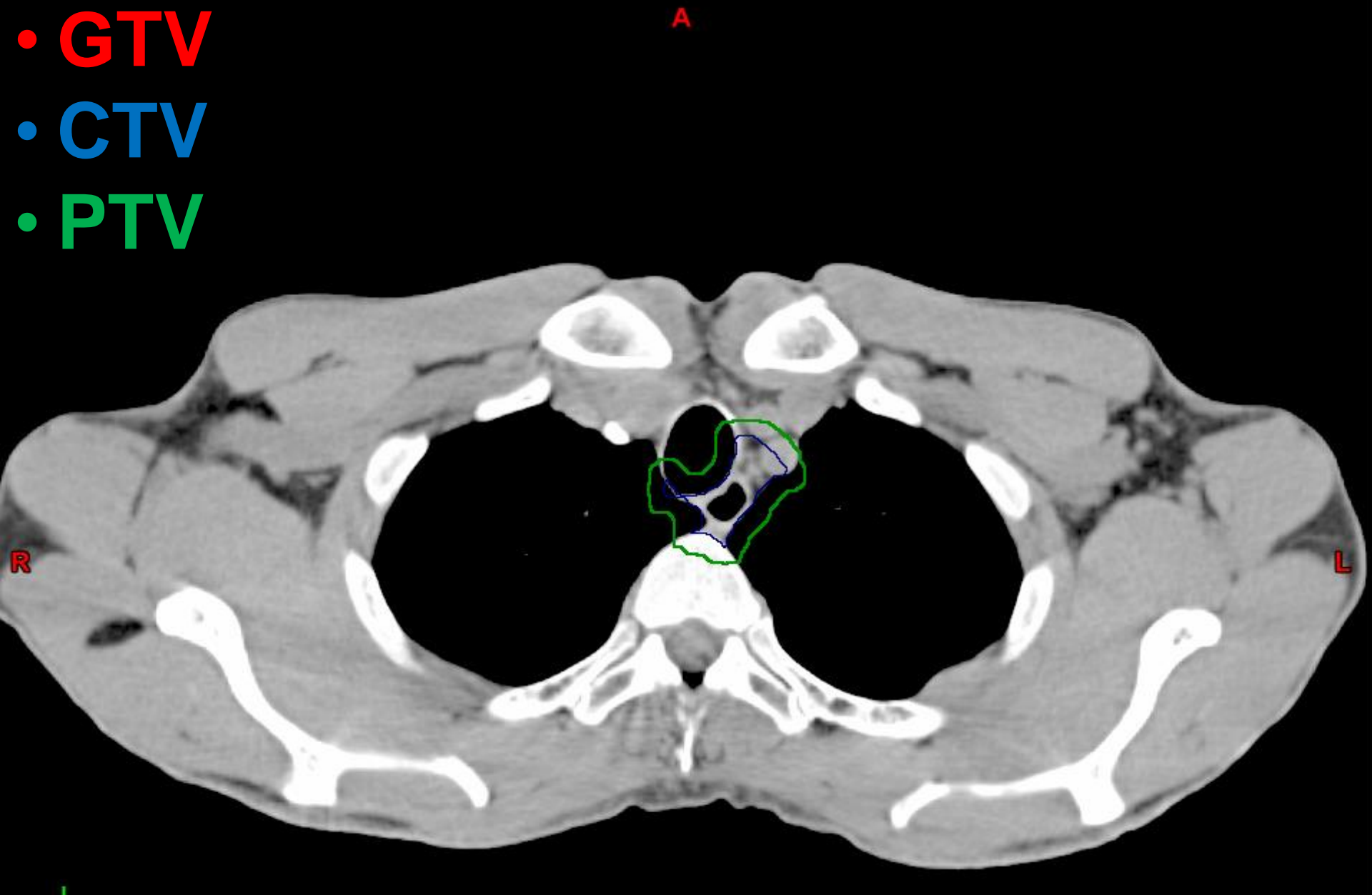
- GTV
- CTV
- PTV



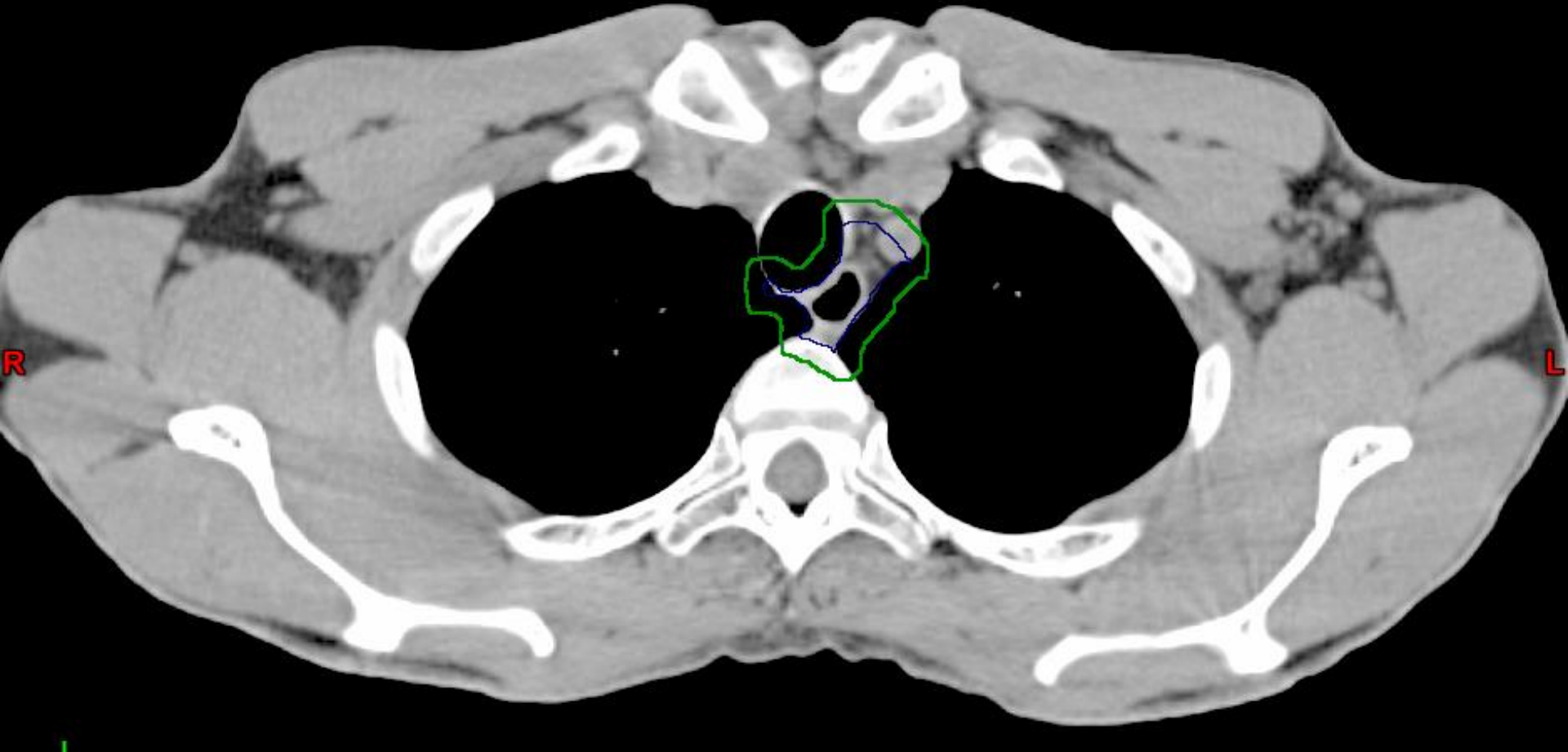
- GTV
- CTV
- PTV



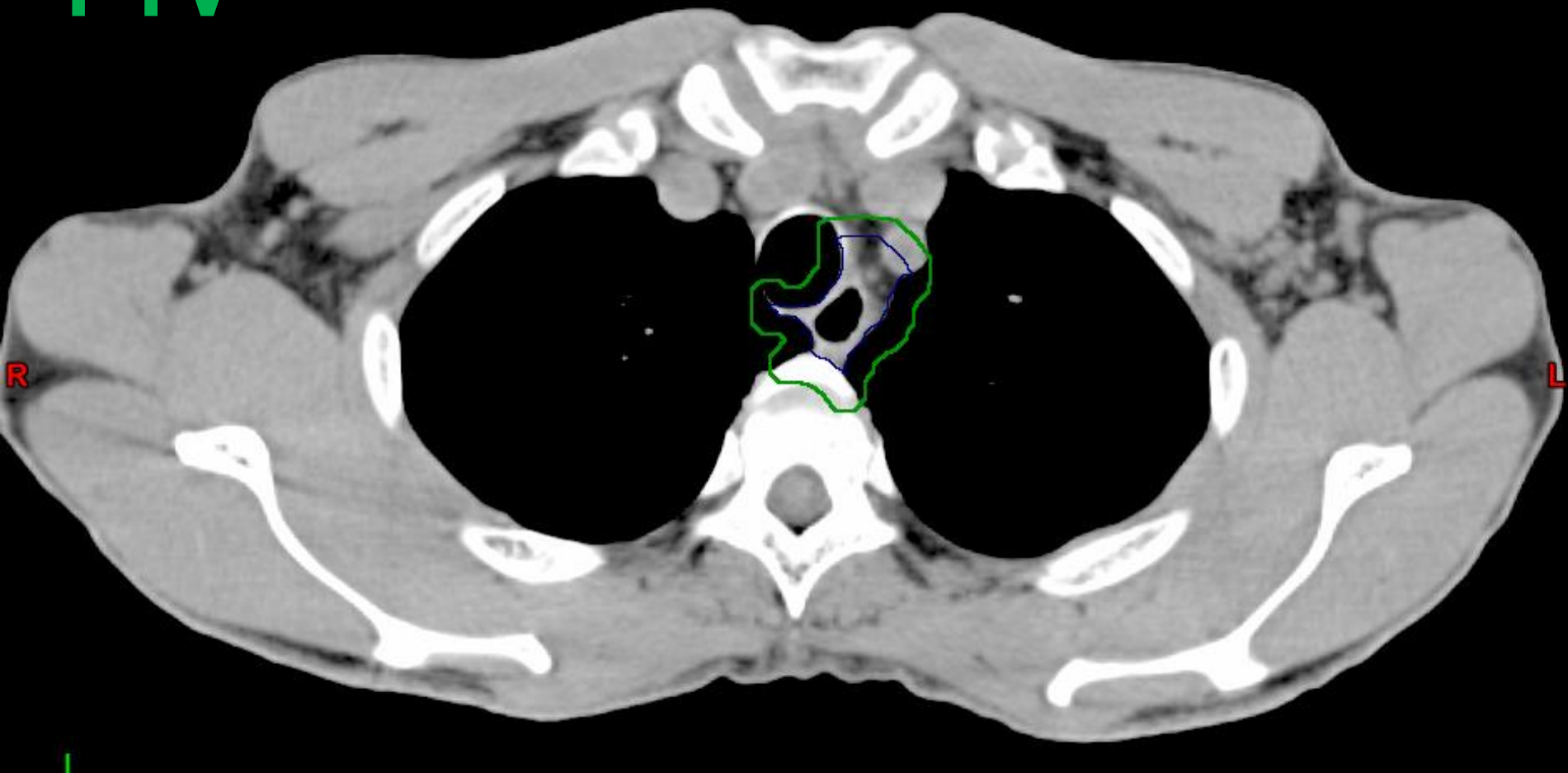
- GTV
- CTV
- PTV



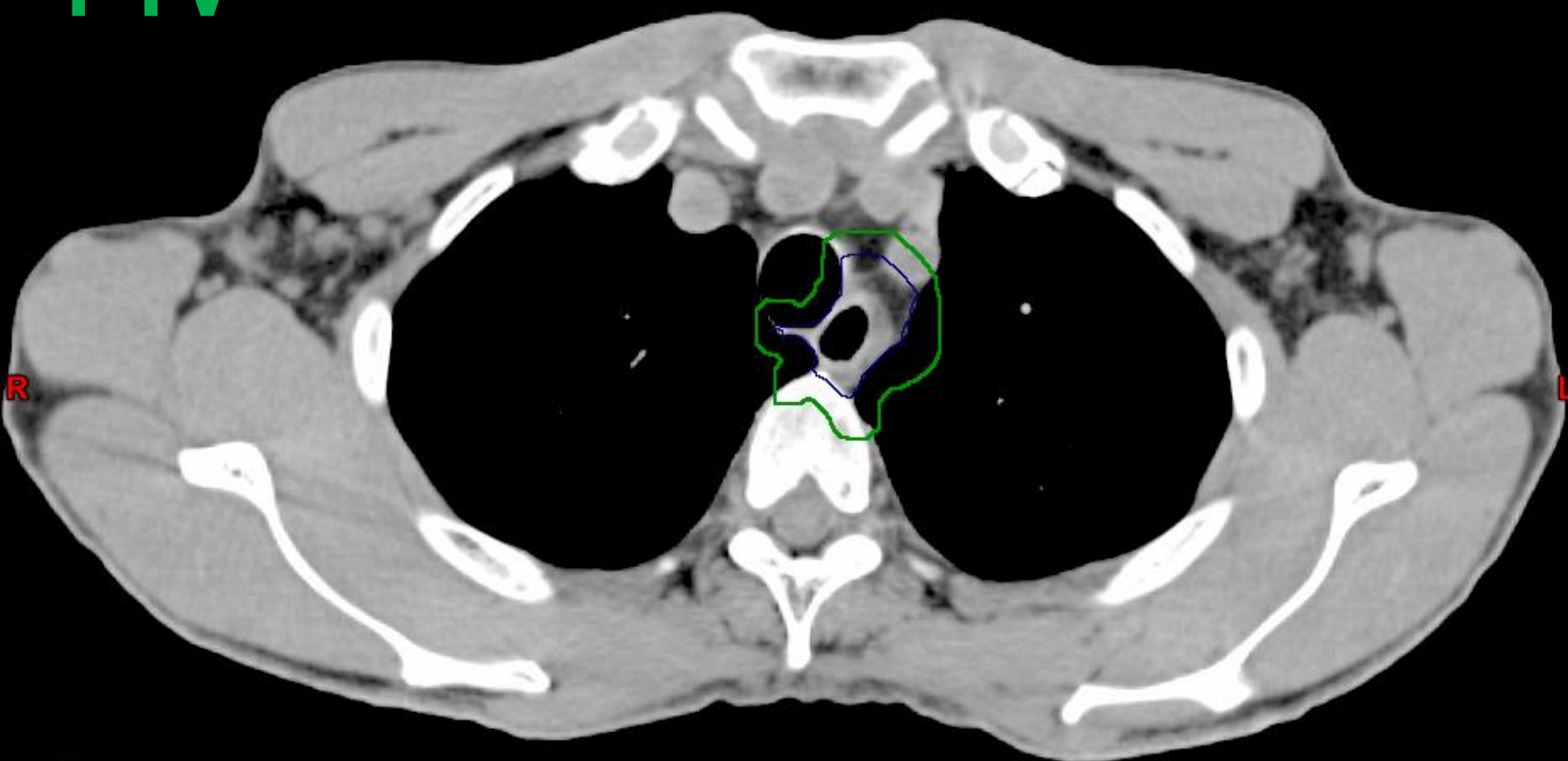
- GTV
- CTV
- PTV



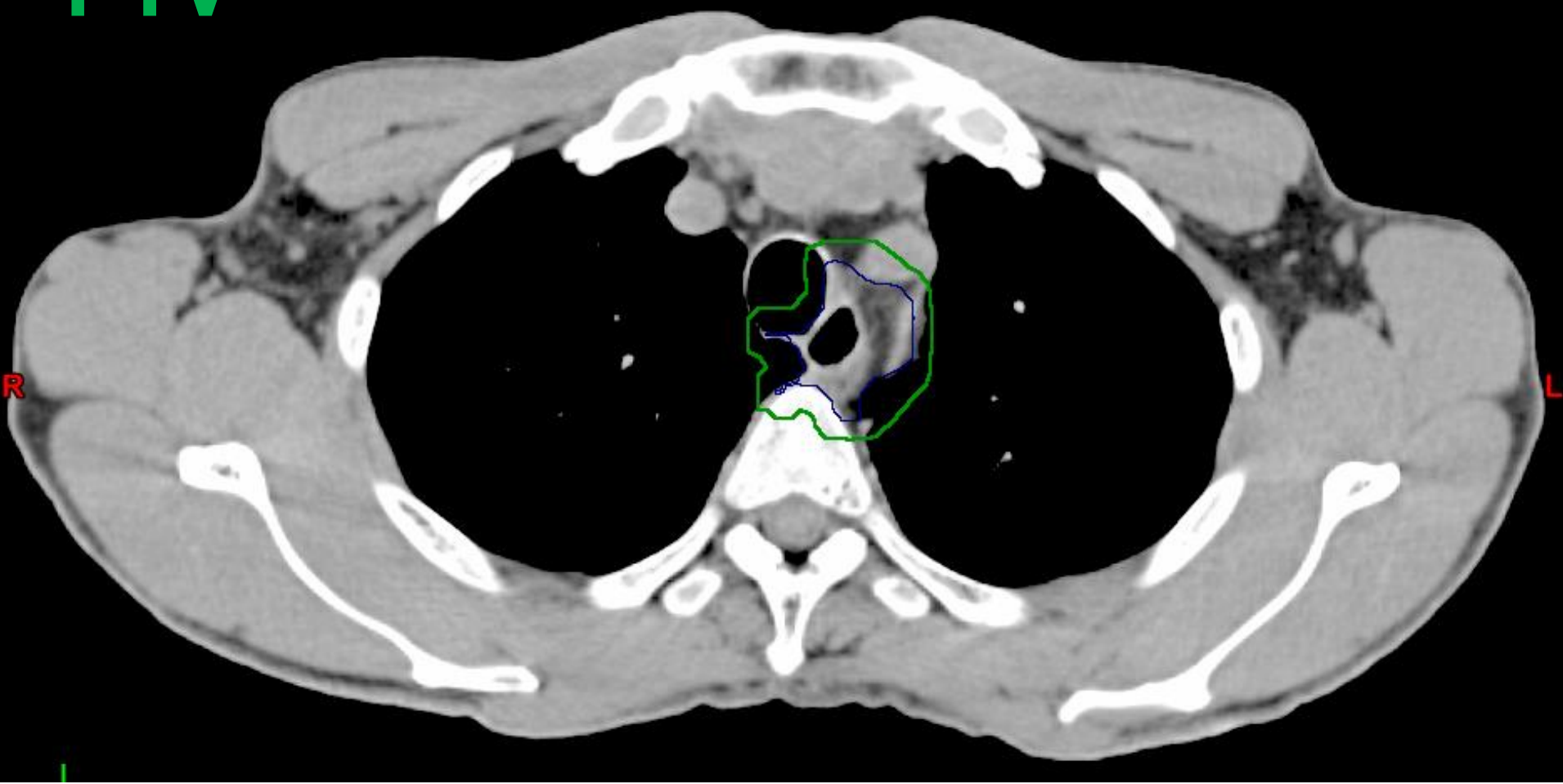
- GTV
- CTV
- PTV



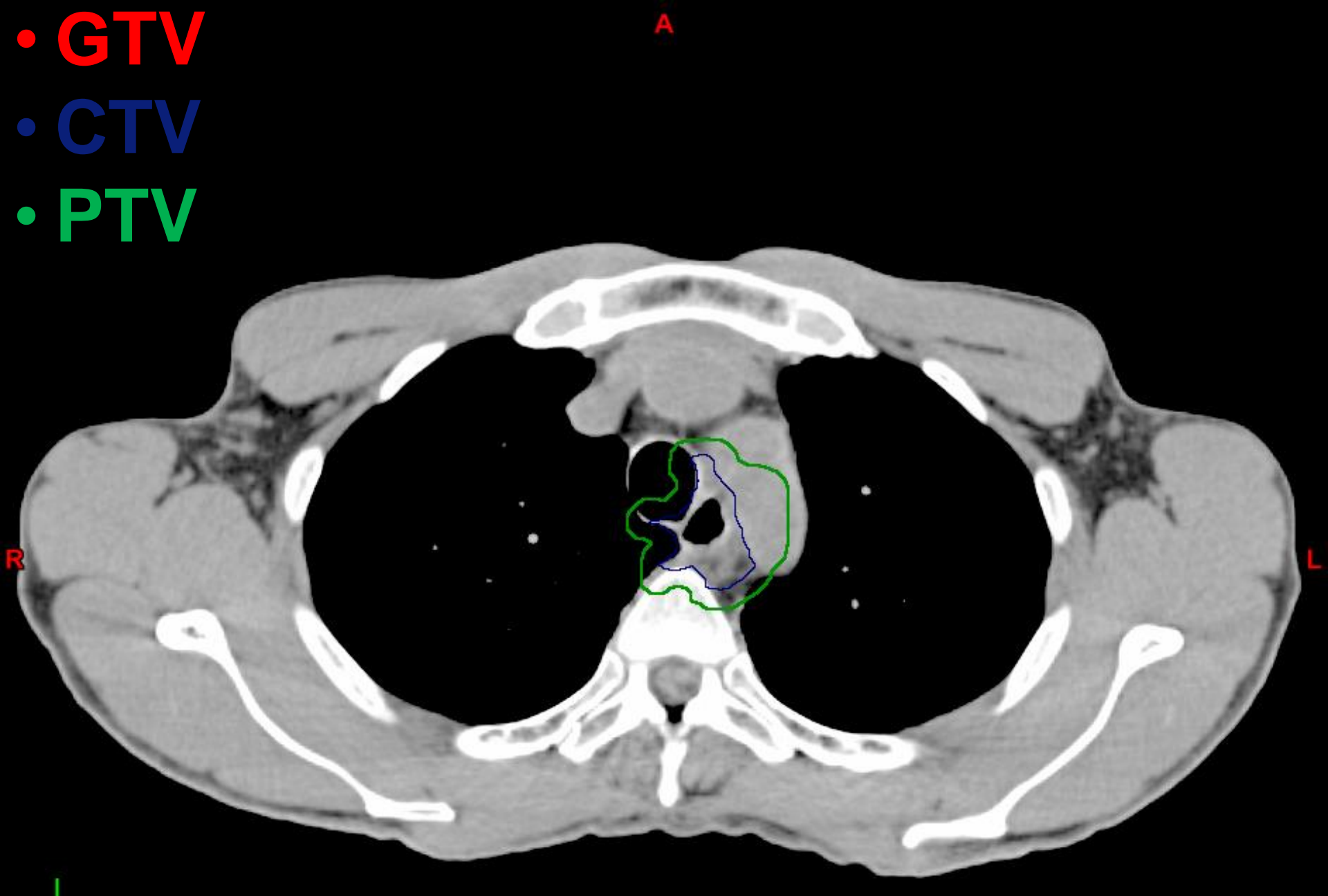
- GTV
- CTV
- PTV



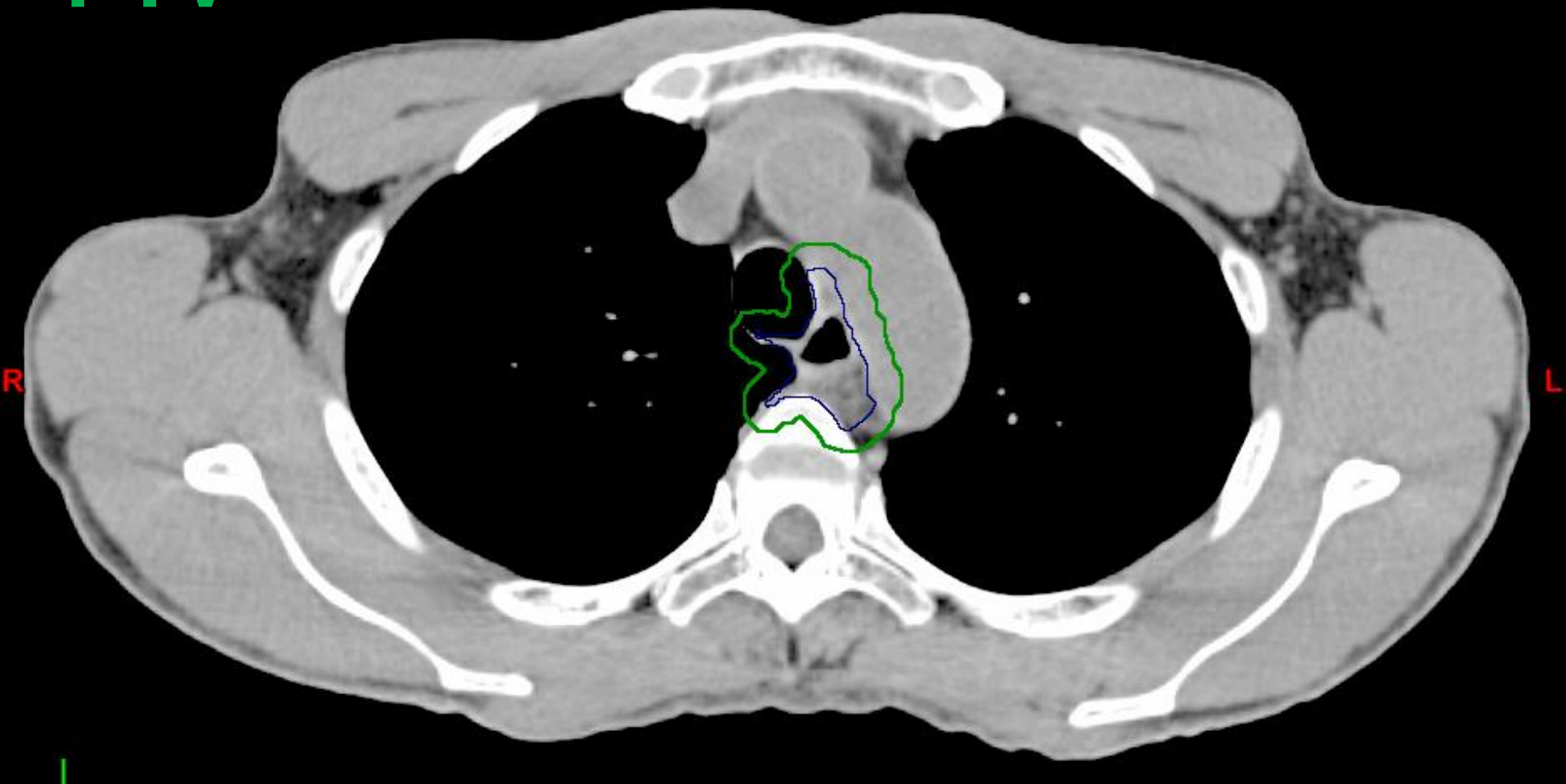
- GTV
- CTV
- PTV



- GTV
- CTV
- PTV



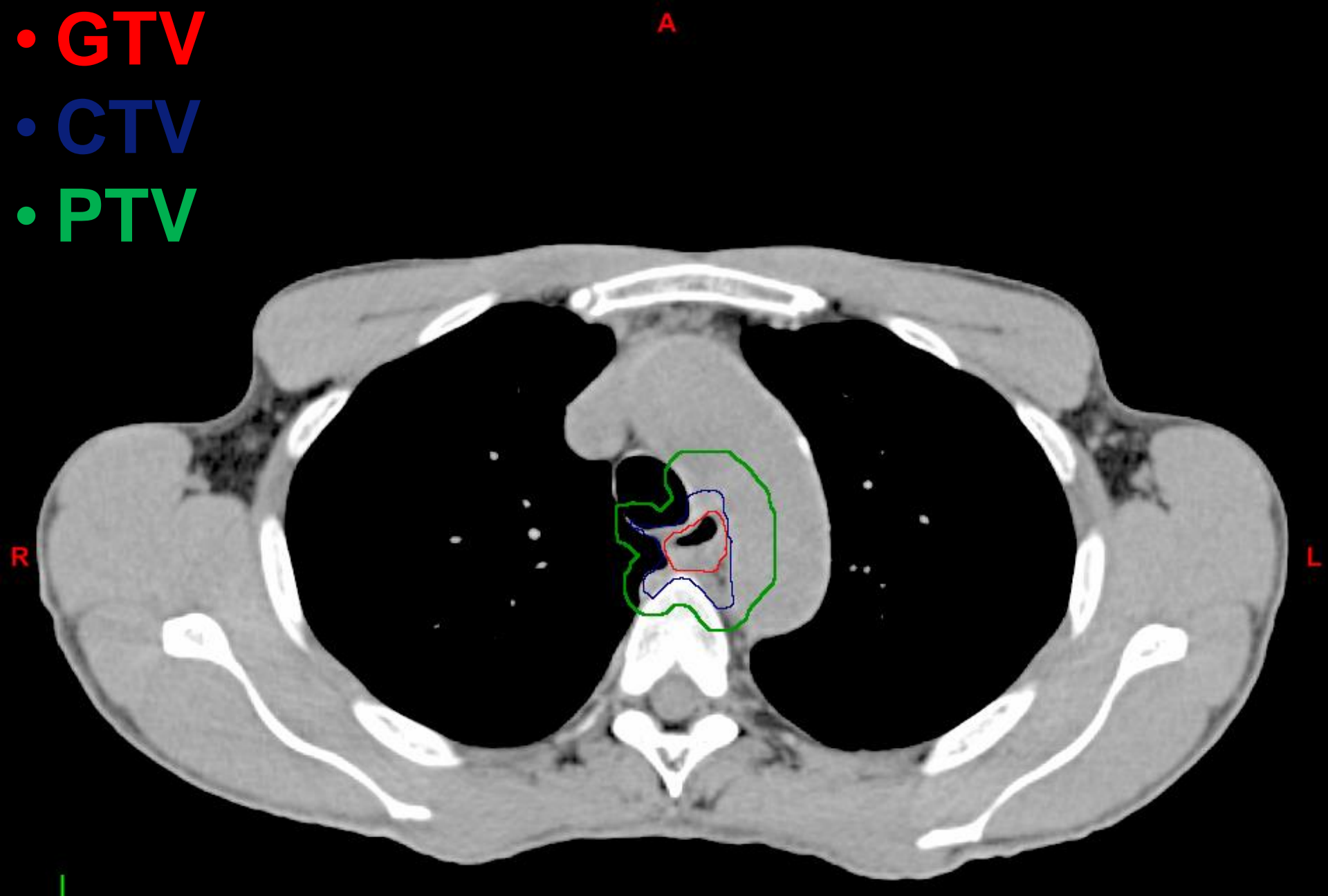
- GTV
- CTV
- PTV



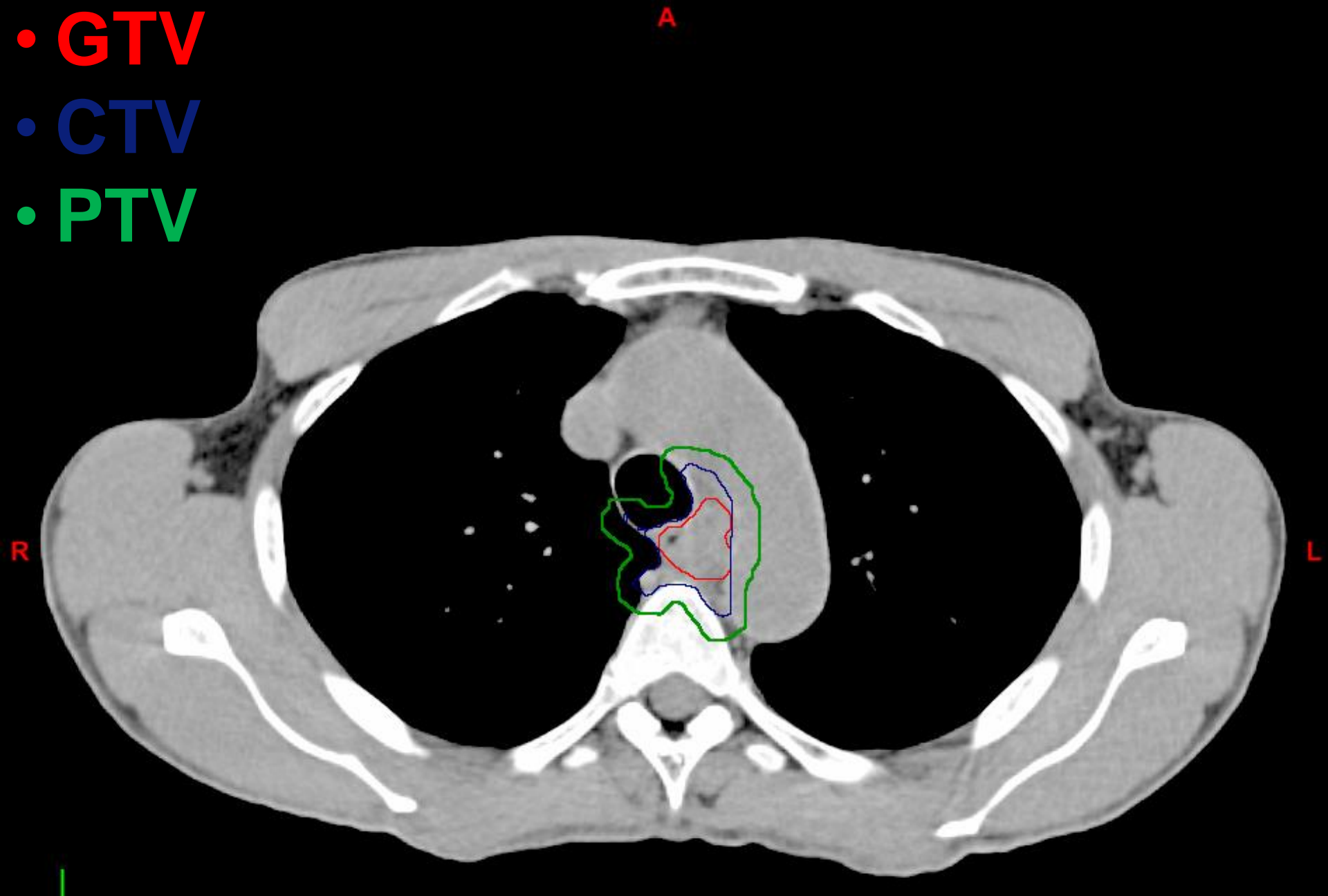
- GTV
- CTV
- PTV



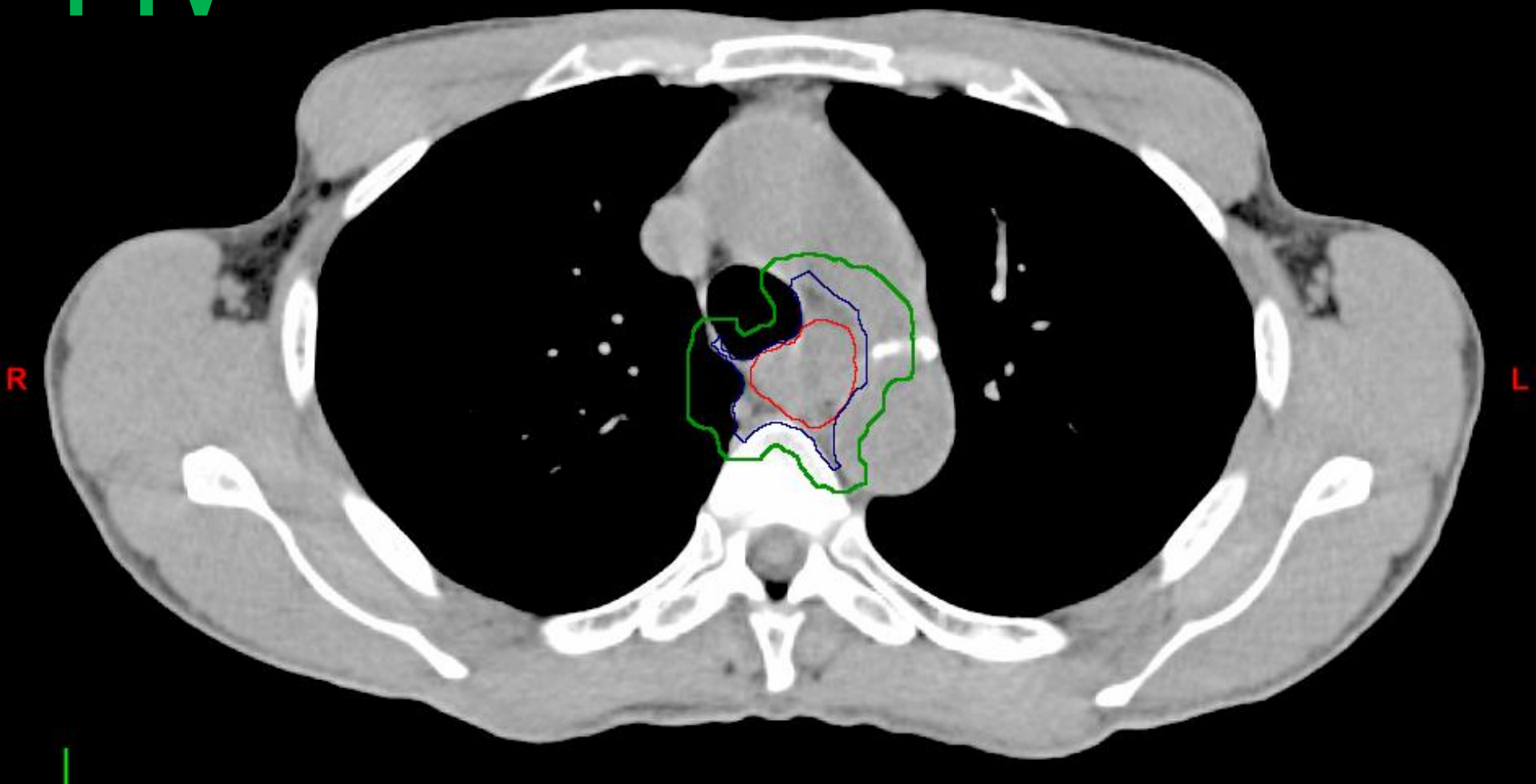
- GTV
- CTV
- PTV



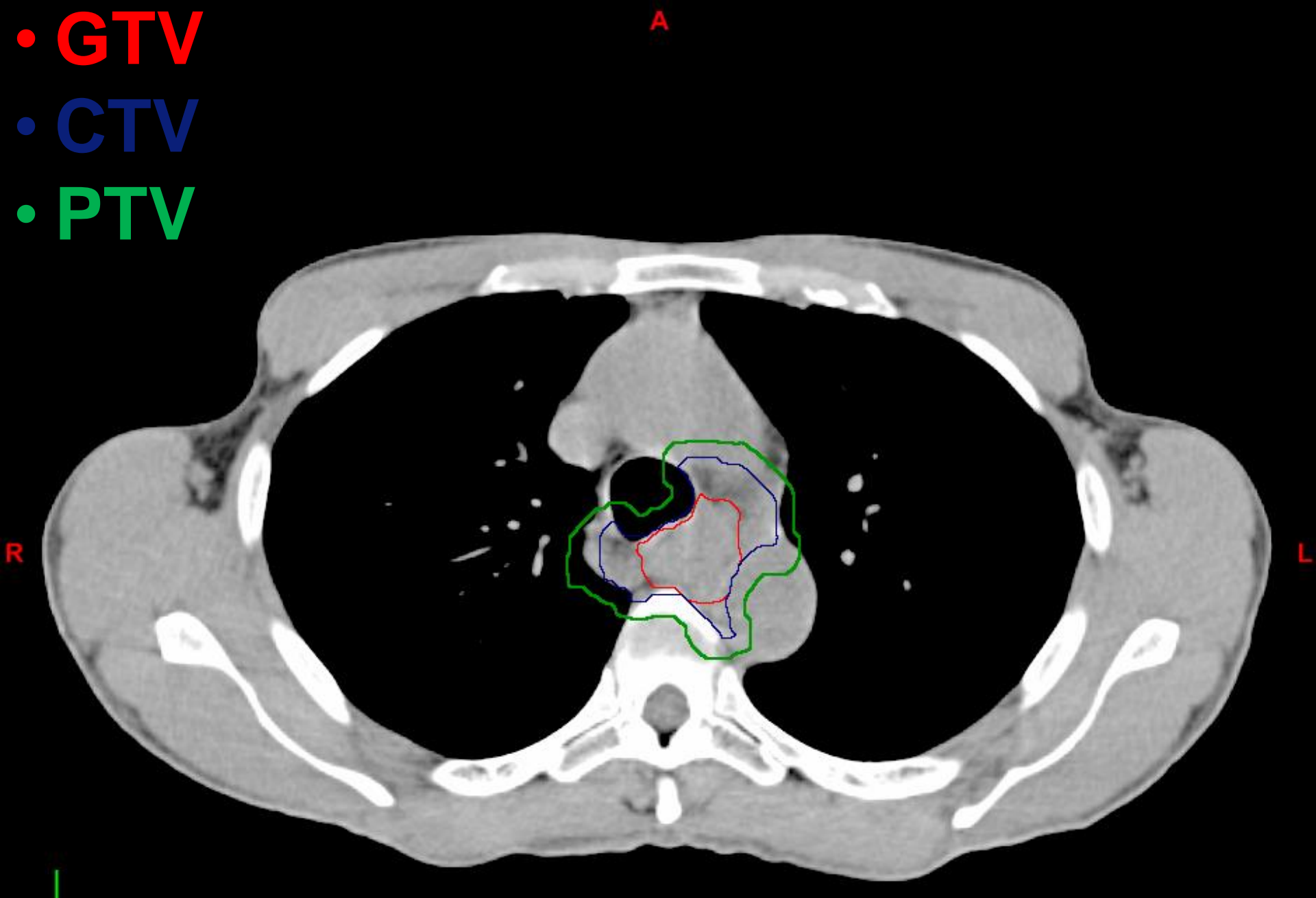
- GTV
- CTV
- PTV



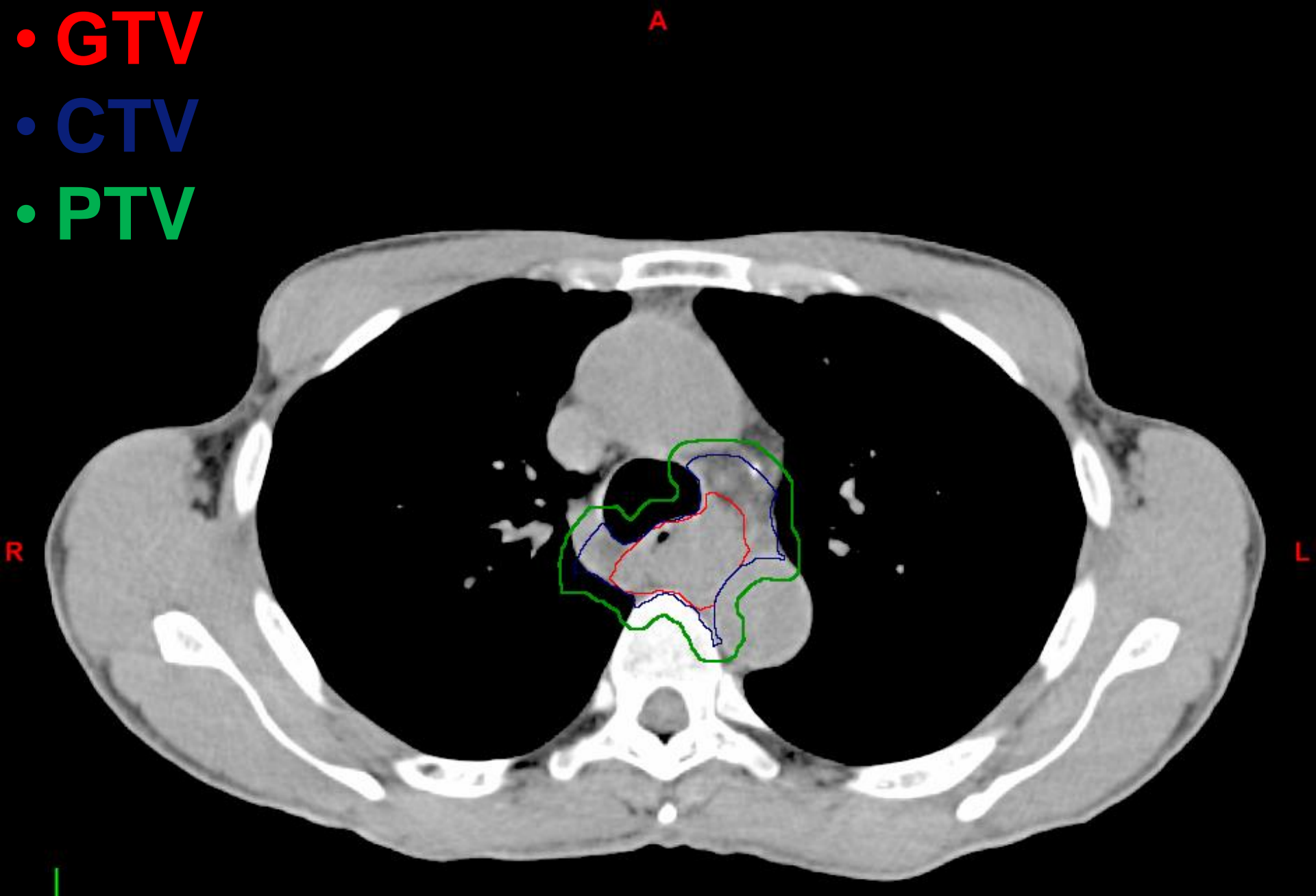
- GTV
- CTV
- PTV



- GTV
- CTV
- PTV



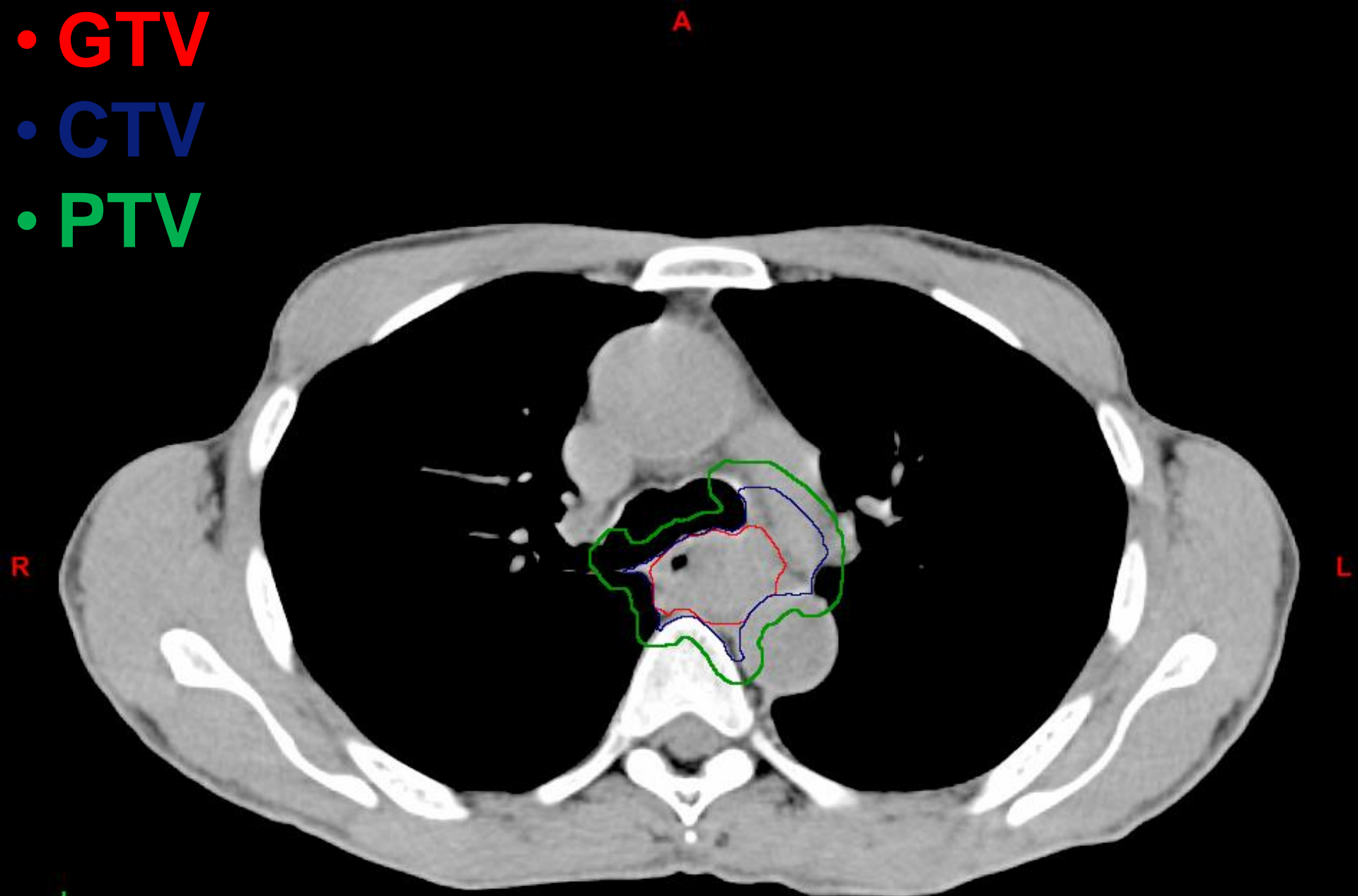
- GTV
- CTV
- PTV



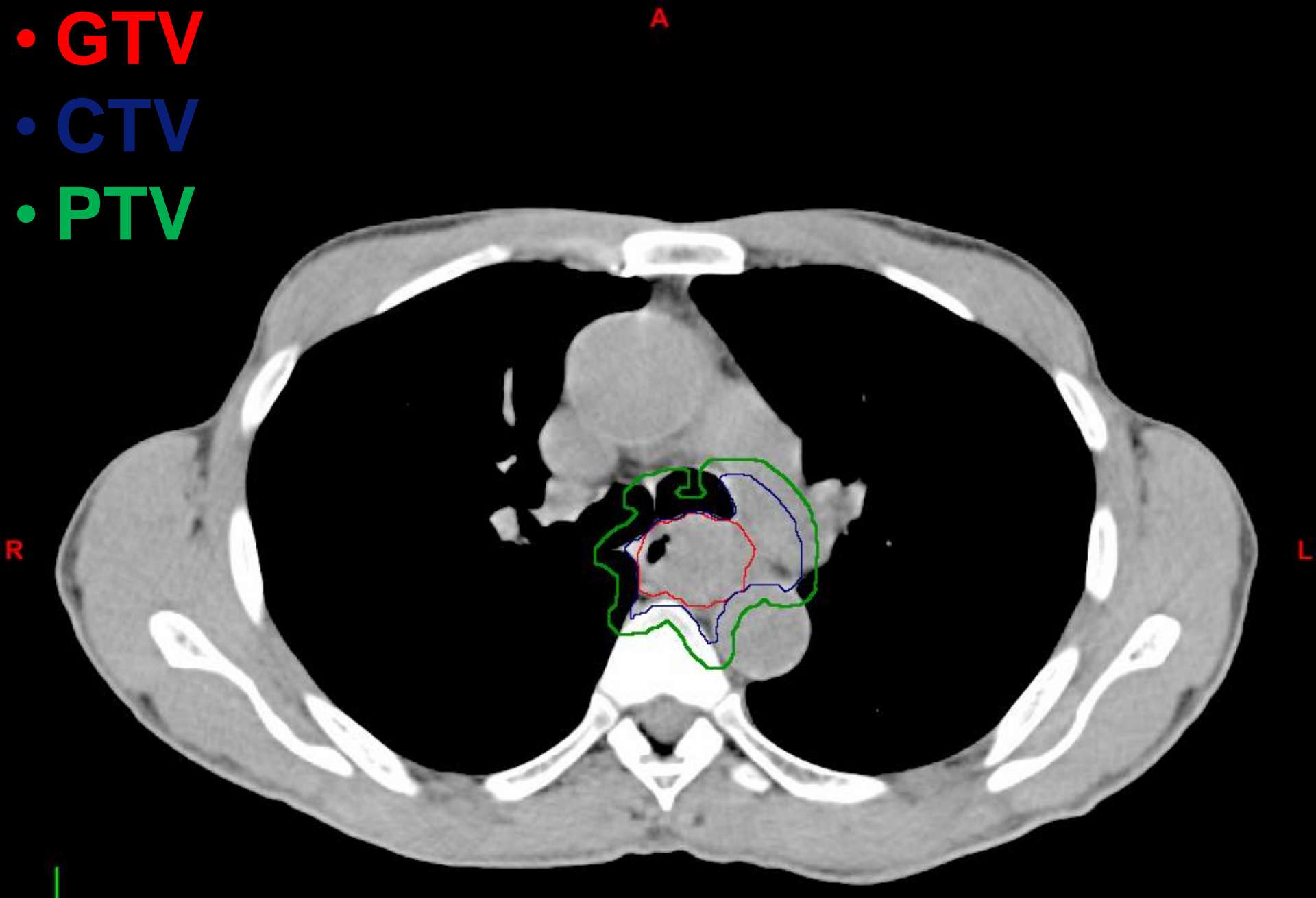
- GTV
- CTV
- PTV



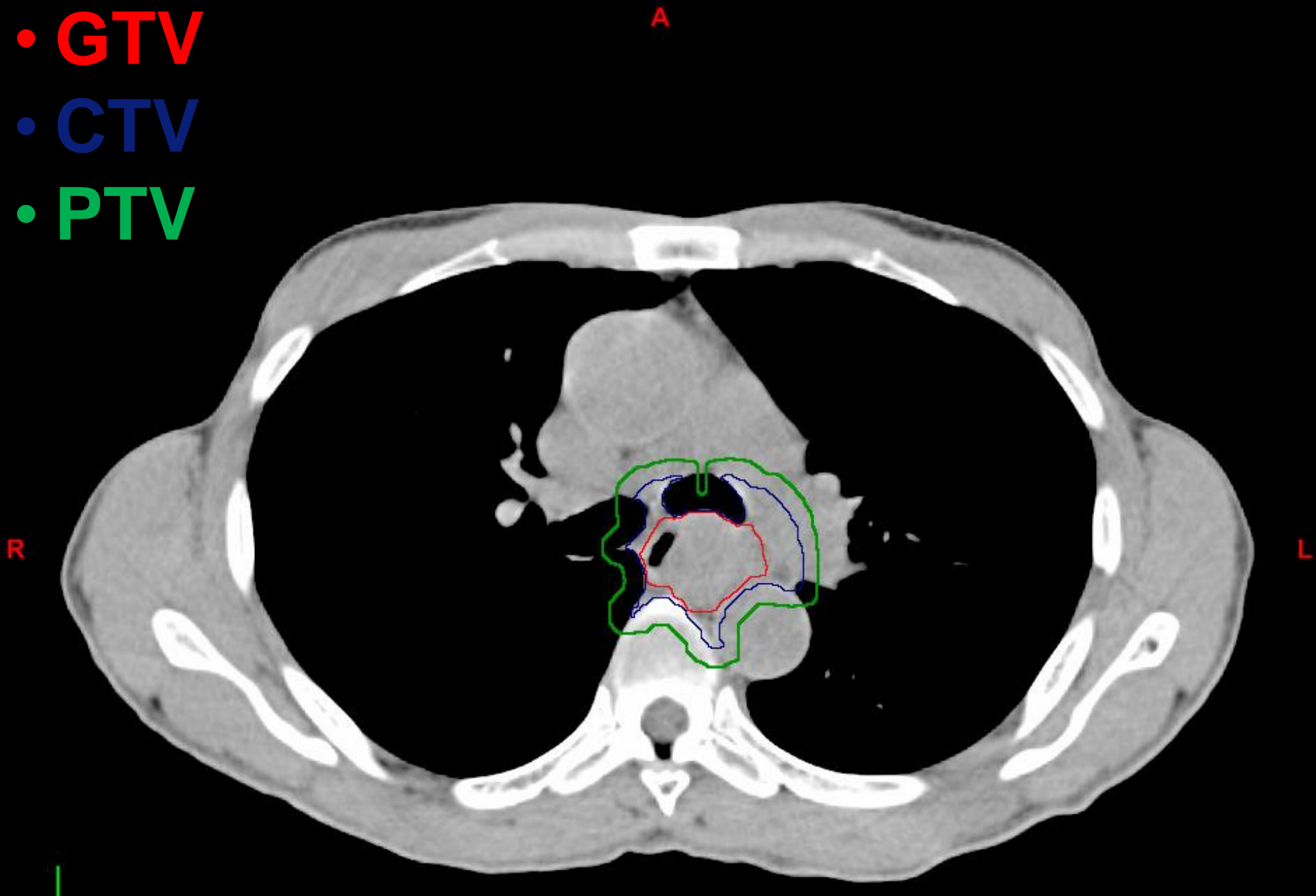
- GTV
- CTV
- PTV



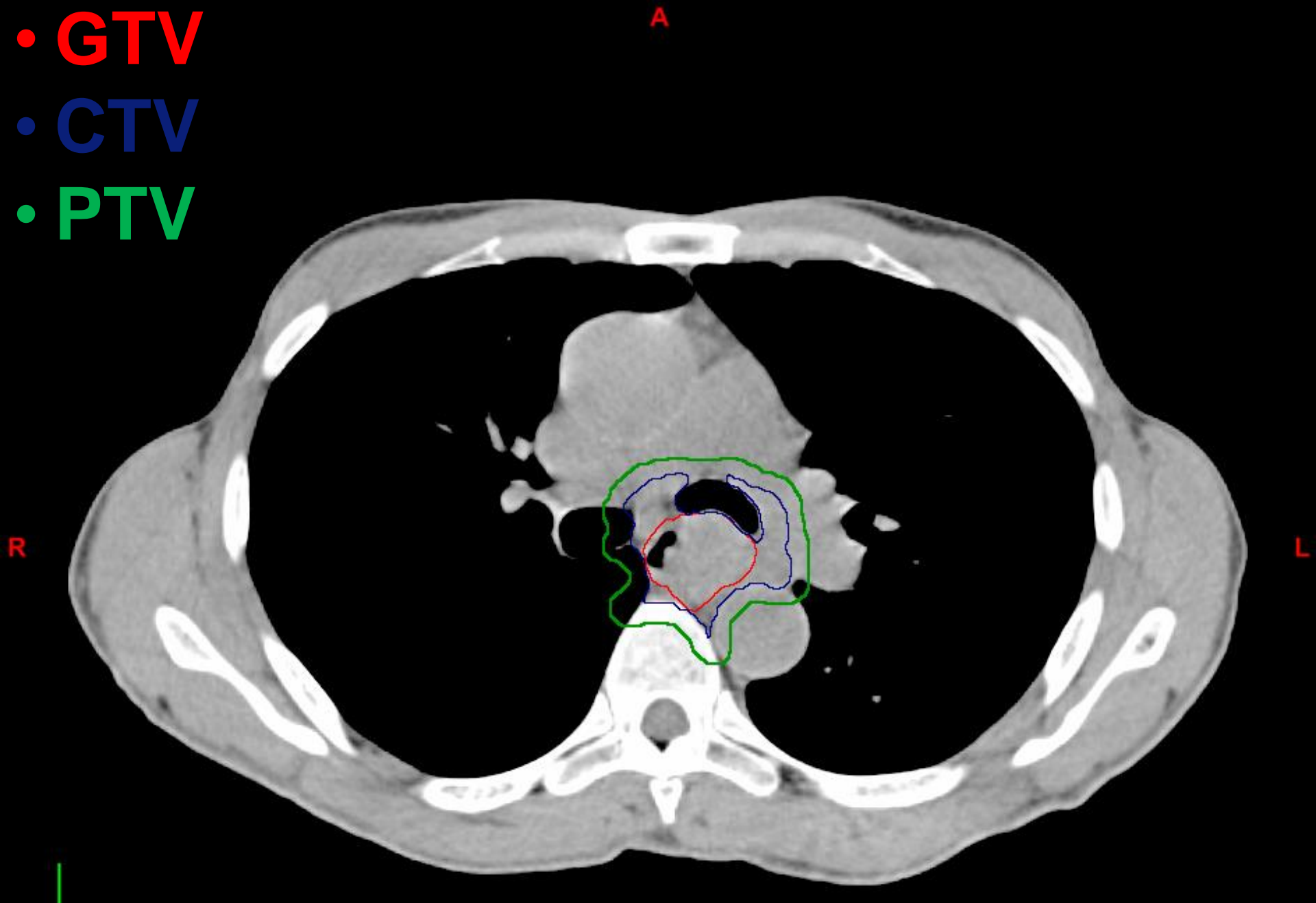
- GTV
- CTV
- PTV



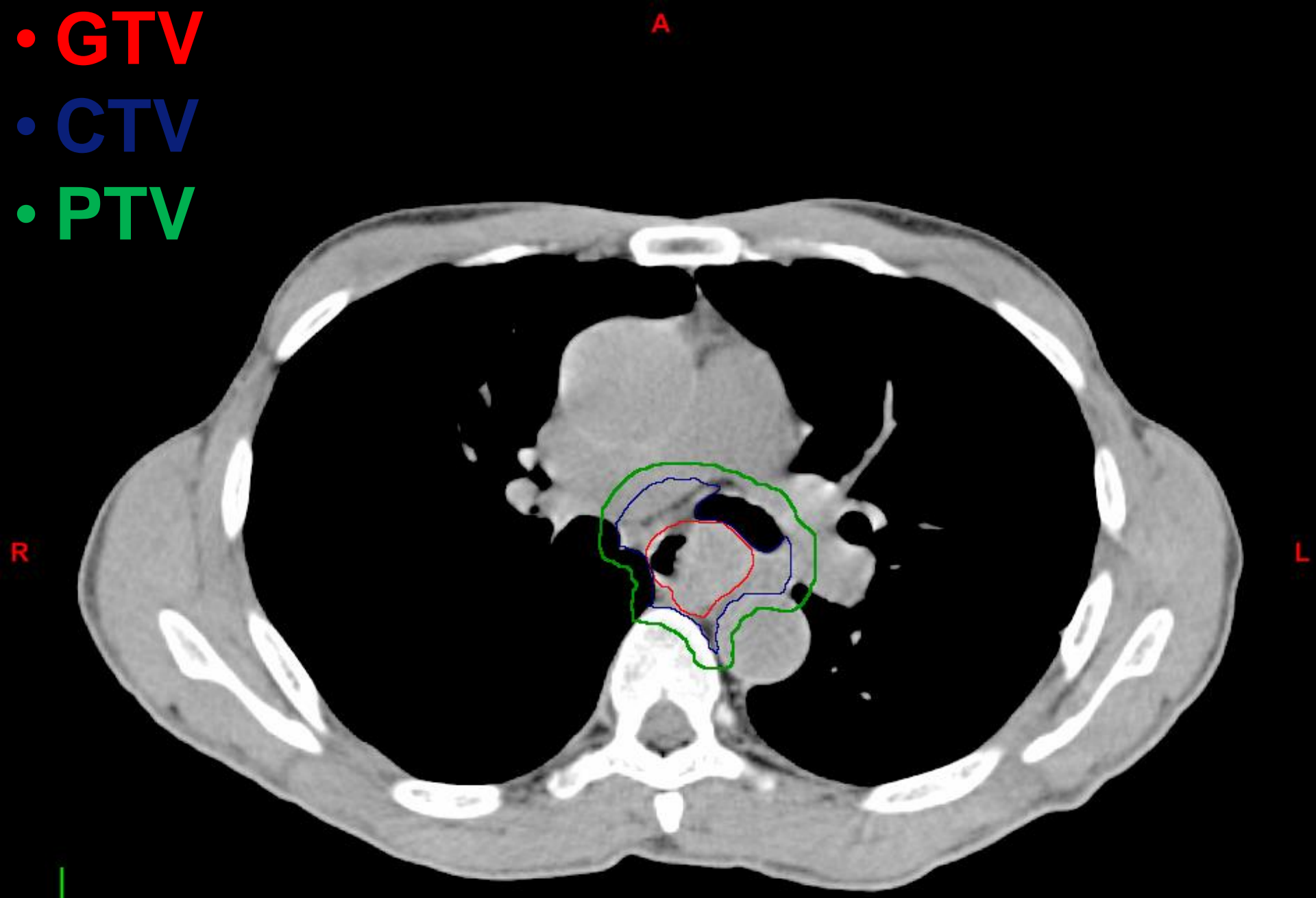
- GTV
- CTV
- PTV



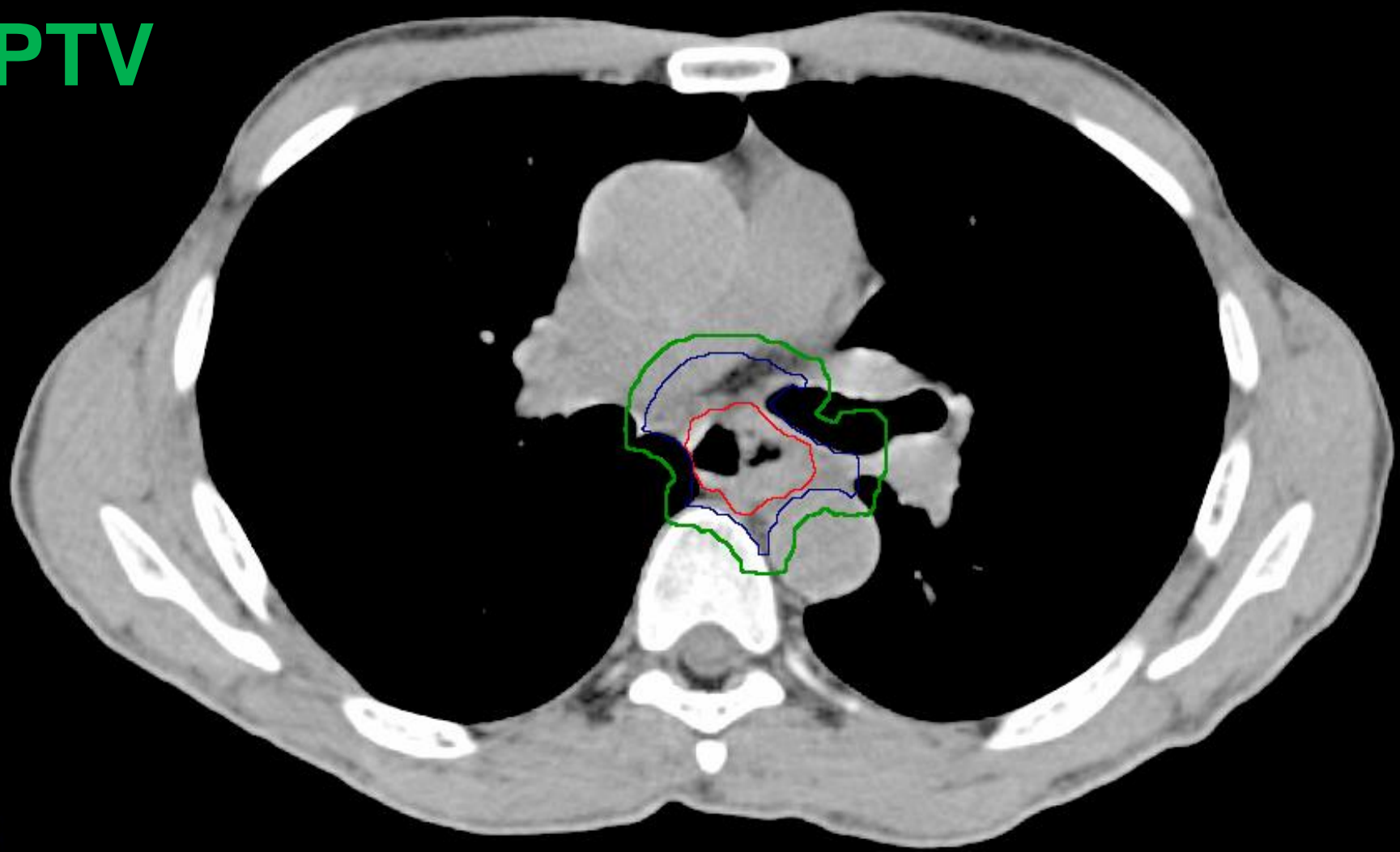
- GTV
- CTV
- PTV



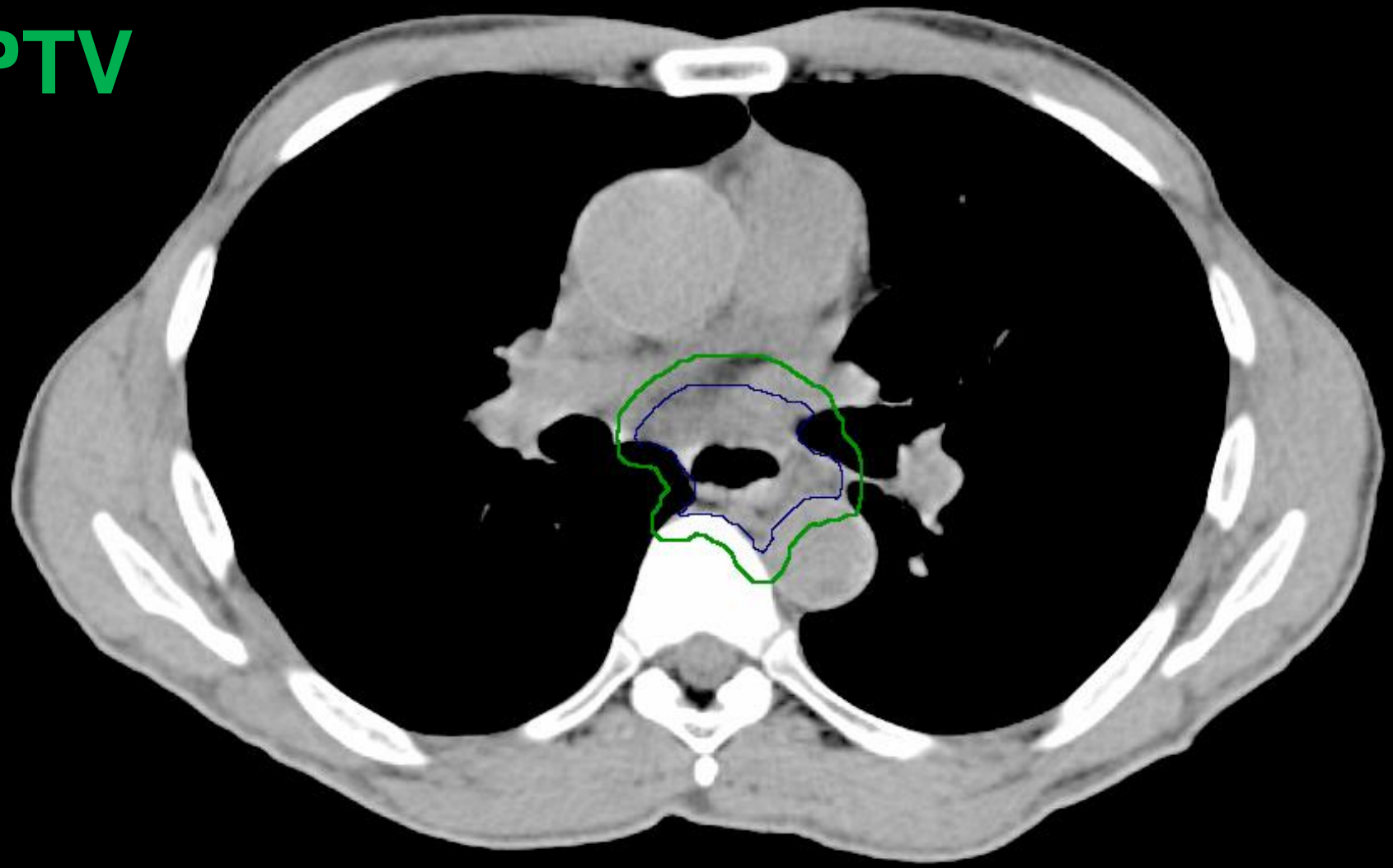
- GTV
- CTV
- PTV



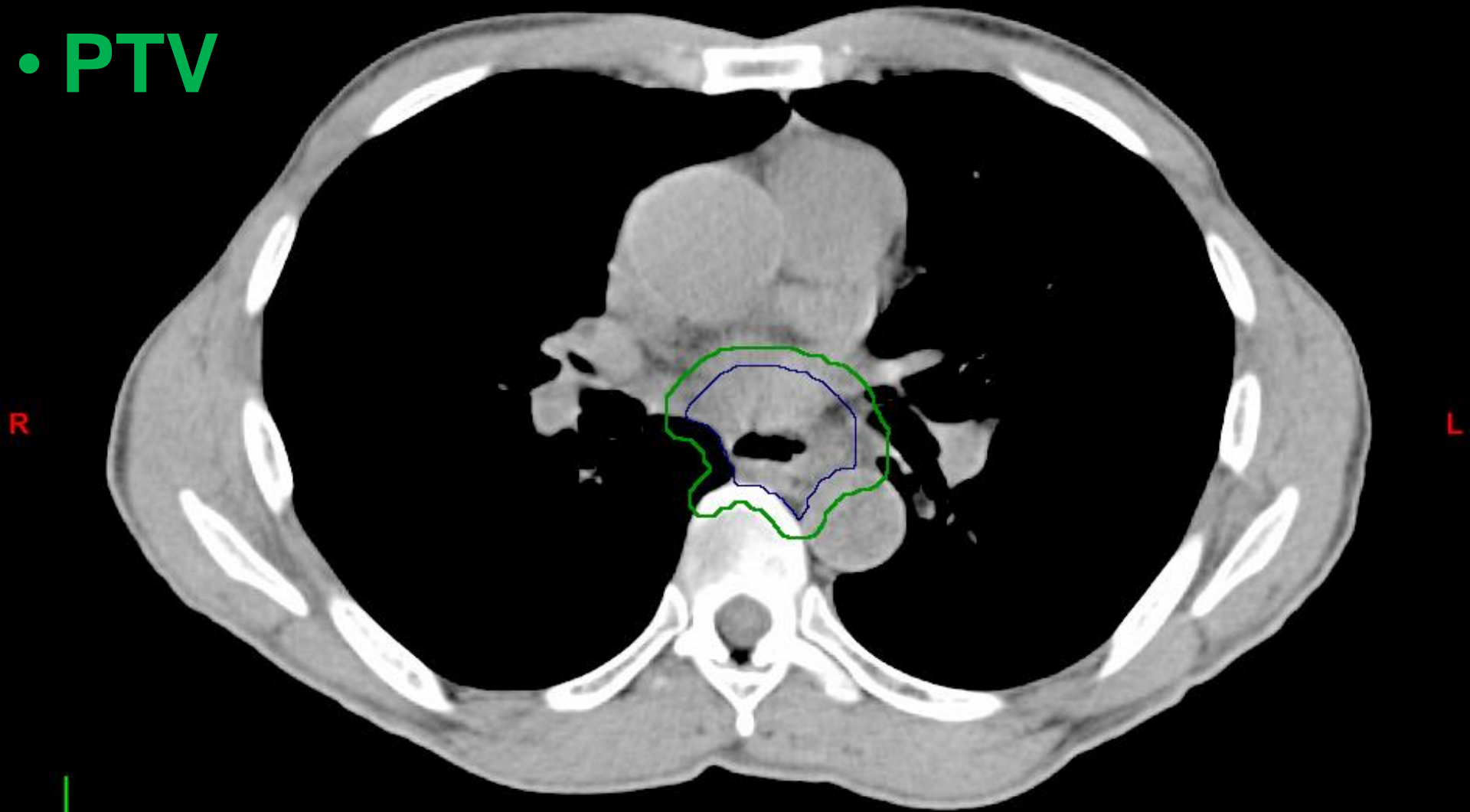
- GTV
- CTV
- PTV



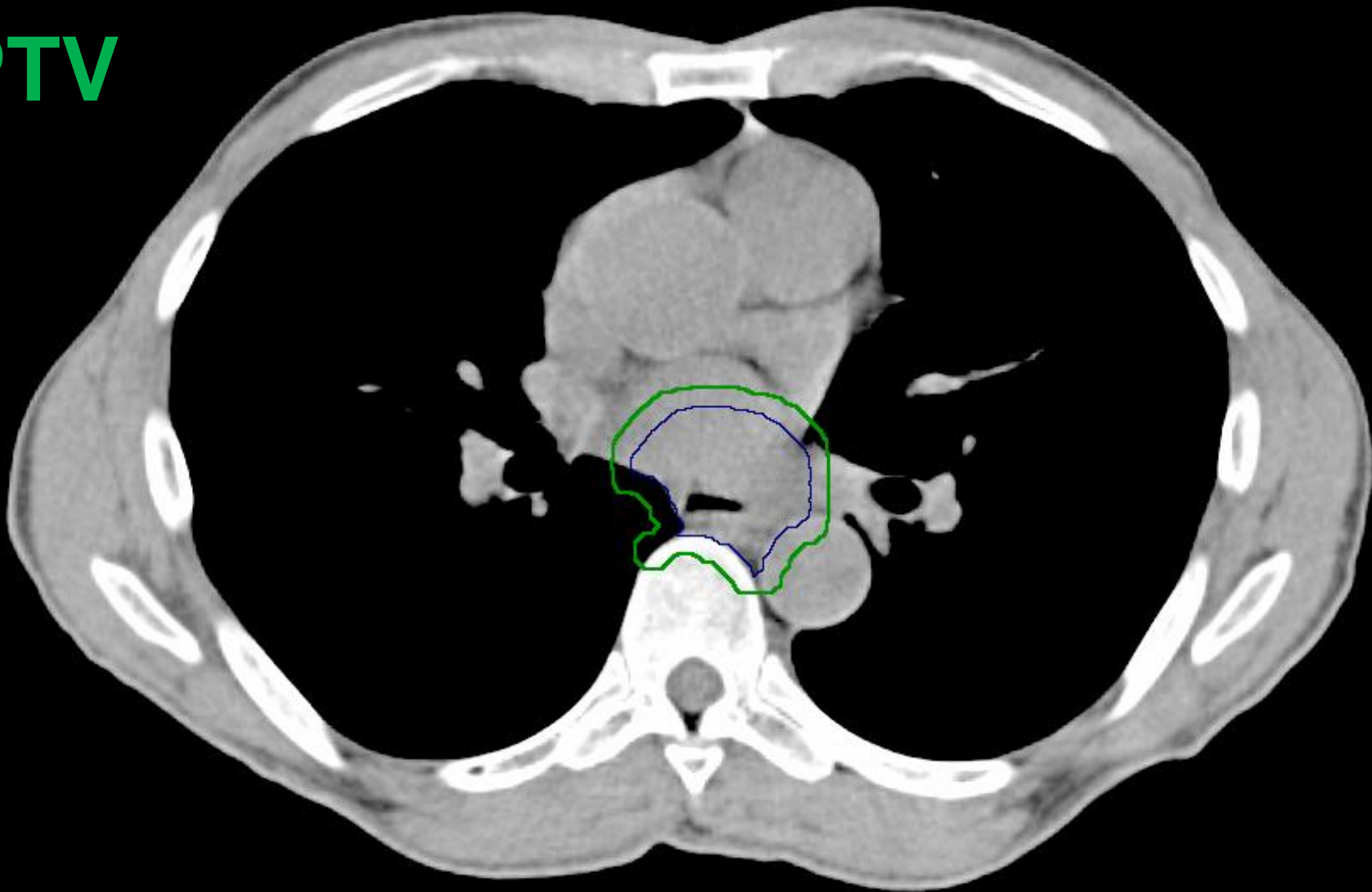
- GTV
- CTV
- PTV



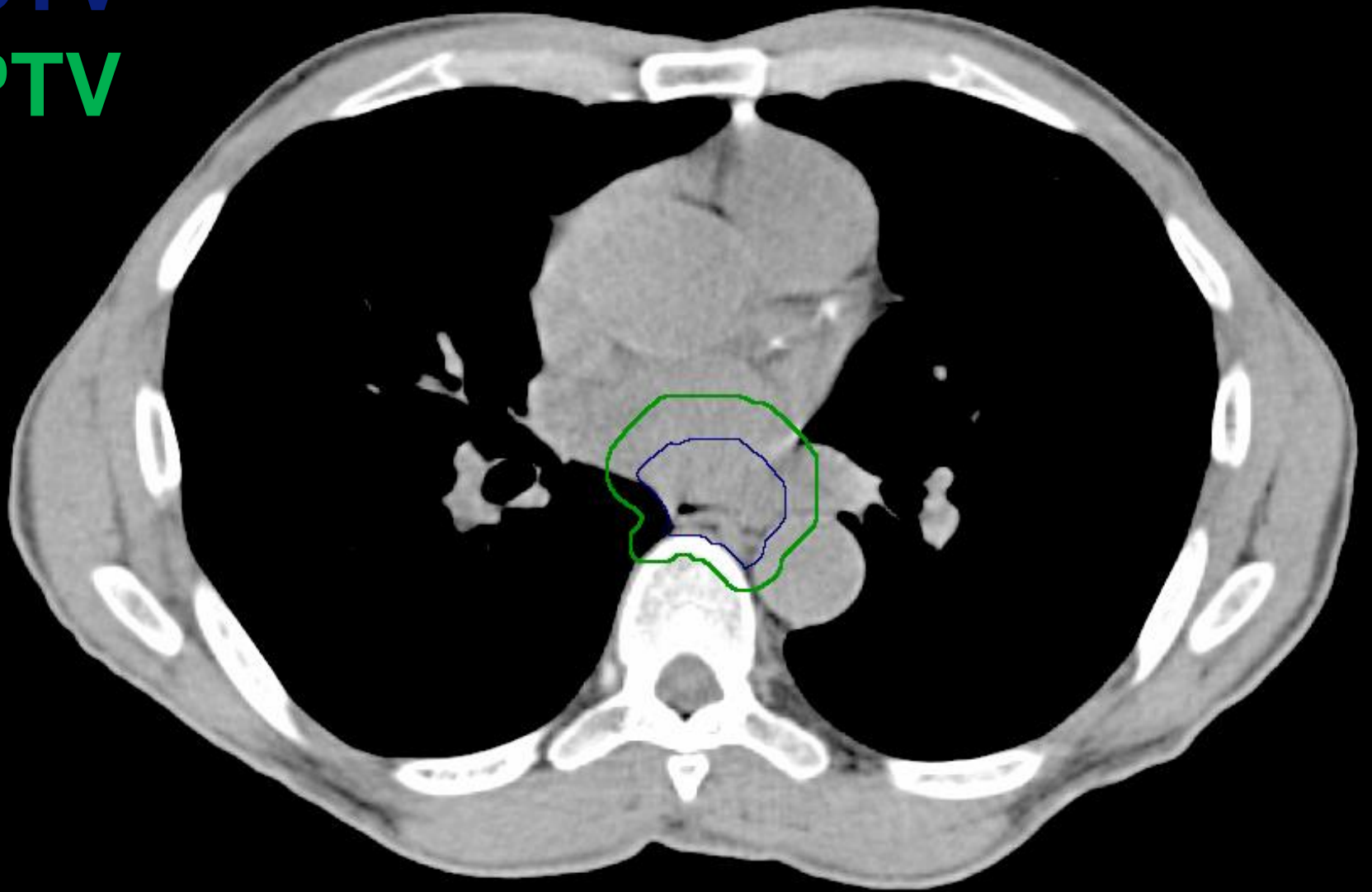
- GTV
- CTV
- PTV



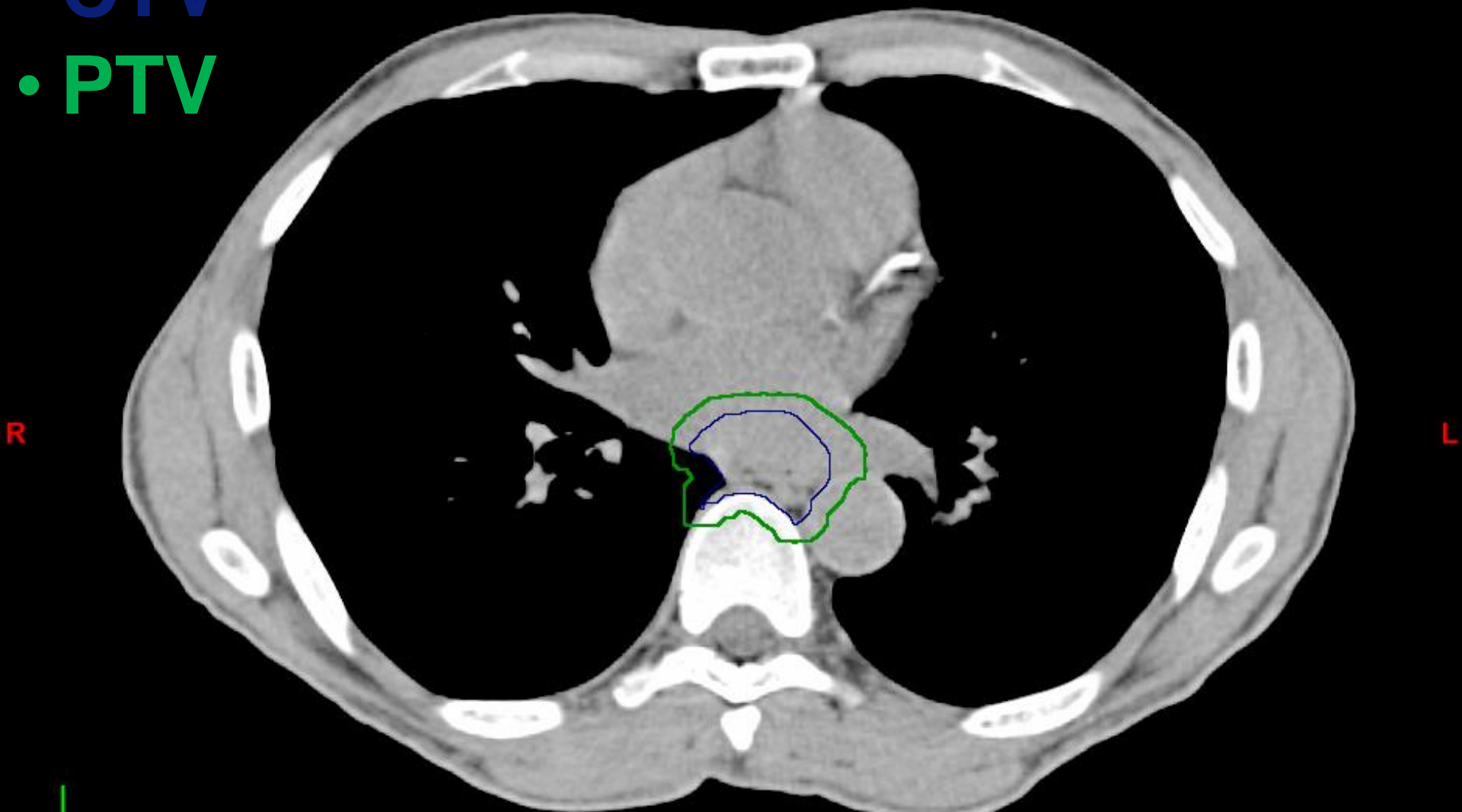
- GTV
- CTV
- PTV



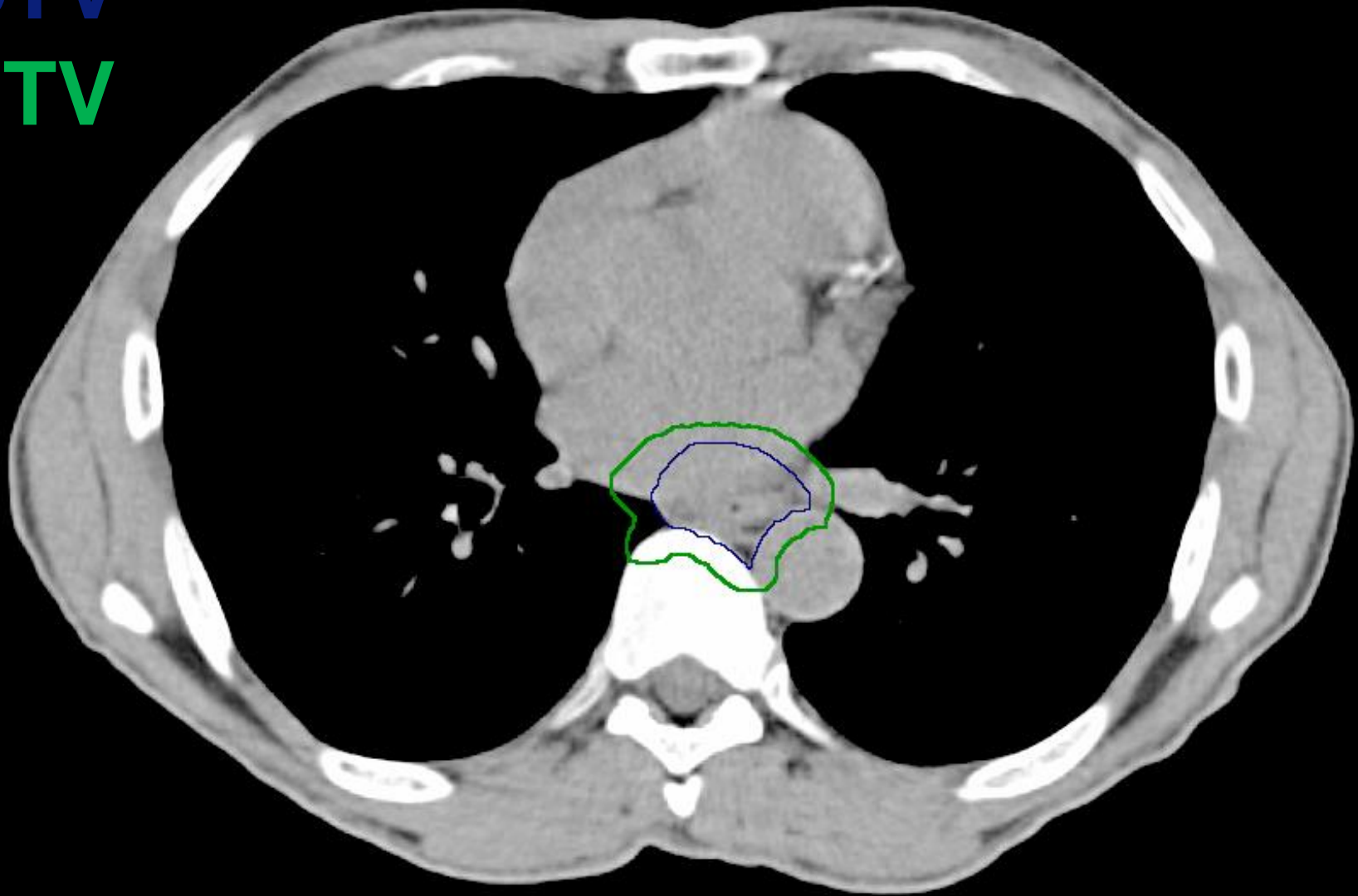
- GTV
- CTV
- PTV



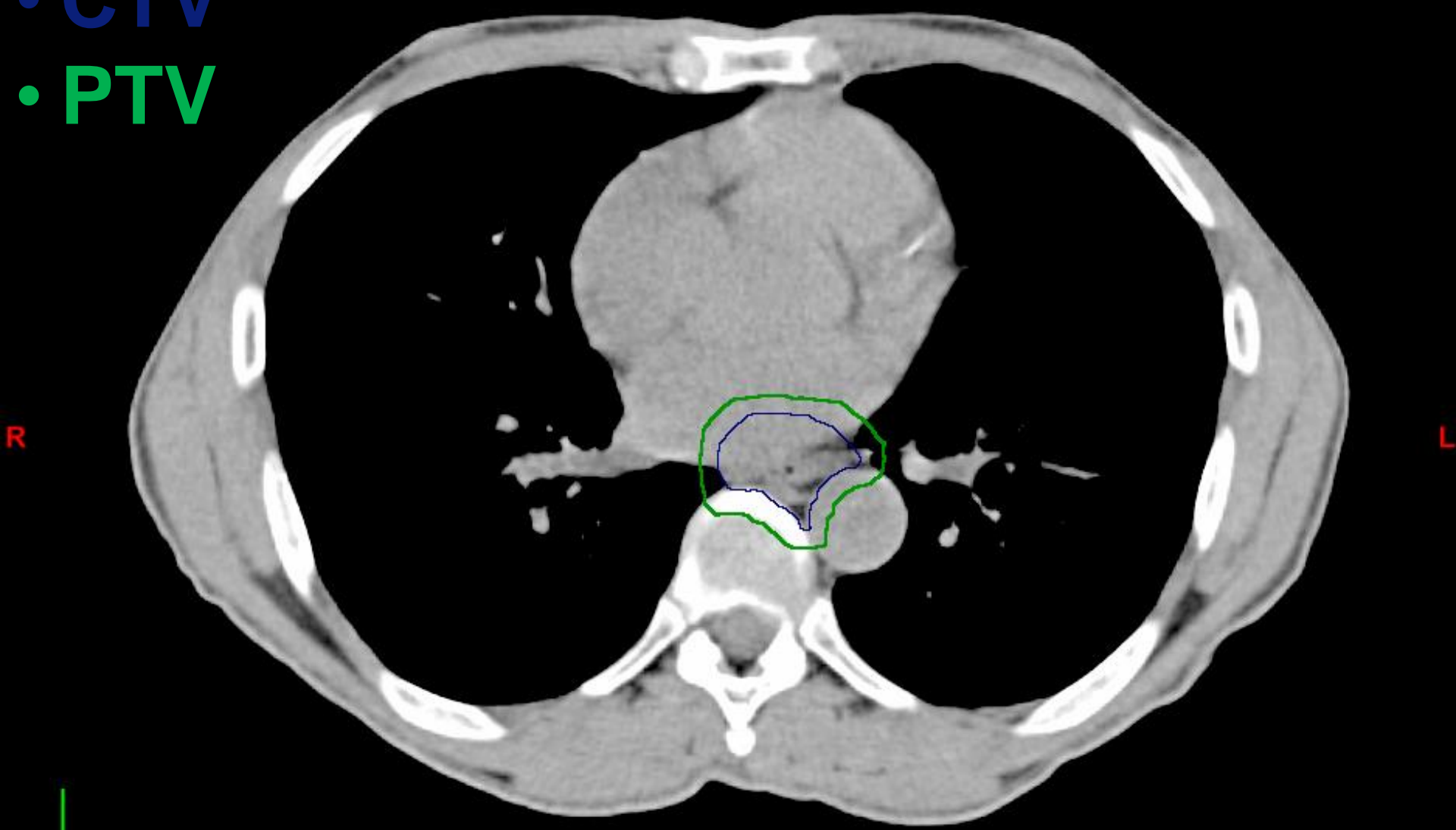
- GTV
- CTV
- PTV



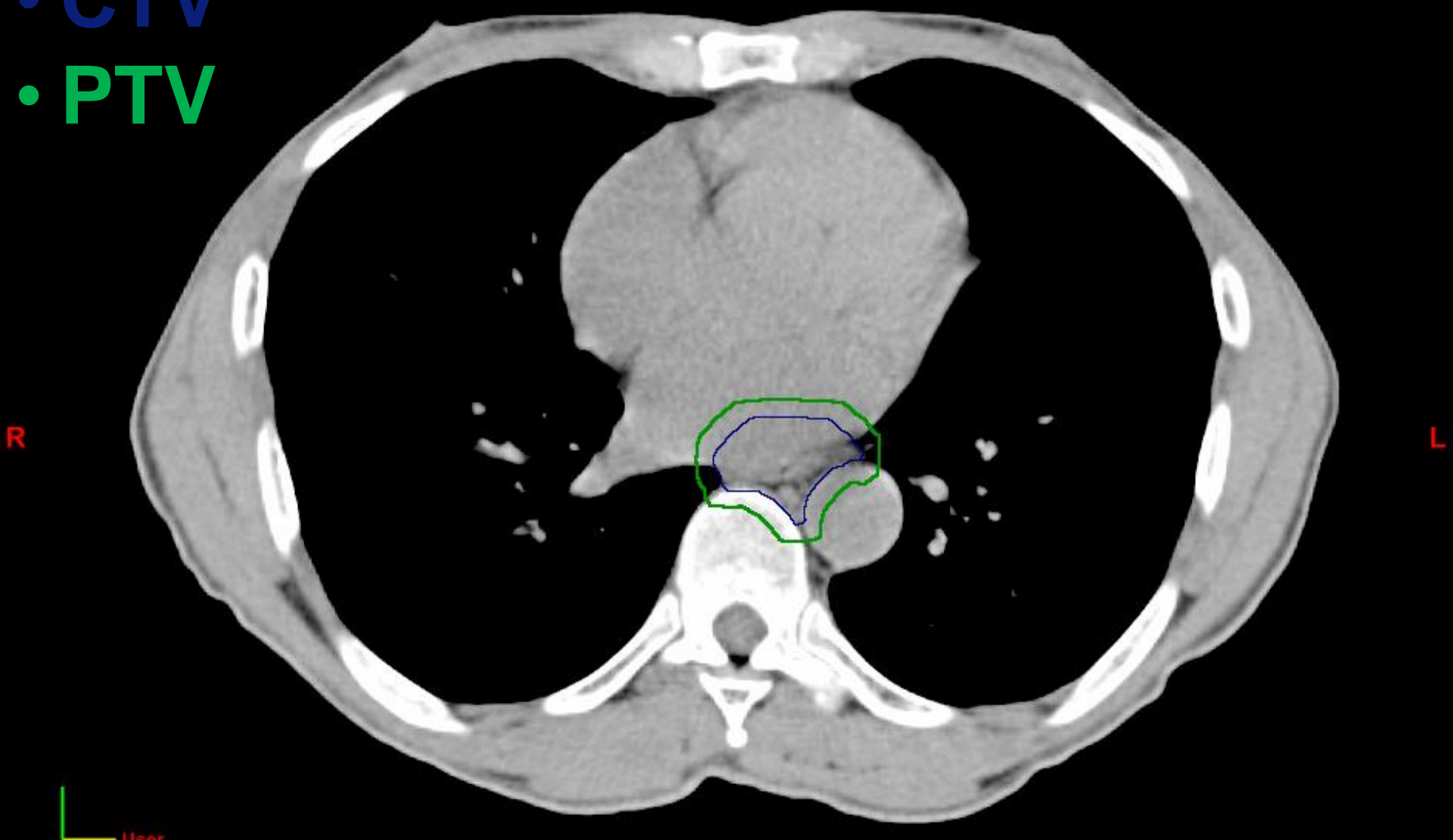
- GTV
- CTV
- PTV



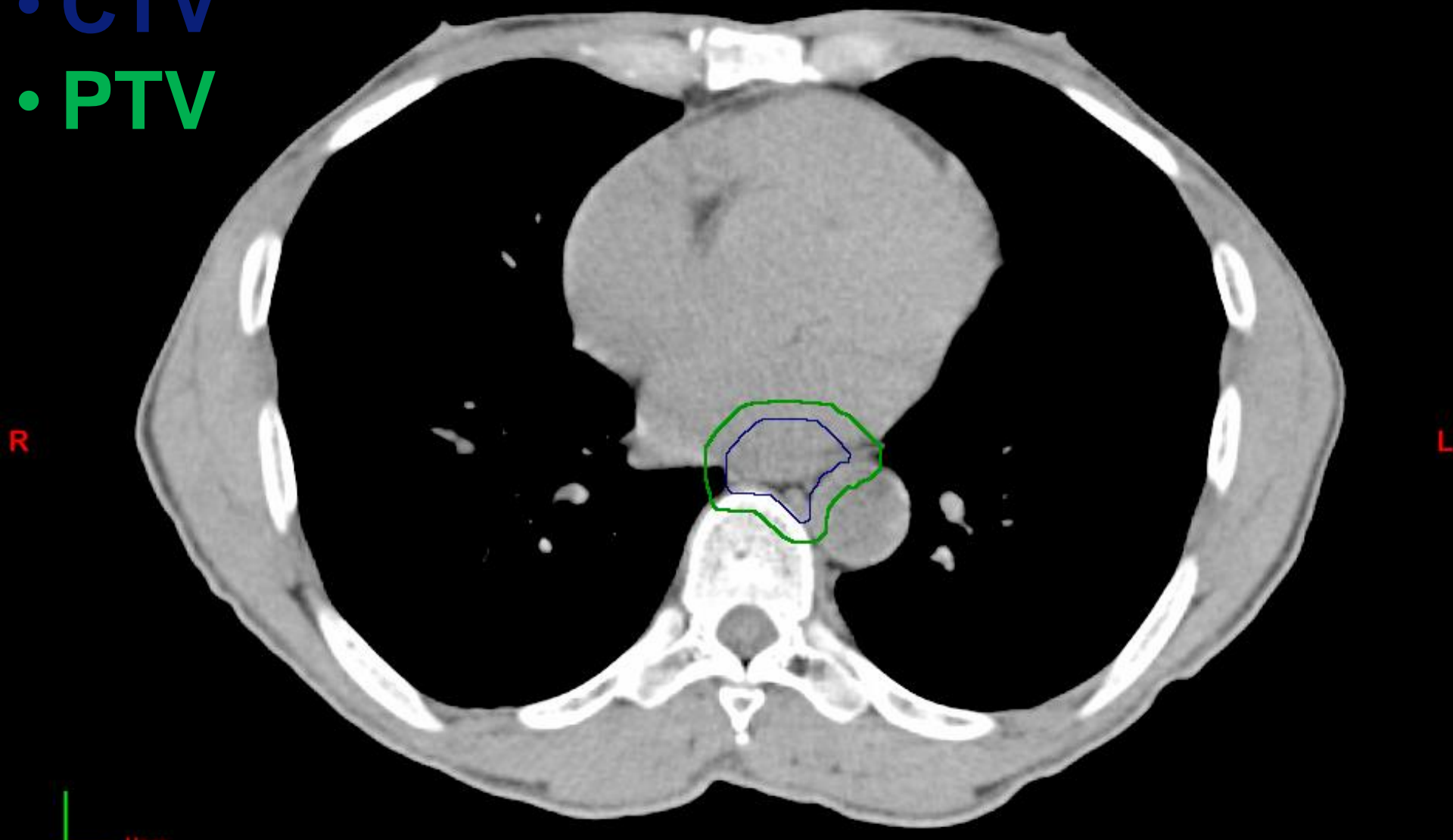
- GTV
- CTV
- PTV



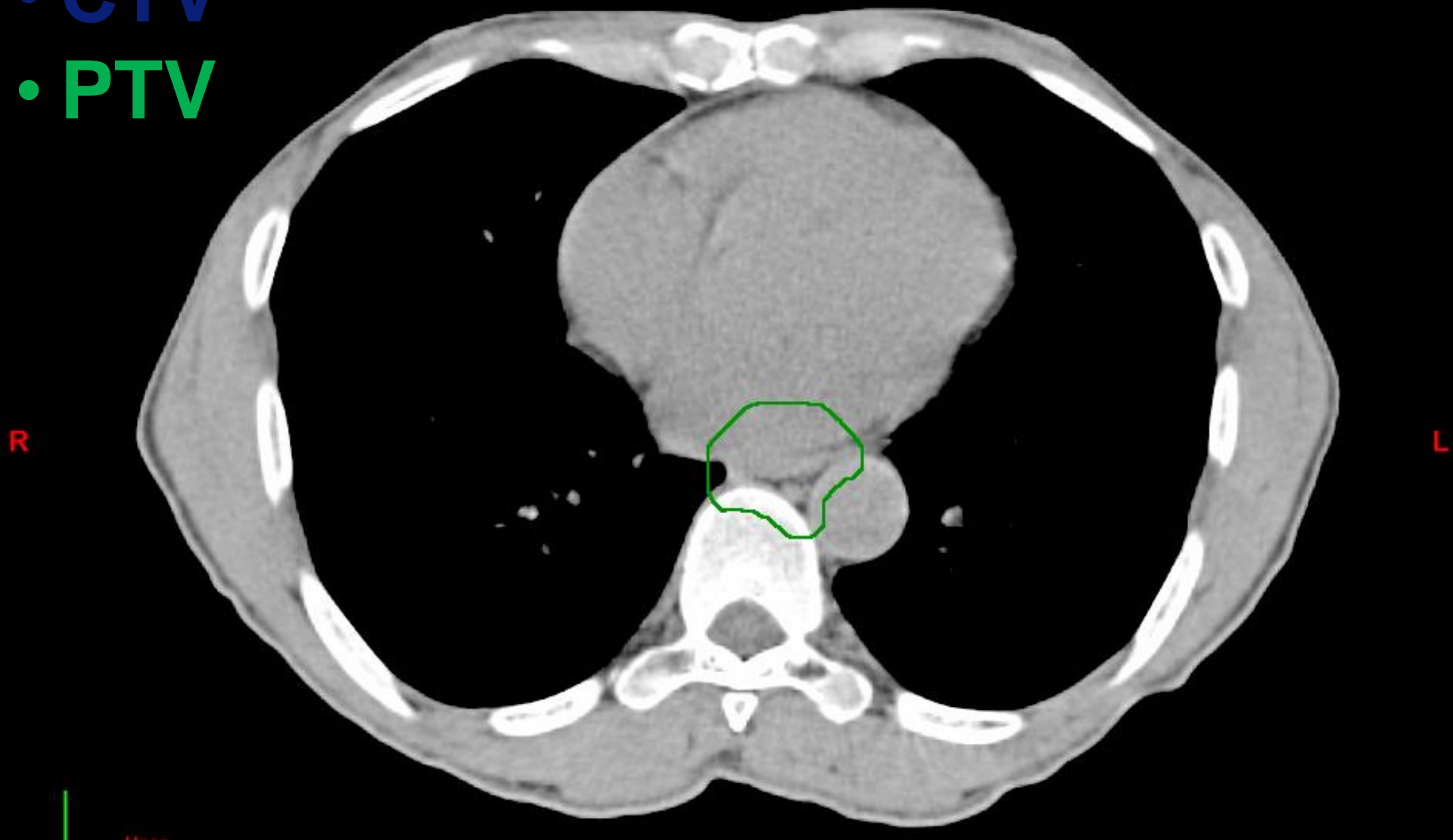
- GTV
- CTV
- PTV

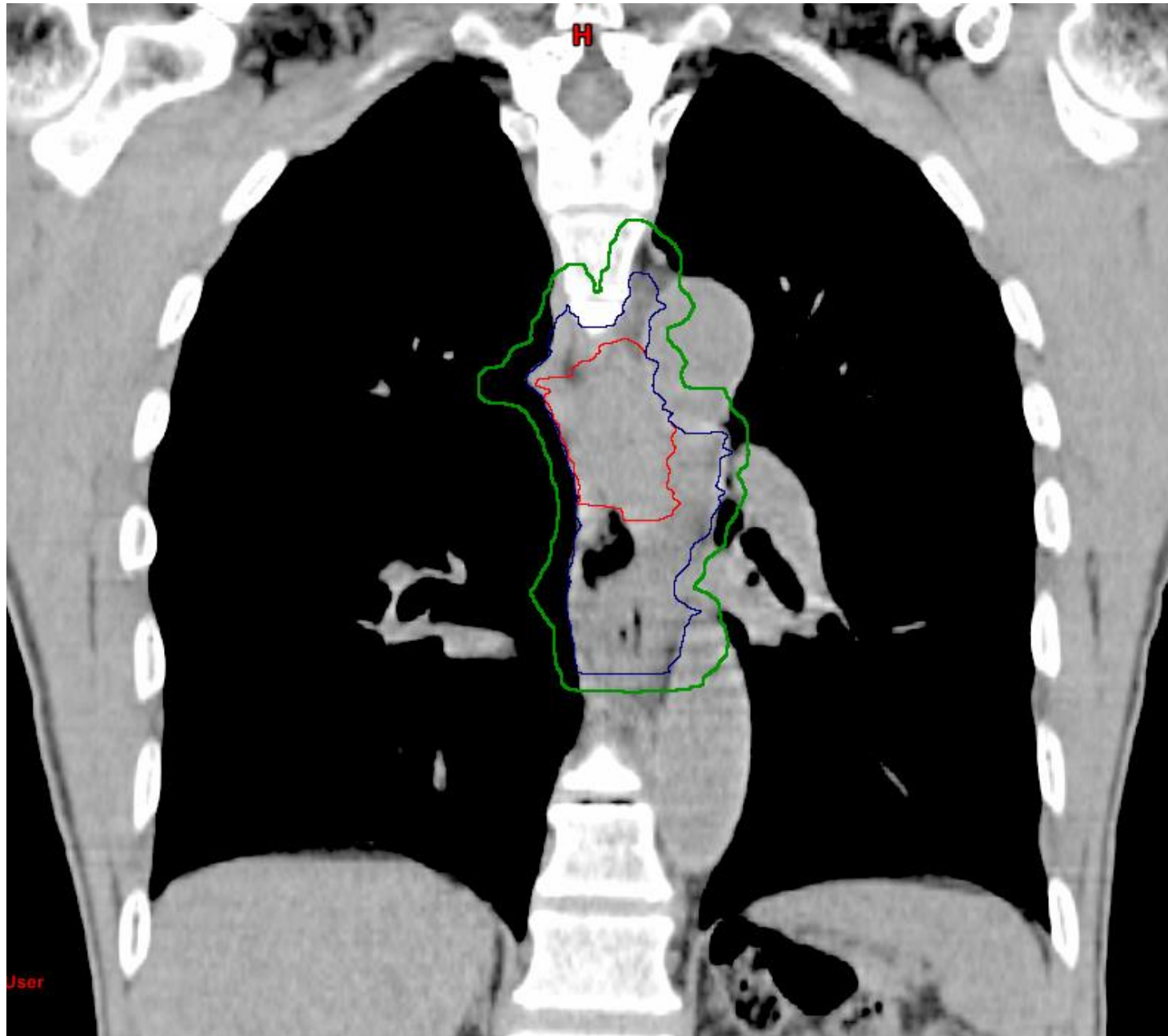


- GTV
- CTV
- PTV

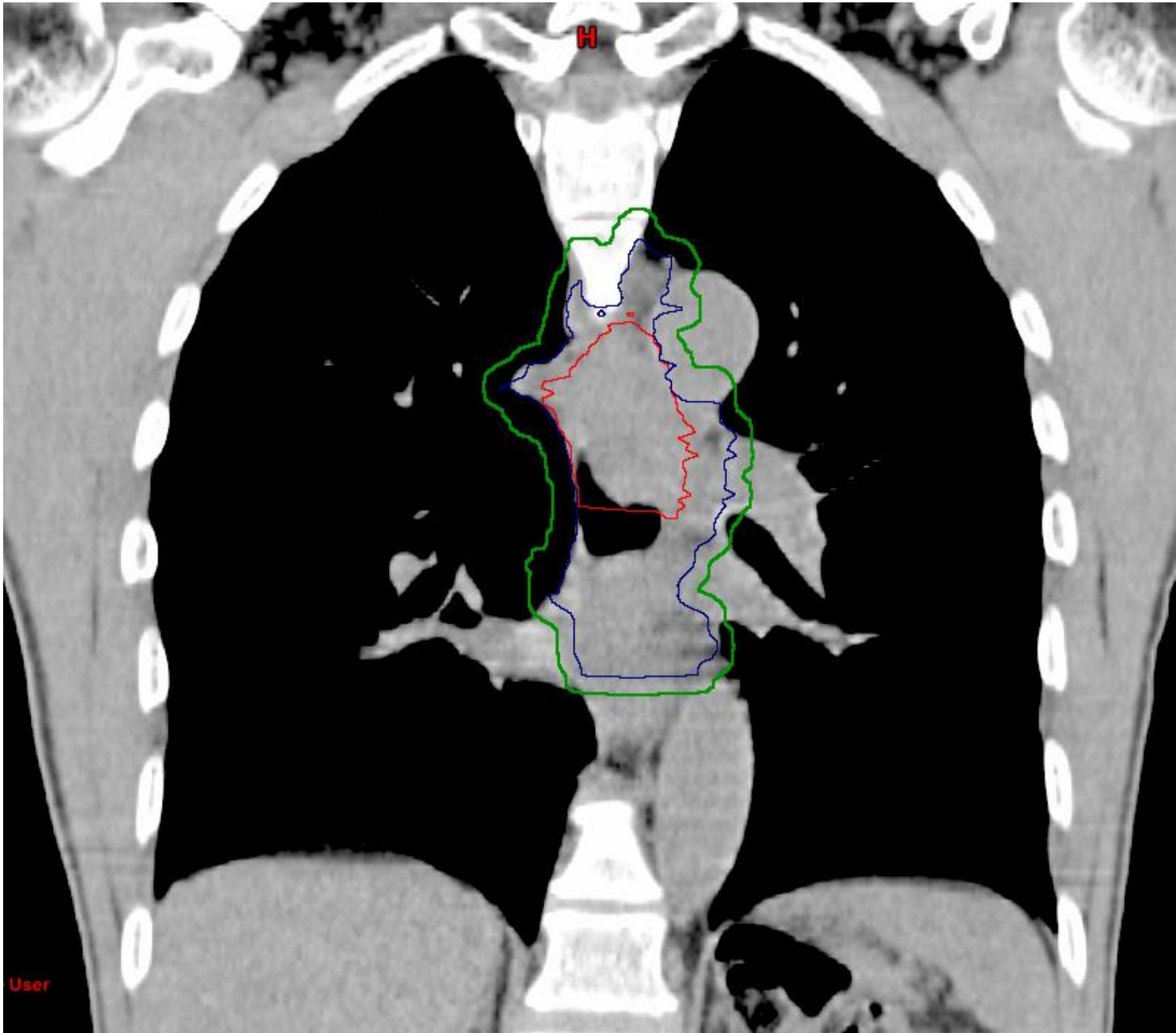


- GTV
- CTV
- PTV

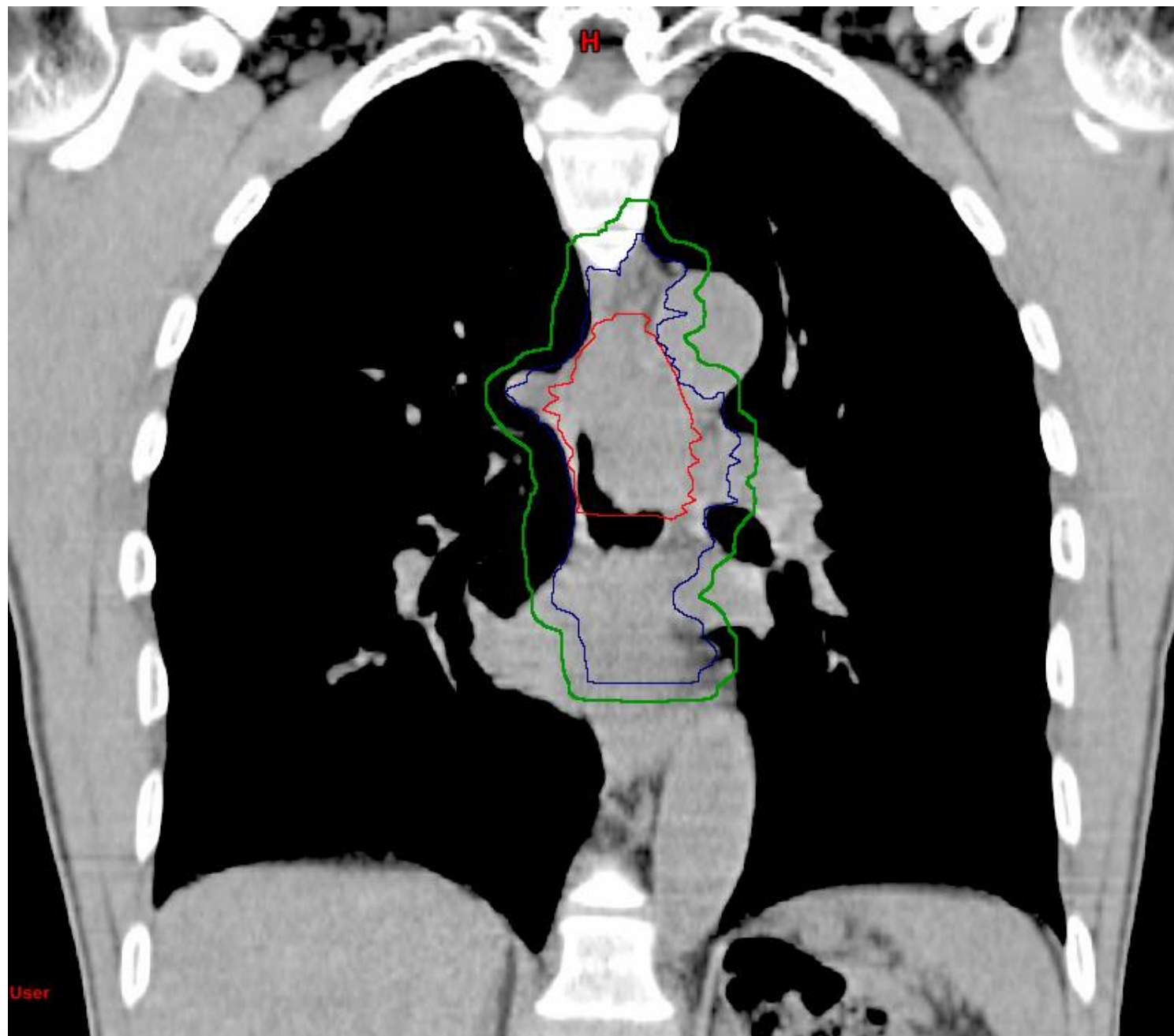




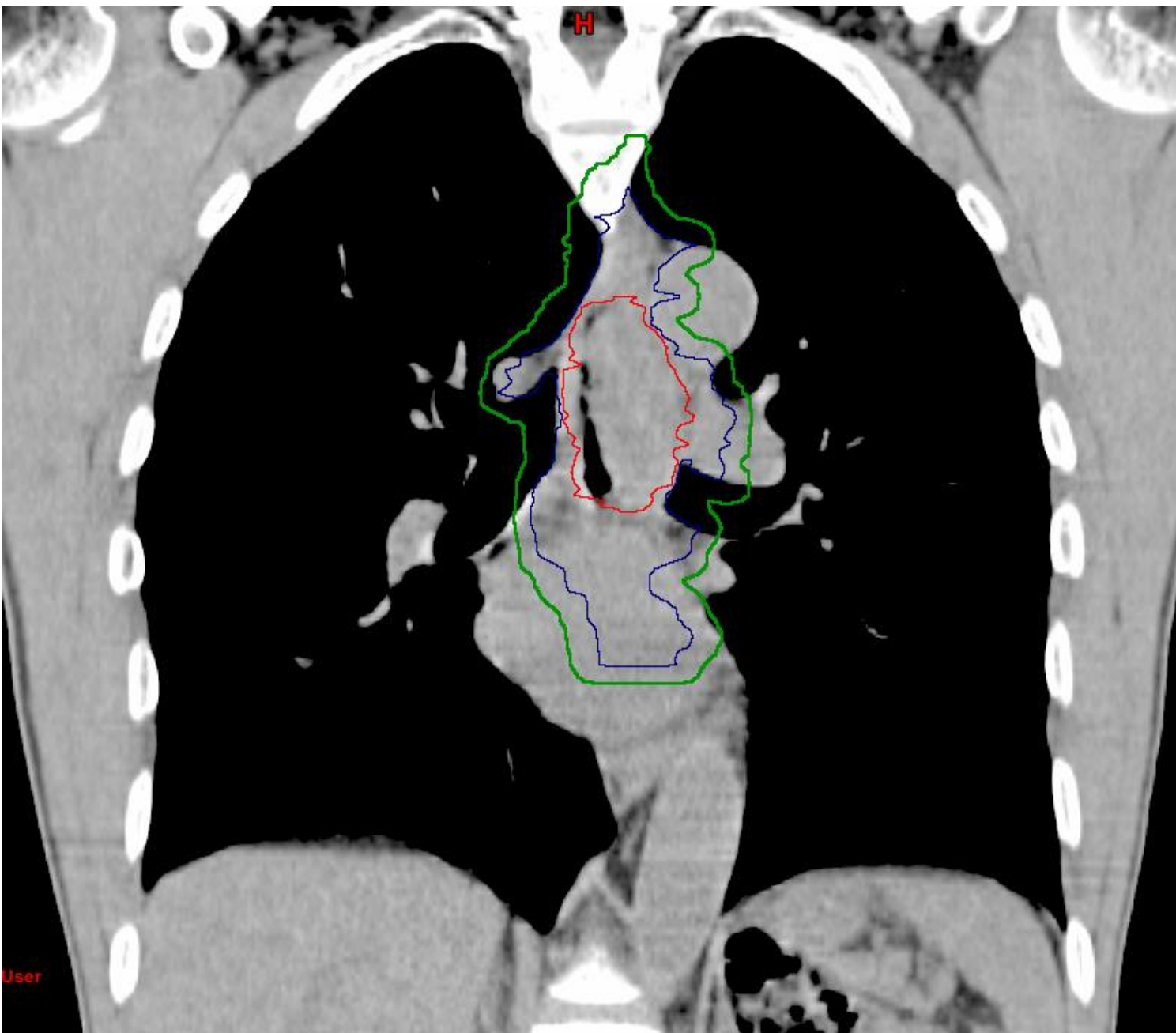
- **GTV**
- **CTV**
- **PTV**



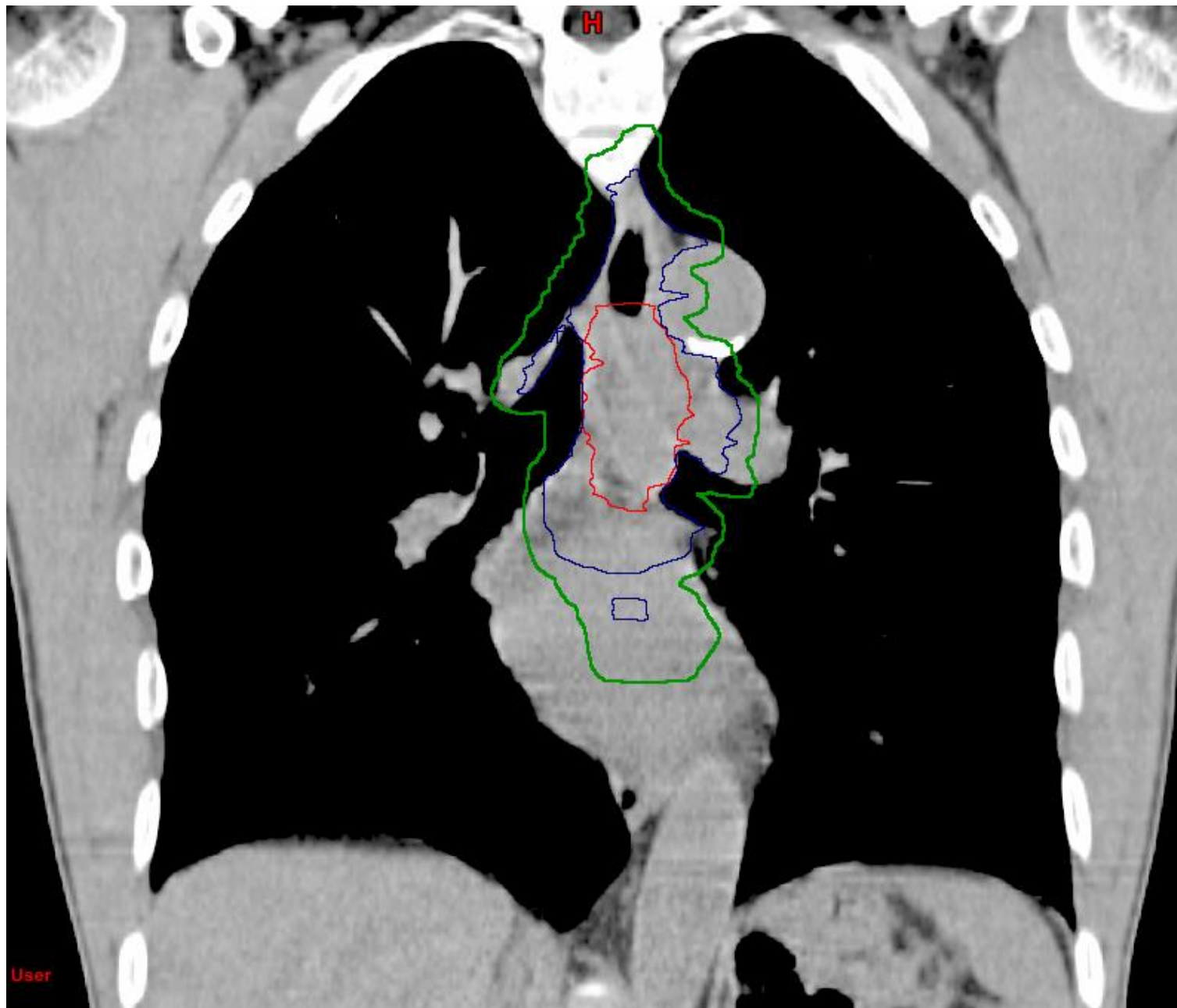
- **GTV**
- **CTV**
- **PTV**



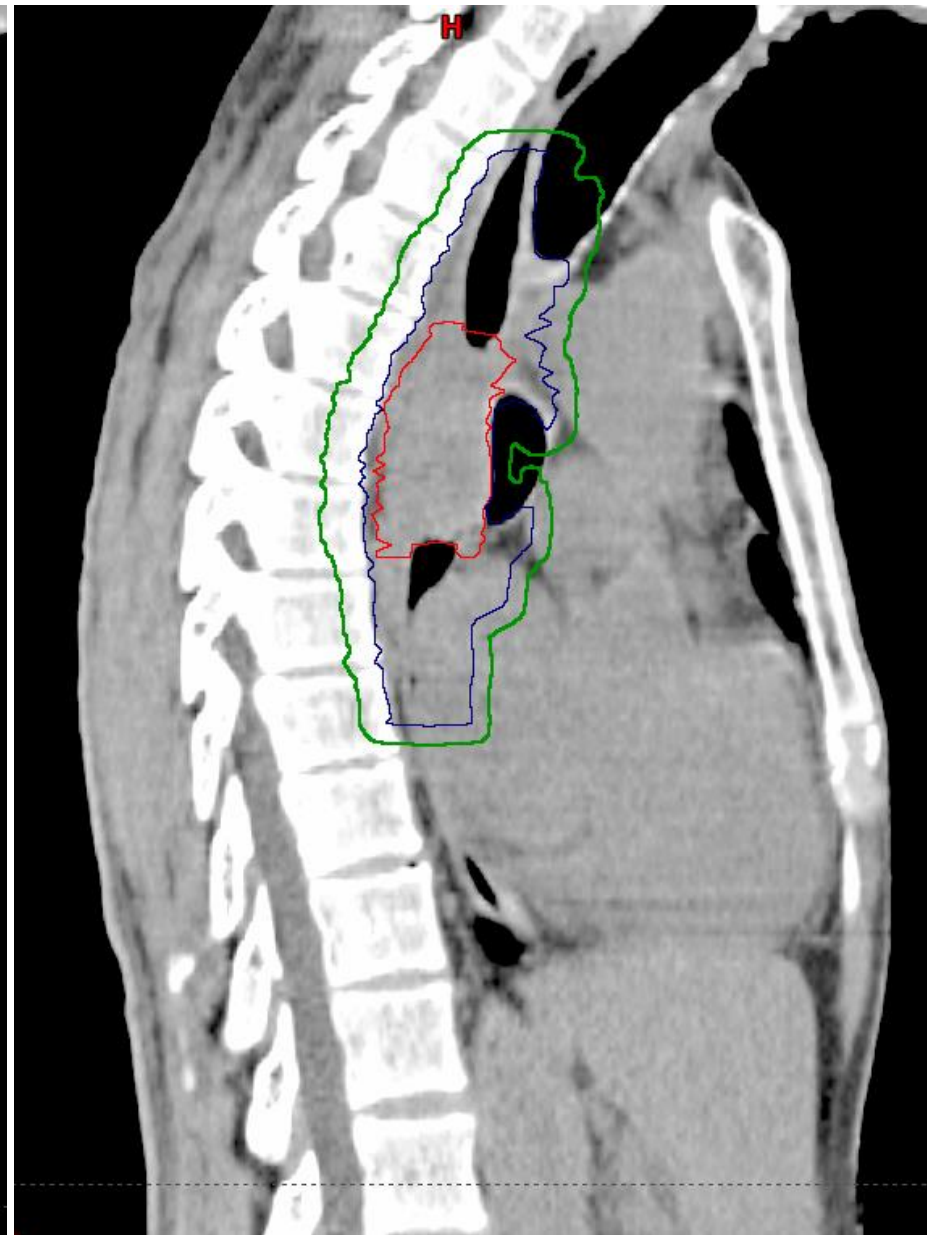
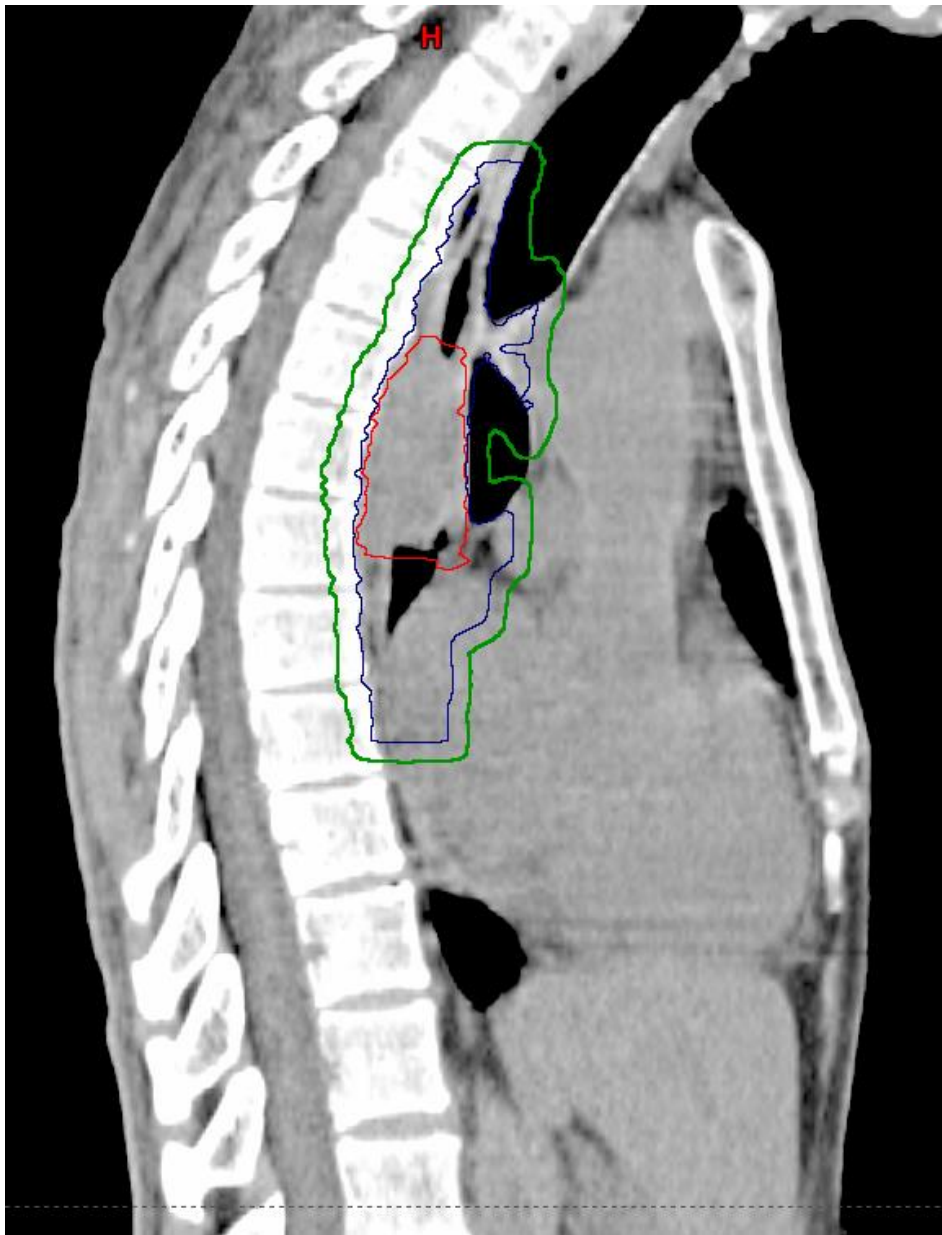
- **GTV**
- **CTV**
- **PTV**

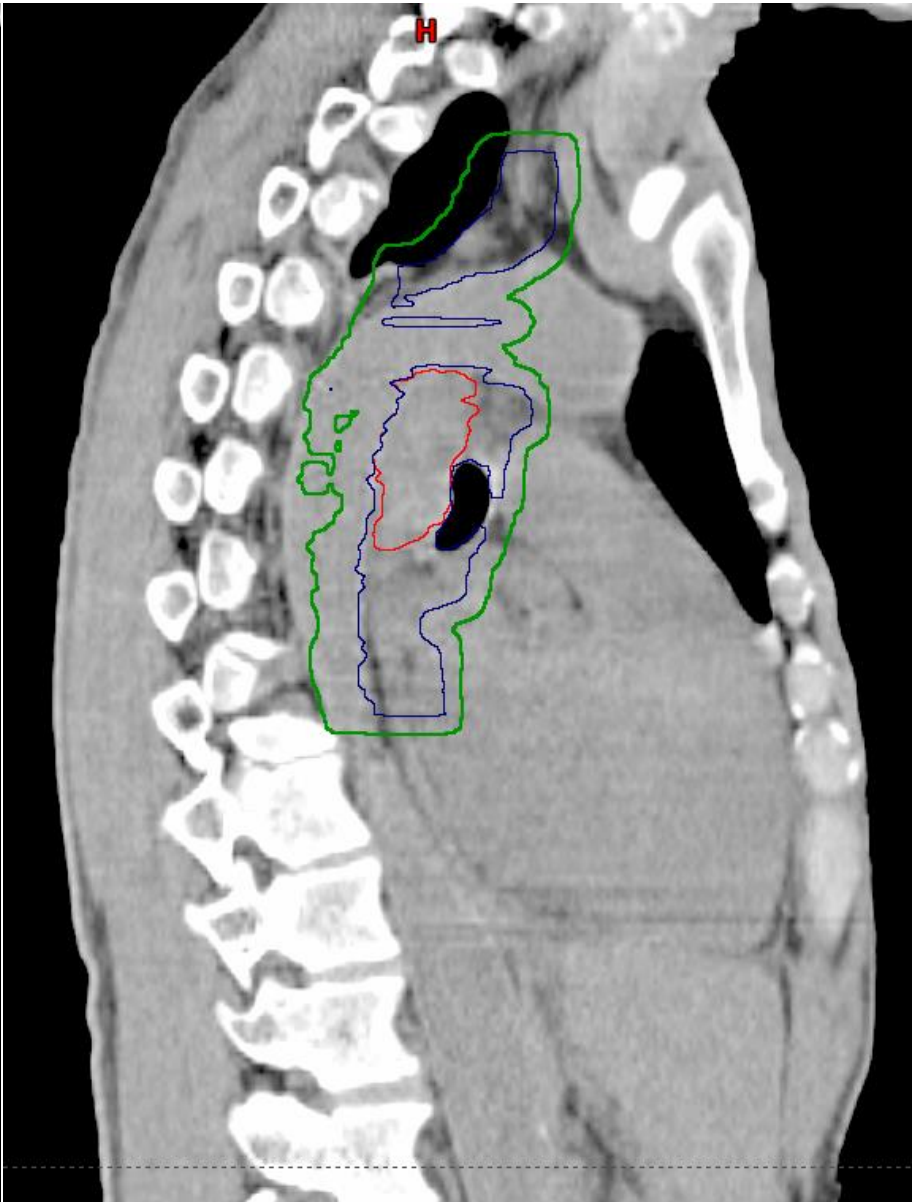
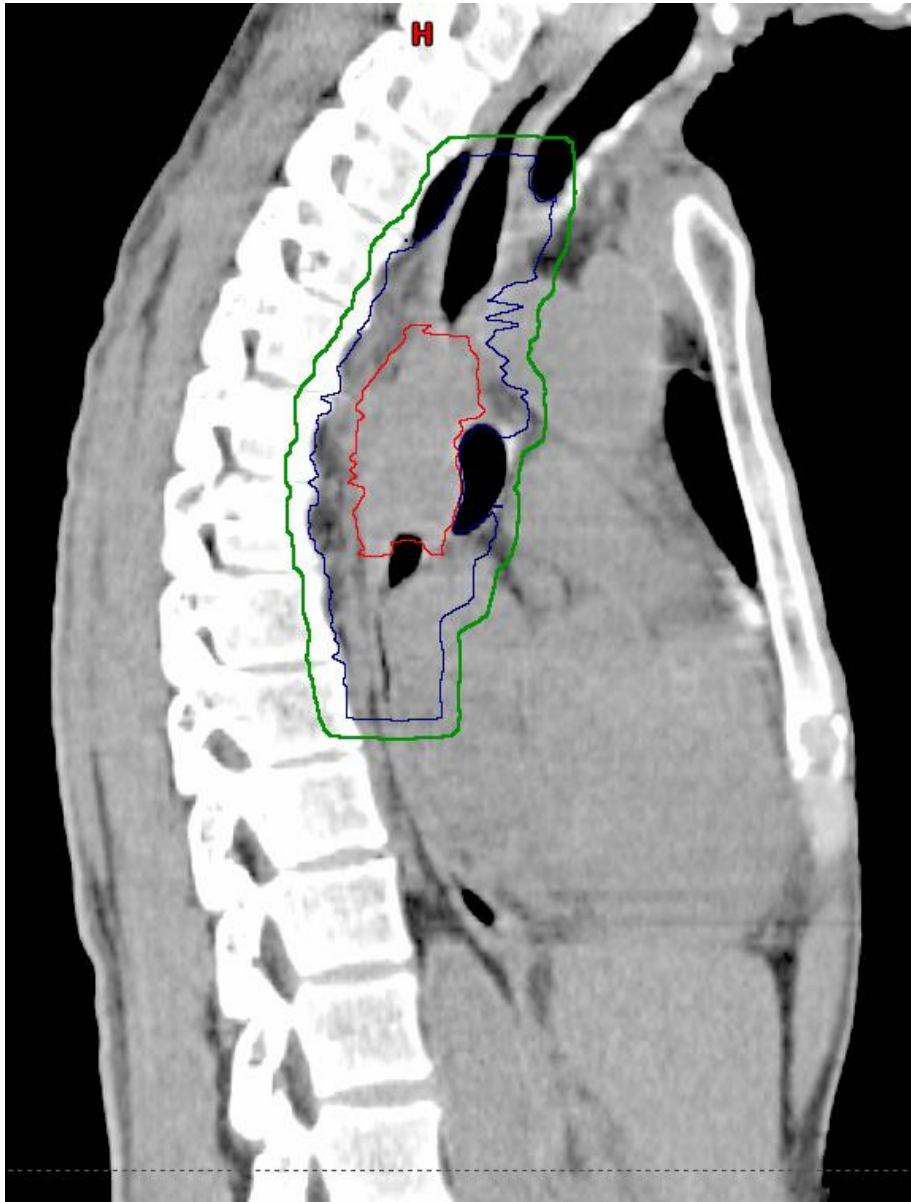


- **GTV**
- **CTV**
- **PTV**



- **GTV**
- **CTV**
- **PTV**





- **GTV**
- **Boost
PTV**



- **GTV**
- **Boost PTV**



- **GTV**
- **Boost
PTV**



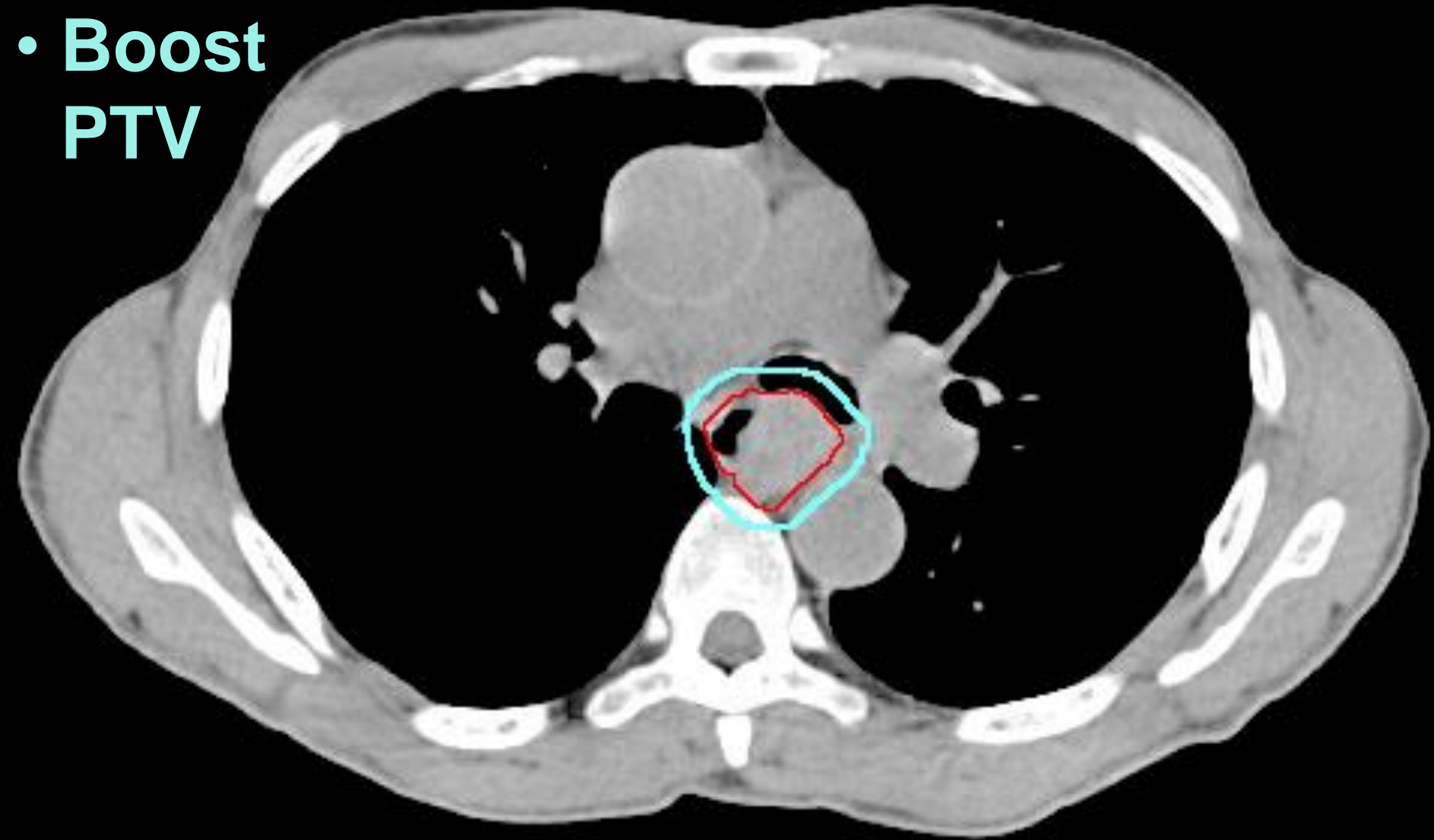
- **GTV**
- **Boost PTV**



- **GTV**
- **Boost
PTV**



- **GTV**
- **Boost PTV**



- **GTV**
- **Boost PTV**



- **GTV**
- **Boost PTV**

