CONTOURING ATLAS FOR CHESTWALL TUMOR TREATED WITH DEFINITIVE RT TO 64. 8 GY

Figure 1. 10 year old patient with 9 x 8 x10 cm left chestwall Ewing sarcoma with spinal canal extension from T5-T7 and positive fluid cytology. Prechemotherapy PET images (A-D) and postchemotherapy PET images (E-H) are shown. See section 17.7.2.3 and 17.7.2.4 for prescription doses.

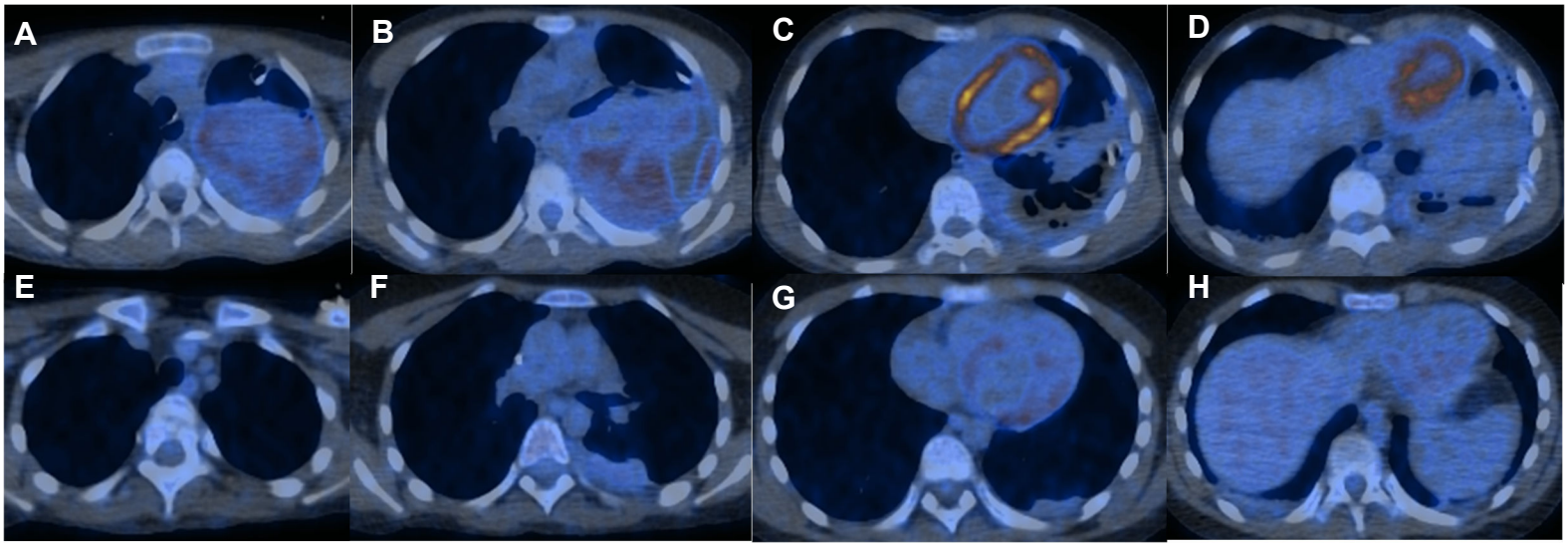

Figure 2. Given the positive fluid cytology, the left whole lung was contoured as CTV4 (yellow contour). Reference the whole lung irradiation contouring appendix to delineate the whole lung volume. It is imperative for cases with positive fluid cytology that the inferior pleural extent as determined by diagnostic CT at full inspiration is included in CTV4 given that the highest risk for microscopic disease is in this dependent area. This volume also includes prechemotherapy disease extent involving the ribs and spinal canal (cropped out of cord).

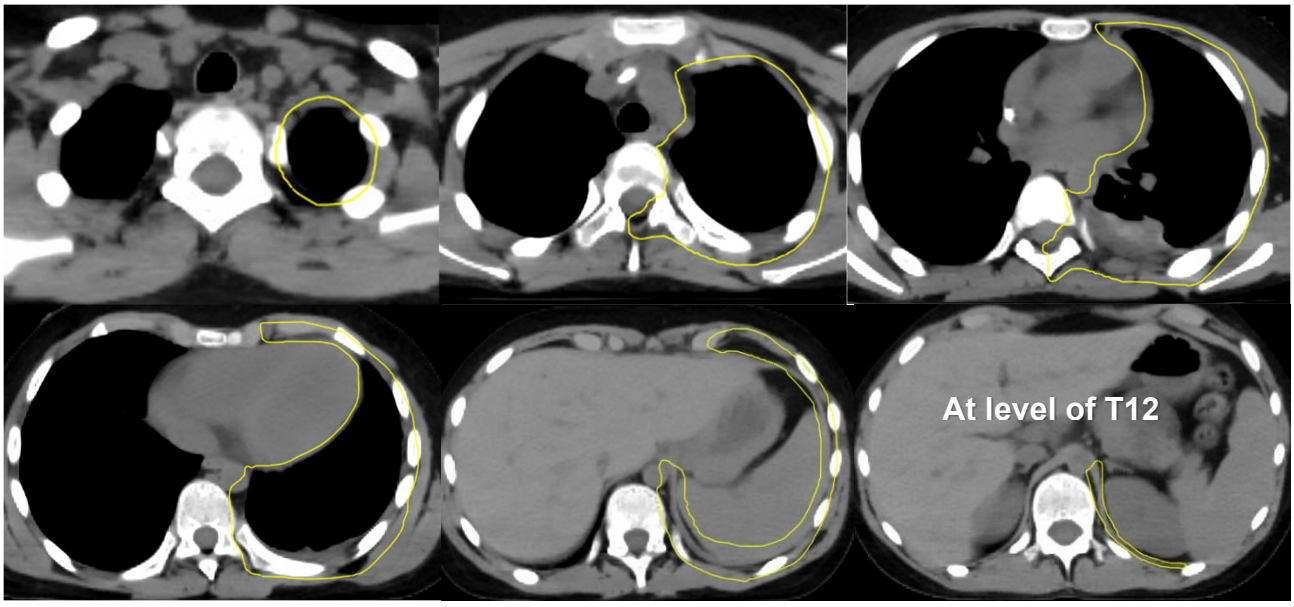

Figure 3. Prechemotherapy GTV1 is defined (pink contour), with modification for the initial tumor that exhibited "pushing margins" into the thoracic cavity and spinal canal (cropped out of cord).

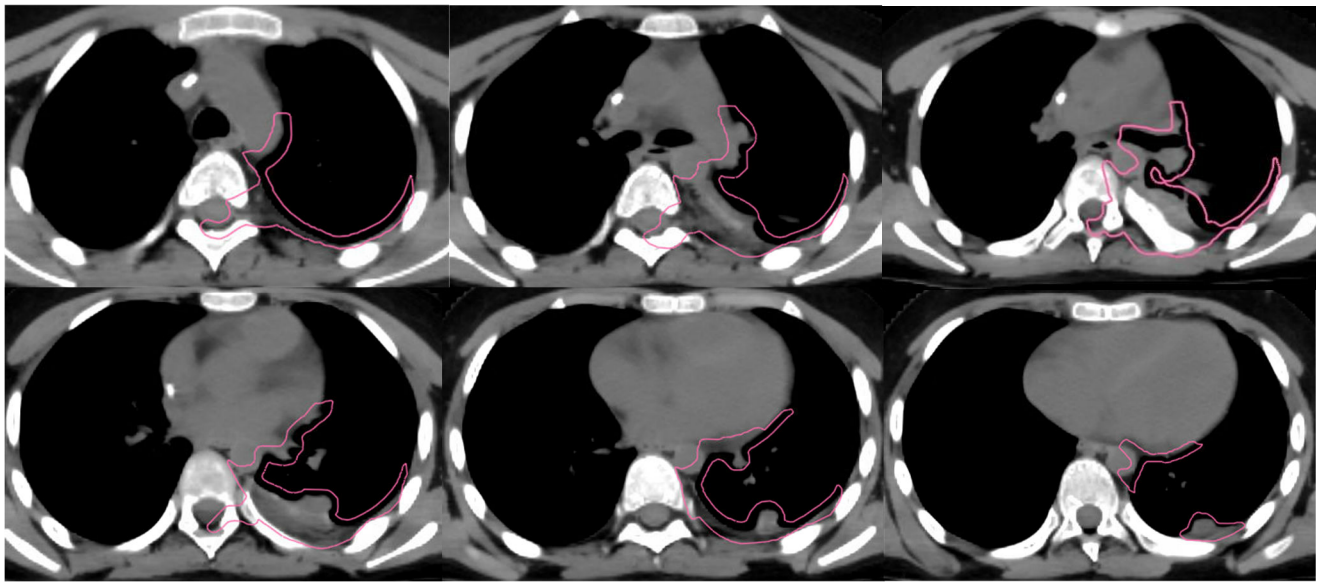

Figure 4. Define CTV1 (blue) by expanding GTV1 (red) by 1 cm. Modify CTV1 anatomically for "pushing margins" into the thoracic cavity and spinal canal (cropped out of cord).

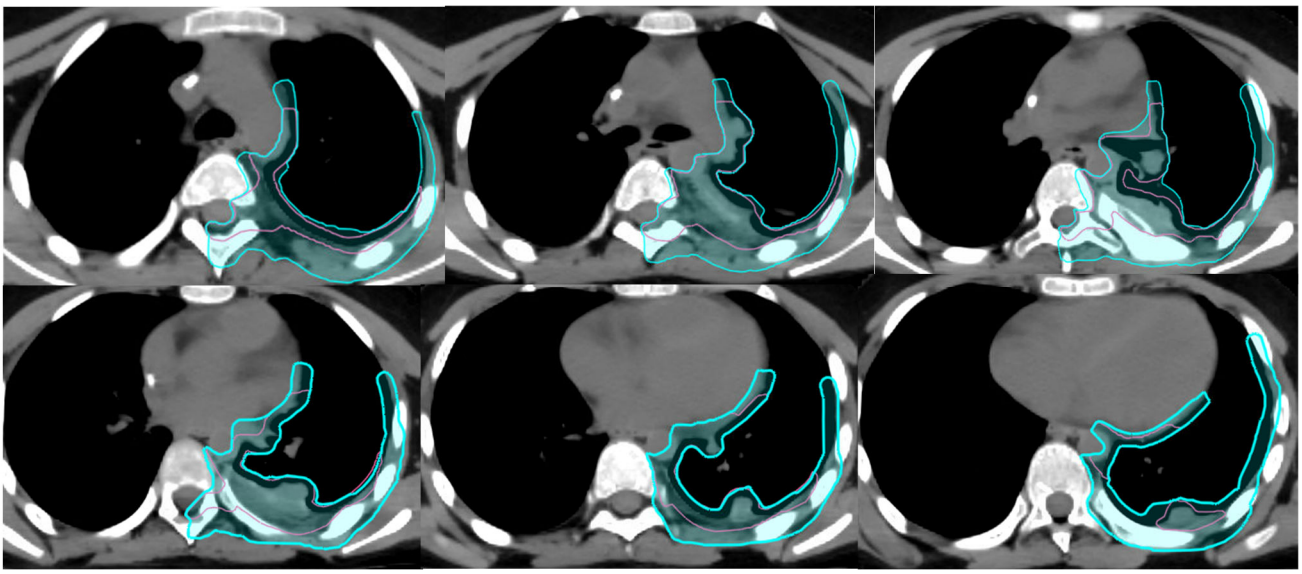

Figure 5. Define GTV2 (green contour) by including prechemotherapy bone disease extent of GTV1 and residual visible tumor as assessed by CT, MRI, PET scan or physical exam.

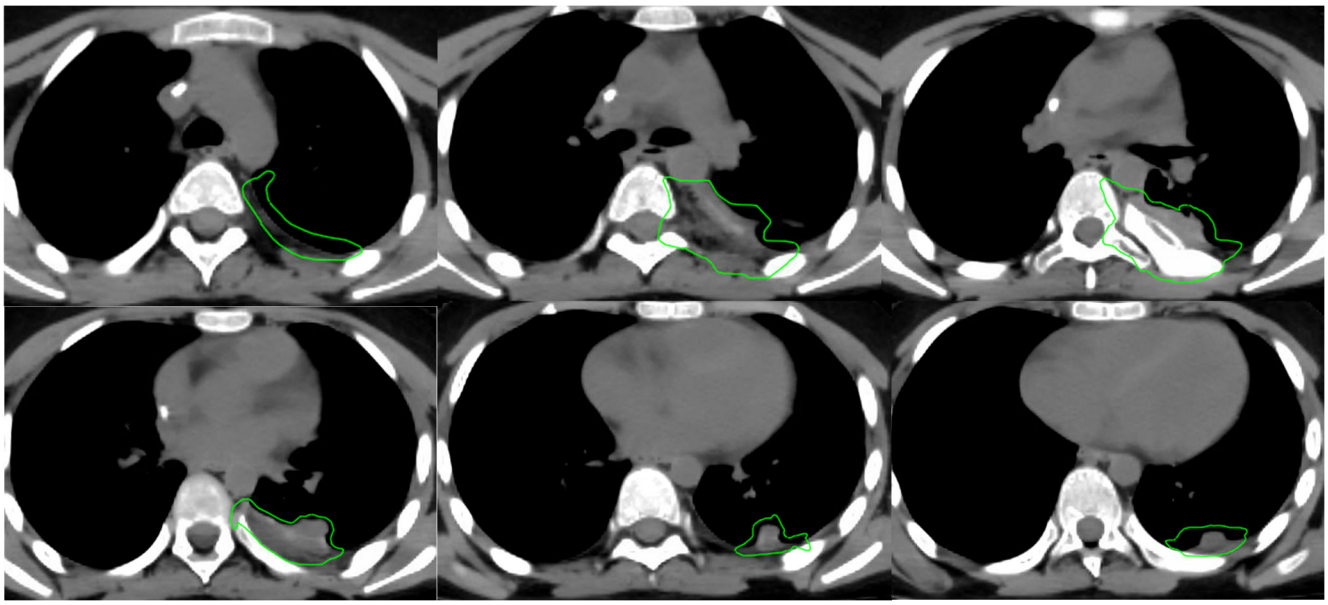

Figure 6. Define CTV2 (pink) by expanding GTV2 by 1 cm. Modify CTV2 anatomically for "pushing margins" into the thoracic cavity and spinal canal (cropped out of cord).

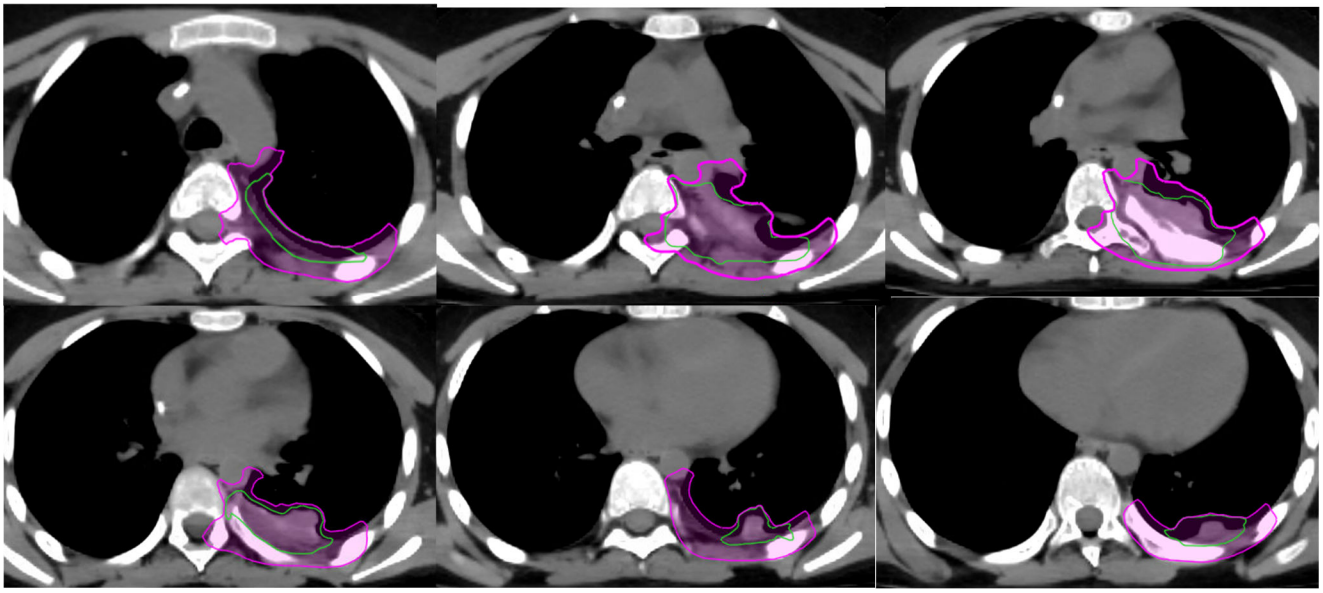

Figure 7. Define GTV3 = GTV2 (green contour).