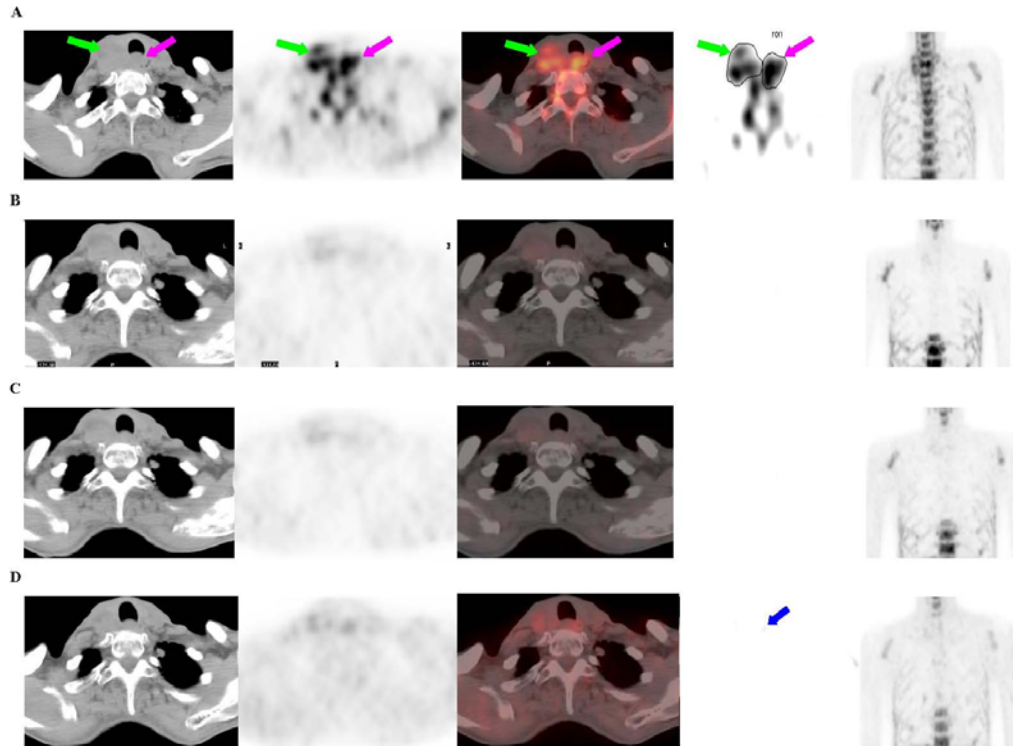


Suppl. Figure 1: Typical response of tumor to RT. Columns from left to right show CT, PET, fused PET/CT, PET with a threshold SUV>1.4, and maximum intensity projection images. Pink arrows indicate esophageal tumor. (A) Prior to radiotherapy, SUVmax=15.2, pTV=34.8cm³. (B) At 30Gy/15 fractions, SUVmax=2.4, pTV=0.5 cm³. (C) At 40Gy/20 fractions, SUVmax=1.8, pTV=0.4 cm³. (D) At 50Gy/25 fractions, SUVmax=1.2, pTV=0 cm³. Abbreviation: pTV=proliferation target volume



Suppl. Figure 2: Tumor repopulation following interruption in treatment. Columns from left to right show CT, PET, fused PET/CT, PET with a threshold $SUV > 1.4$, and maximum intensity projection images. Pink arrows indicate esophageal tumor and green arrows show lymph node metastases (A) Prior to radiotherapy, $SUV_{max} = 5.7$, $pTV = 12.5 \text{ cm}^3$. (B) At 30Gy/15 fractions, $SUV_{max} = 1.26$, $pTV = 0$. (C) At 40Gy/20 fractions, $SUV_{max} = 1.16$, $pTV = 0$. (D) At 46Gy/23 fractions, following a treatment break, $SUV_{max} = 1.82$ (blue arrow), $pTV = 0.57 \text{ cm}^3$. Abbreviation: $pTV = \text{proliferation target volume}$