Clinical summary

- Male 59 year-old with right oropharyngeal squamous cell carcinoma.
- Referred for a pre-radiotherapy PET/CT.
- Treated with chemoradiotherapy & referred for restaging PET/CT after treatment.
Large mass in the right oropharynx extending into the glossoepiglottic region (Red arrow).

Ipsilateral level 2 cervical lymphadenopathy (White arrowhead).
PET/CT findings

Intense FDG uptake in the right oropharyngeal lesion and ipsilateral level 2 lymphadenopathy
Radiotherapy planning

IMRT planning with boost on the hyperintense PET lesions (arrows)

http://humanhealth.iaea.org
Complete metabolic response to therapy
Clinical summary

- Female 60 year-old with poorly differentiated carcinoma of the left pyriform sinus
- For pre-radiotherapy PET/CT
PET/CT findings

Intense FDG uptake in the left pyriform sinus and contralateral level 3 lymphadenopathy.
Teaching points

- Integrated PET/CT for treatment planning for three-dimensional conformal radiation therapy improves the standardization of volume delineation compared with that of CT alone.

- PET/CT–guided IMRT planning can selectively target and intensify treatment of head and neck disease while reducing critical normal tissue doses.