University of BRISTOL

NHS University Hospitals Bristol and Weston NHS Foundation Trust

headandneck 5000

Project Title: Outcomes following definitive (chemo)radiotherapy for nasopharynx carcinoma

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Study Summary:

Nasopharyngeal Carcinoma (NPC) is a rare tumour. Cure rates are high with primary chemo-radiation the main curative treatment. However, the anatomical site of NPC makes treatment highly complex and with high late toxicity with conventional IMRT/ IGRT radiotherapy.

Studies of proton versus photon radiotherapy show major differences to organs at risk with expected far lower Normal Tissue Complication Probability (NTCP) rates of all toxicities. This is validated by clinical studies of clinical outcomes, but these studies are limited.

Randomisation between proton and photon therapy would be impossible on basis of basic principles of radiotherapy and limited case numbers. There are no planned randomised proton beam therapy trials for NPC internationally.

Robust comparators are required of prospective contemporary patient and clinician reported outcomes following photon radiotherapy. The aim of this study is to use prospectively gathered data from the H&N5000 study to assess the evolution of clinician and patient reported toxicity over time following treatment for NPC. A secondary objective is to assess disease outcome following modern IMRT therapy.

Keywords: Nasopharynx, proton, photon, toxicity