PET-NECK: a multicentre randomised Phase III non-inferiority trial comparing a positron emission tomography– computerised tomography-guided watch-and-wait policy with planned neck dissection in the management of locally advanced (N2/N3) nodal metastases in patients with squamous cell head and neck cancer

Hisham Mehanna,¹* Chris C McConkey,² Joy K Rahman,² Wai-Lup Wong,³ Alison F Smith,⁴ Chris Nutting,⁵ Andrew GJ Hartley,⁶ Peter Hall,⁴ Claire Hulme,⁴ Dharmesh K Patel,² Sandra Ventorin von Zeidler,⁷ Max Robinson,⁸ Bal Sanghera,³ Lydia Fresco⁹ and Janet A Dunn²

¹Institute of Head & Neck Studies and Education, University of Birmingham, Birmingham, UK

²Warwick Clinical Trials Unit, University of Warwick, Coventry, UK ³Paul Strickland Scanner Centre, Mount Vernon Hospital, Northwood, UK ⁴Academic Unit of Health Economics, University of Leeds, Leeds, UK ⁵Royal Marsden Hospital, London, UK

⁶University Hospital Birmingham, Birmingham, UK

⁷Department of Pathology, Federal University of Espírito Santo, Vitória, Brazil ⁸Centre for Oral Health Research, Newcastle University, Newcastle upon Tyne, UK ⁹University Hospitals Coventry and Warwickshire, Coventry, UK

*Corresponding author H.Mehanna@bham.ac.uk

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Plain English summary

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Plain English summary

What was the problem?

Head and neck cancer has devastating effects on patients' self-image, speech and swallowing. Chemoradiotherapy (CRT) has become an important way to treat this cancer. In patients whose cancer has spread to the neck lymph glands, current treatment includes removal of the neck lymph glands using an operation called neck dissection (ND). This can have significant complications and after-effects, such as shoulder disability, disfigurement of the mouth and neck, and long-term pain.

With the improvement in CRT, some now believe that ND may no longer be required if the neck disease is treated adequately by CRT. Furthermore, owing to an improved scanning technology called positron emission tomography (PET)-computerised tomography (CT), there is now better ability to identify patients whose neck disease has responded completely to CRT and who do not require a ND.

What did we do?

We compared routine ND with a PET–CT-guided watch-and-wait policy in patients with advanced neck disease to ascertain if PET–CT would result in a survival rate similar to ND, while reducing the number of NDs being performed. We also looked at the costs of both treatment strategies and their impacts on patients' quality of life.

What did we find?

Patients who received PET–CT-guided surveillance showed similar survival outcomes to those who received planned ND. PET–CT surveillance also resulted in fewer complications and lower costs, supporting its use in routine practice.

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