headandneck 5000

University of BRISTOL

University Hospitals Bristol NHS Foundation Trust

PET-CT guided, symptom-based, patient-initiated surveillance versus clinical follow-up in advanced head neck cancer (PETNECK 2)

Principle Applicant: Hisham Mehanna

Co-Applicants: Andreas Karwath, Georgios Gkoutos

Scientific Outline

Summary

PETNECK 2 is a programme of work to explore a new strategy in the follow-up of head and neck cancer patients that have completed treatment. Currently, guidelines recommend regular routine follow-up, aiming to detect recurrences early and enable successful re-treatment which is overall inefficient and resource intensive. Within the programme, we will develop a new way to follow-up patients, guided by their symptoms, and compare it to the current way. This includes proposing patients to have a PETCT scan 1-year after finishing treatment with appropriate and urgent follow-ups if required. To assess the possibility of applying patient-initiated follow-ups in potential low resource settings, we aim to develop risk stratification models based on easily accessible information within the clinical setting. For this, we plan to assess and refine existing predictive models of reoccurrence and survival using clinical factors using the Head&Neck5000 programme and aim to develop and validate predictive models novels if required using RCT results.

Key words:
 Predictive modelling
 HNC recurrence risk
 Evaluation
 Machine Learning