Introduction
- Research project part of a Masters programme
- Aim to complete end of 2011
- Study aimed at trying to find out how effective the tongue is immobilised during treatment

Background
- The tongue is a very mobile structure
- Mouth bites are used to immobilise and depress the tongue and keep the mandible in a stable position and the hard palate out of the treatment field (Hollows et al, 2001)
- Good immobilisation needed with dose escalation
- Limited literature in this area

Literature Review
- Literature search highlighted limited literature
- Most focus on stereotactic or IMRT techniques, which use a bite block system (Baumert et al, 2005; Willner et al, 1997)
- Some related articles on movement of mandible and cervical spine (Ahn et al, 2009; Suzuki et al, 2006; Zhang et al, 2006)

Research Aims
- To assess how the mouth bite and tongue may vary over the course of a treatment
- To explore what factors may impact upon mouth bite position during treatment
- Primary research question - Does the mouth bite move during the course of the treatment in relation to the original position at simulation?
Research Aims
- Secondary research questions
  - Tongue Position throughout treatment
  - Identify trends in any movement
  - Do side effects influence position of mouth bite?

Methodology
- Mixed method approach
  - Eligible patients identified at pre-treatment stage
  - Inclusion criteria
    - Radical
    - Head and Neck
    - Mouth bite
  - Information given
  - Informed consent obtained

Methodology
- Patient given first questionnaire
- Orthogonal images taken during treatment
- Portal images reviewed
- Data recorded and analysed
- Weekly questionnaires and images until completion
- Weight and volume of mouth bite recorded

Progress to date
- Proposal accepted by university
  - Full LREC and R and D approval gained
  - CoRIPS funding awarded
- 2 patients recruited to the study
  - Data collection started

Personal Experience
- New experience – steep learning curve!
- Progress slower than expected
- Recruitment issues
- Support from research group
- Feedback

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  - Ethics committee
- R and D department
References