

## TRIAL SUMMARY

<b>Title:</b>	HPV prevalence in the mouth and oropharynx of the tonsillectomy population
<b>Chief Investigator:</b>	Prof Hisham Mehanna
<b>Sponsor:</b>	University of Birmingham
<b>Rationale:</b>	Human Papillomavirus-related oropharyngeal squamous cell carcinoma (HPV-OPSCC) is caused by the Human Papillomavirus (HPV), which also causes most cervical and anal cancers. HPV infection is sexually-transmitted, and in the mouth may be linked to oral sex. A meta-analysis of the world literature performed shows that the proportion of HPV-OPSCC has more than doubled in Europe and the USA over the past decade. OROMOUTH aims to provide current data on the prevalence, distribution and natural history of HPV infection in the mouth, which are essential requirements for the assessment, development and evaluation of cost-effectiveness of prophylactic vaccination and screening programmes. The vaccination of girls only may not protect males, especially if herd immunity is not achieved due to incomplete uptake of the vaccine in girls. Therefore, in view of the recent rise in HPV-oropharyngeal carcinoma, some experts are raising the possibility of the vaccination of boys as well as girls
<b>Primary Objective:</b>	To estimate the overall, age and gender specific prevalence of HPV in the oropharynx in patients undergoing tonsillectomy for non-malignant conditions.
<b>Secondary Objectives:</b>	<ul style="list-style-type: none"> <li>• To compare the HPV oropharynx prevalence between different sites—in order to identify the different reservoirs of HPV infection.</li> <li>• To describe the distribution of HPV seropositivity in the study population by age and gender.</li> <li>• To describe HPV-type distribution overall by age, gender, and sampling site.</li> <li>• To describe distribution by age and gender of patients who are both HPV PCR positive and anti-HPV L1 sero-positive – predicting persistent HPV infection.</li> <li>• To provide preliminary estimates of the clearance and persistence of HPV infection and antibodies in the oropharynx, as detected in follow-up oral fluid, finger tips/nail brushings and urine samples.</li> <li>• To assess the presence of anti-L1 HPV antibodies in saliva as a marker of vaccination or previous infection in the oral cavity.</li> <li>• To assess the presence of HPV in the urine, finger tips/nail brushings</li> <li>• To provide preliminary evaluation of the performance of potential non-invasive tests for the detection of HPV infection in the mouth against HPV detection rates in tonsillectomy and oropharyngeal scrapes.</li> <li>• To identify the change in overall prevalence and distribution of HPV in tonsils over time, and to describe preliminary data on age and gender specific changes over time.</li> <li>• To provide preliminary data on the potential effect of HPV vaccination in the prevention of oral infection.</li> </ul>
<b>Trial Design:</b>	Prospective cross sectional study.
<b>Inclusion Criteria:</b>	<ul style="list-style-type: none"> <li>• Subjects undergoing tonsillectomy for non-cancer reasons including operations for: recurrent tonsillitis, snoring surgery or obstructive sleep apnoea.</li> <li>• Age 0 to 65 years</li> <li>• Subject or legal guardian has given informed written consent</li> </ul>
<b>Exclusion Criteria:</b>	<ul style="list-style-type: none"> <li>• Subjects undergoing adenoidectomy alone with no tonsillectomy</li> <li>• Subjects with previous oropharyngeal cancer or oral cancer, or any other head and neck cancer such as nasopharyngeal or laryngeal cancer that is currently undergoing or has previously been diagnosed or treated.</li> </ul>

<b>Exclusion Criteria (continued):</b>	<ul style="list-style-type: none"> <li>• Learning disability preventing an adult over 16 years old from giving their own consent.</li> </ul>
<b>Duration of Study:</b>	30 months
<b>Recruitment</b>	1250
<b>Intervention</b>	<ul style="list-style-type: none"> <li>• Study questionnaire – if 16 years old or over</li> <li>• Oral fluid samples</li> <li>• 20ml blood serum sample in adults &gt;16years, 10ml blood in child &lt;16 years old;</li> <li>• 20- 30ml urine sample</li> <li>• Finger tips/nail brushings</li> <li>• Oropharyngeal scrape samples: 2 brush cytology scrapes- posterior pharyngeal wall and base of tongue;</li> <li>• Tonsillectomy specimen</li> <li>• Longitudinal subset: second oral fluid, finger tips/nail brushings and urine samples 3-6 months after operation.</li> </ul>
<b>Analysis:</b>	<ul style="list-style-type: none"> <li>• HPV detection in the tonsil histology, oropharyngeal scrape samples, oral fluid and urine.</li> <li>• Serology against L1 proteins in serum and oral fluid sample</li> <li>• Other tests e.g. HPV nucleic acids and other HPV antibodies in biological samples may be performed</li> </ul>
<b>Trials Office:</b>	Cancer Research UK Clinical Trials Unit/ Institute of Head and Neck Studies and Education, Institute for Cancer Studies, University of Birmingham, Edgbaston, Birmingham. B15 2TT
<b>Trial Schema</b>	

