

Welcome to our second scientific newsletter. I hope everybody had a good Easter and has been enjoying the spring sunshine. As described our three year follow up is now underway and we already have over 400 questionnaires returned. We would be delighted if any more sites were able to support the follow up. And we are still collecting tissue blocks so there is still time to send these to us. We are now starting to present and publish data from Head and Neck 5000 as highlighted in this newsletter. Also we will be presenting three posters at the upcoming BAHNO conference. We now have 25 approved projects where people are working on head and neck 5000 data - one example featured in this newsletter is the analysis that Femke carried out when she spent some time with us. It was a pleasure to have Femke join us and I think (despite the Bristol weather) that she enjoyed it too!



Funding for genetic studies in Head and Neck 5000

We are part of a collaboration led by Paul Brennan at the International Agency for Research on Cancer in Lyon funded by the US National Institute of Dental and Craniofacial Research. This project builds on the work published in Nature Genetics (described above) and brings together groups from Europe, Canada and the United States. This award has three aims. The first is to evaluate the relationship between germline variants and risk of human papillomavirus (HPV) related oropharyngeal cancer. The second is to comprehensively assess somatic mutation patterns in oral cancer and in oropharyngeal cancer. The third is to examine molecular markers, HPV and smoking history in OC and OPC outcome. We are excited to see the tissue samples we collected over the last five years being used to answer important questions about the biology of head and neck cancer.

31st International Papilloma Virus conference - HPV 2017 — Andrea Waylen



At the end of February, Professors Ness and Thomas and I spent a week in Cape Town, South Africa! The visit was justified by our attendance at the 31st International Papilloma Virus conference - HPV 2017. During our time at the conference we were treated to a range of invited lectures, oral abstract sessions, poster sessions, symposia, workshops and social events.

We presented two posters: one on the prevalence of HPV antibodies and survival in the HN5000 cohort and the other on clinical and behavioural factors associated with head and neck cancer and HPV seropositivity. (And, in addition to the hard work, we also squeezed in time for penguins, a visit to the Cape of Good Hope and even some South African wine!)"

New genetic variants associated with oral and oropharyngeal cancer

Prof Andy Ness

We contributed over 1,000 cases to a genome wide association study of 6,034 cases of oral and oropharyngeal cancer and 6,585 controls from Europe, North America and South America. The study identified seven new loci for these cancer sites. The most interesting finding was an association with a locus in the human leukocyte antigen (HLA) class II region and oropharyngeal cancer. This association was not present in people from South America (where the prevalence of human papillomavirus (HPV) related tumours is low) and appeared to be considerably stronger for people with HPV related oropharyngeal cancers. We were delighted to see the DNA collected from people taking part in head and neck 5000 making an important contribution to this international consortium.

Lesseur C et al. Genome-wide association analyses identify new susceptibility loci for oral cavity and pharyngeal cancer. *Nature Genetics* 2016; **48**: 1544-1550.



Symptoms of depression in relation to overall survival in people with head and neck cancer

Femke Jansen

Clinical depression as well as symptoms of depression have been reported to increase mortality and reduce survival in different (cancer) populations (Cuijpers et al. 2014). People who are especially prone to (symptoms of) depression are those diagnosed with head and neck cancer (HNC). In a previous systematic review (Krebber et al. 2014) it was reported that one in five persons with HNC report symptoms of depression. Previous studies on the association between (symptoms of) depression and survival in people with HNC, however, showed mixed findings. Also, previous studies were often limited to a small sample size, and to a single measurement of (symptoms of) depression. The Head and Neck 5000 project encompasses a valuable source of data to study the association between (symptoms of) depression and survival in people with HNC in more detail. I am based at VU University Medical Center, Amsterdam. I visited the Bristol University from January to April 2017 to investigate this association, in collaboration with Head and Neck 5000 researchers (Andy Ness, Andrea Waylen, Steven Thomas, Chris Penfold) and researchers from The Netherlands (Irma Verdonck-de Leeuw, Pim Cuijpers, René Lee-mans).

Head and Neck 5000 seminar series - Chris Penfold

In autumn 2016 we began our head and neck cancer seminar series. This series has been a great opportunity both to hear about the work being undertaken by some of our long-term collaborators and to build new links. It has also been a catalyst for several projects using data from the Head and Neck 5000 cohort. In October Simon Rogers (Aintree) started the series with his talk about making the most of patient reported outcomes following head and neck cancer. Followed in November by Gerry Humphris (St Andrews), who spoke about fears of cancer recurrence. In the New Year David Conway (Glasgow) joined us to give a talk about socioeconomic inequalities in head and neck cancer. And, most recently, Irma Verdonck-de Leeuw (Amsterdam) presented her research on health related quality of life in head and neck cancer patients. In the coming months we are looking forward to talks from Claire Foster (Southampton) and Catriona Mayland (Liverpool).

The H&N5000 Follow-up Study is up and running.

We now have 31 of the original 76 sites open with 31 sites still in set up. Sadly 14 sites are unable to take part in the Follow-up Study due to a lack of capacity. We have sent out over 800 Questionnaires so far and the return rate on questionnaires sent out over 4 weeks is 60%. We have only just started to send out reminder packs so we are hoping that this number will rise.

Scientific Team

The scientific team is a collaboration of experienced clinicians and academics at the School of Oral and Dental Sciences, University of Bristol.

- Professor Andy Ness: Professor of Epidemiology
- Dr Miranda Pring: Consultant Senior Lecturer in Oral Maxillofacial Pathology
- Professor Steven Thomas: Professor in Oral and Maxillofacial Surgery
- Dr Andrea Waylen: Senior Lecturer in Social Sciences



From left to right :
Miranda Pring, Andy Ness, Steven Thomas and Andrea Waylen

Co-ordination Team

The co-ordination team, led by senior research nurse Katrina Hurley, run the field-work component of the study and co-ordinate its day-to-day management:

- Ms Katrina Hurley: Programme Manager
- Mrs Chris Lippiatt: Data Co-ordinator
- Dr Christopher Penfold: Research Associate in Statistics
- Mr Stu Toms: Database Manager
- Mrs Christine Wood: Study Research Co-ordinator