



headandneck 5000

Epstein-Barr virus antibody pattern in head and neck cancer outside nasopharyngeal carcinoma

Principle Applicant: Julia Simon

Co-Applicants: Dr. Tim Waterboer, Dr. Nicole Brenner, Prof. Andy Ness, Prof. Miranda Pring

Project Summary

Epstein-Barr virus (EBV) is associated with the development of nasopharyngeal carcinoma (NPC), while Human papillomavirus (HPV) infection plays a major role in oropharyngeal carcinoma (OPC) development. While HPV can also be involved in NPC development, the role of EBV infection in OPC development is unknown. We have previously validated EBV serology and HPV serology in NPCs using molecular data (EBER-ISH, p16, HPV DNA and RNA). We now aim to use the validated EBV antigen panel to investigate EBV positivity in head and neck cancers outside NPC. Together with available data from the HPV serology study and EBV RNA data from previously extracted RNA, this will allow us to describe the attributable fractions of EBV, HPV, and lifestyle factors in all Head and Neck 5000 cancers.

Keywords:

Epstein-Barr virus, head and neck cancer, oropharyngeal carcinoma, serology