LS11-006 - Second generation human papillomavirus (HPV) vaccine for broad-spectrum protection against HPV-induced skin and mucosal neoplasia

Zusammenfassung

Infections with human papillomaviruses (HPV) cause at least 5% of human cancers worldwide, including all cervical and a subset of other ano-genital and oro-pharyngeal cancers, genital and common skin warts, and have been implicated in the development of non-melanoma skin cancer. More than 120 HPV types (strains) have been identified today. Licensed HPV vaccines protect only against two or 4 HPV types causing 70% of cervical cancers. We have designed a novel vaccine with the potential to protect against a broad spectrum of HPV types. We propose to develop laboratory assays to measure vaccine efficacy against 45 clinically most relevant HPV. Experiments in mice will evaluate protection against genital and cutaneous HPV infection, with the long-term goal of conducting human clinical trials. If successful, introduction of this vaccine into a childhood program may become a cost-effective means to reduce the burden of HPV induced neoplasia of the skin and genitalia.

Schlagworte:
human papillomavirus (HPV), mucosal and skin cancer, vaccine, virus-like particles (VLP)

Principal Investigator:	Reinhard Kirnbauer
Institution:	Medical University Vienna
Weitere Projektpartner:innen:	Richard Roden (Johns Hopkins University) Dieter Fink (Veterinärmedizinische Universität Wien)



Status: Abgeschlossen (01.01.2012 – 31.12.2016)
GrantID: 10.47379/LS11006

Weiterführende Links zu den beteiligten Personen und zum Projekt finden Sie unter
https://www.wwtf.at/funding/programmes/ls/LS11-006/