EuroSciCon

European Congress on
Vaccines & Vaccination and Gynecologic Oncology

October 26-27, 2018
Budapest, Hungary

Journal of Clinical Immunology and Allergy, Volume: 4
DOI: 10.21767/2471-304X-C2-006

Euro Vaccines 2018

HUMAN HERPESVIRUSES: SHOULD WE STILL INVEST IN VACCINES OR FOCUS ON PREDICTIVE TESTS?

Emmanuel Drouet
Université Grenoble-Alpes, France

Human herpesviruses (HHV1-8) have co-evolved through a persistent infection in the host, spread efficiently to others generally without causing serious disease. The complex interplay between host and virus has made it difficult to elaborate useful vaccine strategies to protect against the HHV-associated diseases. The Varicella-Zoster vaccine represents the paradigm of a successfully marketed herpesvirus vaccine. Over the years, the development of HHV vaccines has been a story of mixed fortunes, especially for HSV-2 and HCMV. However, studies carried out in various disease settings (i.e. transplant patients or pregnant women), have emphasized the importance of cellular immunity and it is indeed encouraging to see that recent HHV vaccine (i.e. HCMV) development programs have started to incorporate this arm of the immune system. Nowadays, an array of arguments calls for a realistic goal for vaccine strategies which should be preventing HHV disease rather than HHV infection. It is particularly, the case for the Epstein-Barr virus (EBV or HHV4) which is the primary cause of infectious mononucleosis and is associated with epithelial cell carcinomas, as well as lymphoid malignancies. The challenge is that the HHVs express very different proteins during their lytic and latent phases. Parallel to this need, one could propose priorities for future research: identification of surrogate markers that predict the development of HHV diseases or malignancies; determination of immune correlates of protection against HHV infection and disease in animal models and in humans. Finally, we will discuss recent works showing the beneficial role of these persisting viruses in the context of malignancies.

Emmanuel.drouet@ibs.fr