

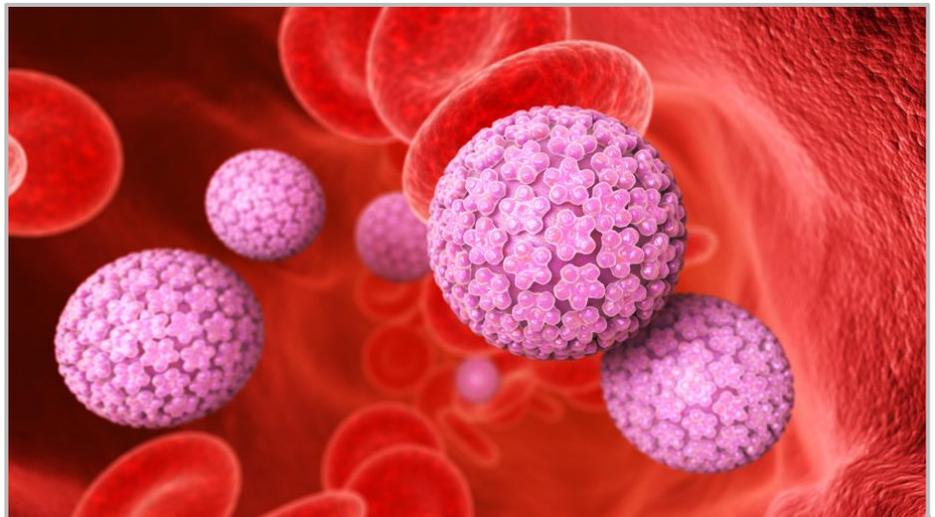
TECHNOLOGY OFFERS

Cutaneous Papilloma Virus Vaccine (P-1358)

An immunogenic polypeptide comprising a multitude of papillomavirus L2 N-terminal peptides to protect against most cutaneous HPV types

EXECUTIVE SUMMARY

Infections with human papillomavirus (HPV) are a worldwide health challenge, particularly in resource-limited regions. We have developed an immunogenic polypeptide comprising a multitude of papilloma-virus (PV) L2 N-terminal peptides, s, corresponding to amino acids 20 to 50 of the L2 polypeptide of HPV16, wherein said HPV L2 N-terminal peptides are L2 N-terminal peptides from at least four different cutaneous HPV and to the aforesaid immunogenic polypeptide for use in medicine and for use in vaccination of a subject against cutaneous HPV infection and/or mucosal HPV infection. The technology further comprises a munogenic polypeptide and to vectors, host cells, methods for producing an antibody, as well as antibodies related thereto.



Tatiana Shepeleva, stock.adobe.com

Category

Vaccine,
Therapeutics

Indication

HPV

Development stage

Pre clinical

Seeking

Licensing, Development partner

BENEFITS

- Broad protection range
- Thermostable antigen, needs no cooling chain
- Low production costs

TECHNOLOGY BACKGROUND

HPV-related diseases are premalignancies or overt malignancies of the skin and mucosal surfaces and are an important personal and public health problem causing physical, mental, sexual and financial detriments. In organ transplant recipients (OTRs) the number of skin warts is constantly rising, corresponding with the duration of the iatrogenic immune suppression. Similar observations are being made in other immune compromised individuals, e.g. HIV+. Five years after transplantation up to 92% of the OTRs are suffering from skin warts. The warts in OTRs usually do not regress spontaneously and therefore require repeated and costly treatment which, however, can only alleviate the symptoms and does not provide a lasting cure. There is, thus, a need in the art for improved means and methods for vaccination against HPV, in particular cutaneous HPV, and in particular for immunogenic polypeptides that are highly immunogenic and allow for a cross-neutralization of various HPV genotypes without the drawbacks as referred to above.

DEVELOPMENT STAGE

-Preclinical, POC in mouse completed-----

APPLICATIONS

- Treatment of infections with cutaneous HPV types e.g. before organ transplantation.
- Pharmaceutical composition & Vaccine

INTELLECTUAL PROPERTY

Patent application submitted:

- WO WO2019063841A1; Cutaneous Papilloma Virus Vaccine, Application Date 29.09.2017.

PUBLICATIONS & REFERENCES

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ABOUT THE DKFZ INNOVATION MANAGEMENT

Working at the interface of research and industry, the Innovation Management of the German Cancer Research Center (DKFZ) helps to get new cancer medications, diagnostic tests, and research instruments onto the market as quickly as possible.

The DKFZ with its more than 3,000 employees is the largest biomedical research institution in Germany. At the Center more than 1,300 scientists investigate how cancer develops, identify cancer risk factors and endeavor to find new strategies to prevent people from getting cancer. They develop novel approaches to make tumor diagnosis more precise and treatment of cancer patients more successful. DKFZ is a member of the Helmholtz Association of National Research Centers, with ninety percent of its funding coming from the German Federal Ministry of Education and Research and the remaining ten percent from the State of Baden-Württemberg