

# HPV self-sampling – a new screening option to prevent cervical cancer

## HPV and cervical cancer

Human papillomavirus belongs to the group of DNA viruses, with more than 130 known types. Many of them are sexually transmitted, and almost 80% of people are infected with them at some points in their lives. The infection may have a latency period of up to 1 or 2 years without any symptoms and in a lucky case the immune system eliminates it. In the rest of the cases, the presence of the virus may lead to the occurrence of benign or malignant skin and mucous membrane changes of various severities. While certain low-risk HPV types cause genital papillae, those classified as high-risk types play an important role in the formation of cervical cancer, vaginal, vulvar, penile and anal cancer or cancerous tumours in the oral cavity.

As the mortality rate of cervical cancer is extremely high, it is very important that sexually active women should regularly participate in screening. Since it has been proven that the development of cervical cancer is associated with an HPV infection of the cervical area, testing for the presence of the virus should be part of the screening for cervical cancer.

## New aspects in the screening of cervical cancer

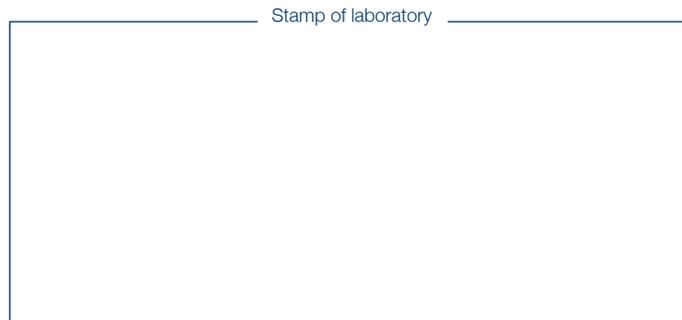
Today cytological testing is generally used for screening. The aim of the test is to identify cells with cancerous malformation, as well as to detect early signs of a pre-cancerous state. If the result is uncertain, the test may be combined with HPV screening. The weak point of the smear cytological test is that the sensitivity of a single test is rather low (50-70%), which means that the result may be false negative in a significant percentage. Considering that the screening of cervical cancer based on HPV testing is more sensitive, moreover, based on clinical studies, HPV testing is less subjective (it can be better reproduced), the latest professional protocols have changed the screening sequence to place HPV testing as the primary test. Therefore, several European countries are now committed to primary HPV-based screening.

## HPV and self-sampling

Until recently, HPV sample collection has only been possible as a part of a gynaecological examination. However, from now on it is available to patients as well, with the use of a self-sampling device. The two ways of sample collection differing that during the medical examination sample is collected from the cervical canal, whereas with self-sampling the sample is collected from the vagina and the outer surface of the cervix. Based on literature data, if the virus is detected by means of a PCR-based HPV test, the sensitivities of the tests from the two sample types are the equally adequate. The latest European guidelines recommend the self-sampling test primarily for women who cannot or do not wish to participate in gynaecological screening for any reason. An advantage of the self-sampling test is that more positive HPV cases can be identified than earlier so detection and prevention of cervical cancer may become more efficient.

## How the self-sampling test is ordered

To purchase a Qvintip self-sampling HPV testing kit please contact:



## Interpretation of the results

If the presence of a virus is detected that confers high risk for cervical cancer, you should visit your gynaecologist with your results as soon as possible so that additional tests (smear cytology) can be made. Otherwise, please retain your test results, and show them to your doctor during the next gynaecological screening. To reach the highest possible safety, the two screening methods (HPV detection and smear cytology) should be combined, so regular gynaecological screening is recommended.

### Additional information, literature:

Web: [www.genoid.net](http://www.genoid.net)

Qvintip: [www.aprovix.com](http://www.aprovix.com)

**Karsa, L., M. Arbyn, and H. Vuyst**, European guidelines for quality assurance in cervical cancer screening. Summary of the supplements on HPV screening and vaccination. **Papillomavirus research, 2015. 1: p. 22-31.**

**Arbyn, M., et al.**, Accuracy of human papillomavirus testing on self-collected versus clinician-collected samples: **a meta-analysis. Lancet Oncol, 2014. 15(2): p. 172-83.**

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