

# first risk-based screening for **cervical cancer** in Europe



This is the third newsletter of the RISCC project, a European Commission funded project to facilitate the implementation of the first risk-based screening programs for cervical cancer in Europe.

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In this issue you will find:

- Describing the project in detail: Work package 3
- News and events
- Publications so far



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 847845.

## DESCRIBING THE PROJECT IN DETAIL

Work package 4

For an overall description of the project and its organisation, please check the **first newsletter**.

Aside from the screening history and vaccination status, other factors might influence the risk of cervical cancer: symptoms, education level, smoking, use of oral contraceptives, parity or country of birth. Therefore, they could play a role in refining the individual's risk of cervical cancer, but data on these factors is not necessarily available in screening registries.

To deal with these issues, WP4 will:

Conduct meta-analyses to quantify the impact of these risk factors on cervical cancer risk and therefore assess whether they are useful for risk stratification.

Develop tools and collect personal data on risk factors via an electronic questionnaire connected to WP7 digital platform.

On the other hand, treatment of precancer lesions detected via screening can entail obstetric complications. Therefore, WP4 will quantify these complications by means of an individual patient data pooled analysis.

Furthermore, to support and strengthen the interpretation of the risk profiles of all factors together, additional pooled analyses will be performed on

Validation of HPV tests for several collection media (cliniciancollected samples, vaginal self-samples, urine samples)

Validation of triage tests for HPV-positive women

Efficacy of strategies offering self-sample kits versus routine screening in underscreened women

Trend studies on the prevalence of HPV, CIN3 and cancer in unvaccinated and vaccinated birth cohorts

This work package is led by Sciensano in Belgium with the collaboration of Stichting VUMC and Self-screen BV in the Netherlands, Karolinska Institutet in Sweden, International Agency for Research on Cancer in France and the University of Ljubljana in Slovenia.



# **NEWS AND EVENTS**

#### **5th meeting (9th -10th May 2022)**

The fifth RISCC consortium meeting was held online. It was a very fruitful meeting. The advances towards the development and implementation of risk-based cervical cancer screening were discussed and everybody was updated on the status of the different work packages. Obviously, there is still much work to be done.



Next project meeting: 16-17 November 2022 in Amsterdam. We will finally be meeting in person!

### NEW PUBLICATIONS SINCE LAST NEWSLETTER

Stanczuk G, Currie H, Forson W, et al. Clinical Performance of Triage Strategies for Hr-HPV-Positive Women; A Longitudinal Evaluation of Cytology, p16/K-67 Dual Stain Cytology, and HPV16/18 Genotyping. Cancer Epidemiology, Biomarkers & Prevention 2022;31:1492–8. doi:10.1158/1055-9965.EPI-21-1425

Arroyo Mühr LS, Eklund C, Lagheden C, et al. Head-to-Head Comparison of Bi- and Nonavalent Human Papillomavirus Vaccine-Induced Antibody Responses. J Infect Dis 2022;226:1195– 9. doi:10.1093/infdis/jiac190

Canfell K, Smith M, Saville M, et al. **HPV screening for cervical cancer is reaching maturity.** BMJ 2022;377:o1303. doi:10.1136/ bmj.o1303

Athanasiou A, Veroniki AA, Efthimiou O, et al. **Comparative** effectiveness and risk of preterm birth of local treatments for cervical intraepithelial neoplasia and stage IA1 cervical cancer: a systematic review and network meta-analysis. The Lancet Oncology 2022;23:1097–108. doi:10.1016/S1470-2045(22)00334-5

Kyrgiou M, Athanasiou A, Arbyn M, et al. **Terminology for cone** dimensions after local conservative treatment for cervical intraepithelial neoplasia and early invasive cervical cancer: 2022 consensus recommendations from ESGO, EFC, IFCPC, and ESP. The Lancet Oncology 2022;23:e385–92. doi:10.1016/S1470-2045(22)00191-7

Lehtinen M, Pimenoff VN, Nedjai B, et al. Assessing the risk of cervical neoplasia in the post-HPV vaccination era. Int J Cancer Published Online First: 12 September 2022. doi:10.1002/ijc.34286

Latsuzbaia A, Vanden Broeck D, Van Keer S, et al. Validation of BD Onclarity HPV assay on vaginal self-samples versus cervical samples using the VALHUDES protocol. Cancer Epidemiology, Biomarkers & Prevention 2022;:EPI-22-0757. doi:10.1158/1055-9965.EPI-22-0757 Latsuzbaia A, Vanden Broeck D, Van Keer S, et al. Clinical Performance of the RealTime High Risk HPV Assay on Self-Collected Vaginal Samples within the VALHUDES Framework. Microbiology Spectrum 2022;0:e01631-22. doi:10.1128/ spectrum.01631-22

Arbyn M, Bonde J, Cushieri K, et al. **Can HPV Selfy be considered as a clinically validated HPV test for use in cervical cancer screening?** Journal of Translational Medicine 2022;20:422. doi:10.1186/s12967-022-03627-w

Fernández-Deaza G, Caicedo-Martinez M, Serrano B, et al. Cervical cancer screening programs in Latin America: current recommendations for facing elimination challenges. Salud publica mex 2022;64:415–23.

Van Keer S, Latsuzbaia A, Broeck DV, et al. **Analytical and clinical performance of extended HPV genotyping with BD Onclarity HPV Assay in home-collected first-void urine: a diagnostic test accuracy study.** Journal of Clinical Virology 2022;:105271. doi:10.1016/j.jcv.2022.105271

Arbyn M, Simon M, de Sanjosé S, et al. Accuracy and effectiveness of HPV mRNA testing in cervical cancer screening: a systematic review and meta-analysis. The Lancet Oncology Published Online First: 13 June 2022. doi:10.1016/S1470-2045(22)00294-7

Inturrisi F, Bogaards JA, Siebers AG, et al. Women with a positive high-risk human papillomavirus (HPV) test remain at increased risk of HPV infection and cervical precancer ≥15 years later. Tumour Virus Research 2022;14:200240. doi:10.1016/j. tvr.2022.200240

Inturrisi F, Berkhof J. **Pricing of HPV tests in Italian tender-based regional settings.** Journal of Medical Economics 2022;:1–21. doi:1 0.1080/13696998.2022.2082777

Kremer WW, Dick S, Heideman DAM, et al. Clinical Regression of High-Grade Cervical Intraepithelial Neoplasia Is Associated With Absence of FAM19A4/miR124-2 DNA Methylation (CONCERVE Study). JCO 2022;:JCO.21.02433. doi:10.1200/ JCO.21.02433 Verhoef L, Bleeker MCG, Polman N, et al. **Performance of DNA methylation analysis of ASCL1, LHX8, ST6GALNAC5, GHSR, ZIC1 and SST for the triage of HPV-positive women: Results from a Dutch primary HPV-based screening cohort.** International Journal of Cancer 2022;150:440–9. doi:10.1002/ijc.33820

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Smith MA, Sherrah M, Sultana F, et al. National experience in the first two years of primary human papillomavirus (HPV) cervical screening in an HPV vaccinated population in Australia: observational study. BMJ 2022;376:e068582. doi:10.1136/bmj-2021-068582

Lehtinen M, Gray P, Louvanto K, et al. **In 30 years, gender-neutral** vaccination eradicates oncogenic human papillomavirus (HPV) types while screening eliminates HPV-associated cancers. Expert Review of Vaccines 2022;0:1–4. doi:10.1080/14760584.202 2.2064279

Zhang L, Carvalho AL, Mosquera I, et al. **An international consensus on the essential and desirable criteria for an 'organized' cancer screening programme.** BMC Medicine 2022;20:101. doi:10.1186/ s12916-022-02291-7



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