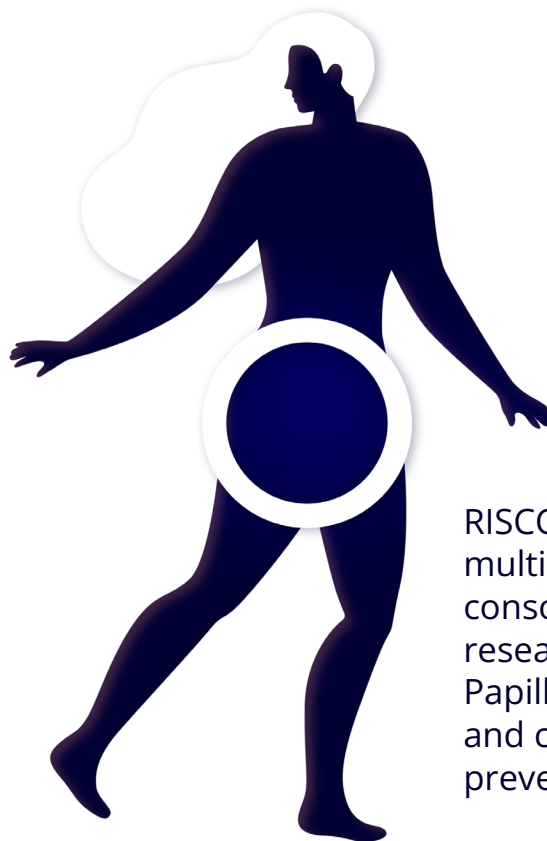




first risk-based screening for cervical cancer in Europe



RISCC is a multidisciplinary consortium of key researchers in Human Papillomavirus (HPV) and cervical cancer prevention.

#6

This is the fifth 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 6**
-  **News and events**
-  **Publications since last newsletter**



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DESCRIBING THE PROJECT IN DETAIL

Work package 6 - Implementation tools and pilots

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

In previous newsletters we have explained how we will estimate the risk of cervical cancer according to the screening history (WP2), the vaccination status (WP3) and other factors such as the presence of symptoms, education level, smoking, use of oral contraceptives, parity or country of birth (WP4). Furthermore, in the last newsletter we explained how we will model these data to assess the effectiveness and cost-effectiveness of risk-based screening algorithms (WP5).

In work-package 6, the RISCC project aims to facilitate the implementation of risk-based screening through the following open-source and free tools:

Development of a web platform (frontend and backend) to manage a screening program co-created with health professionals and patients through the European Network of Gynaecological Cancer Advocacy Groups (ESGO-ENGAGe).

The frontend, used by participants, facilitates invitation to the screening program (increasing screening coverage), signature of informed consent, ordering of self-sampling kits, gathering of information on personal risk factors through e-survey delivery, communication of screening results, and providing other relevant information.

The backend is for administration purposes, including participant and screening sample management, design of questionnaires, and access to integrated screening and vaccination history data, and enables risk-stratified calculation to support decision-making.

Development of a mobile multilanguage e-survey platform (backend and app) for data collection from study participants enabling study personnel to design questionnaires and risk calculations based on answered questions, to manage surveys and participants, and to enable participants to answer questionnaires, to access educational material, and to get personal risk assessment information.

Furthermore, it is conducting three pilot studies in high-risk women:

In Belgium, the BELGSSAR study is a randomised trial to i) assess the increased participation in cervical cancer screening when Belgian general practitioners offer self-sampling to non-screened women in the last 3 years and ii) to test the feasibility of retrieval of data on risk-factors from patient files.

In Sweden, women at higher risk of cervical cancer (history of AGC, HSIL, ASCUS/LSIL, HPV positive and never attenders) are invited to participate in a nationwide implementation trial with self-sampling ([check this link](#))

In Hungary, ESGO-ENGAGE is testing the above-mentioned tool to invite unscreened women for self-sampling screening and to manage the HPV screening.

This work package is led by the Karolinska Institutet in Sweden in collaboration with *Stockholms Lans Landsting in Sweden, Sciensano in Belgium and the European Society of Gynaecological Oncology - European Network of Gynaecological Cancer Advocacy Groups in Switzerland.*

Work package 6



NEWS AND EVENTS

7th and 8th meeting (29-30th June and 28-29th November 2023)

The seventh RISCC consortium meeting was held online whereas the eighth one was held in Amsterdam. Both meetings were really useful to see the large number of updates as we reach the last year of the project to develop the first cervical cancer risk-based screening program.



Next project meeting: April-May 2024, virtually.

Final project meeting: November 2024 in Barcelona. Stay tuned for a hybrid event to share our results!

EUROGIN congress 2024

On 13th-16th March 2024, the International Multidisciplinary HPV Congress EUROGIN (EUropean Research Organisation on Genital Infection and Neoplasia) will take place in Stockholm, Sweden.

This year, don't miss the specific scientific session on the RISCC project taking place on Friday 15th at 13h. below you can find the details:

Risk of precancer by current and previous screening test results - WP2 - Hans Berkhof (Netherlands)

Risk of precancer in vaccinated cohorts - WP3 - Matti Lehtinen (Finland)

Risk of precancer by genotyping results - WP4 - Marc Arbyn (Belgium)

Model-based evaluation of risk-based screening - WP5 - Iacopo Baussano (France)

Pilot implementation of risk-based screening - WP6 - Joakim Dillner (Sweden)

E-learning course of risk-based screening and dissemination - WP7 - Claudia Robles (Spain)

We enjoy sharing our findings and research, so you will find other interesting talks from the RISCC consortium partners. Feel free to ask us anything.

NEW PUBLICATIONS SINCE LAST NEWSLETTER

Arbyn M, Cuschieri K, Poljak M, Bonde J (2023) **Can REALQUALITY RQ-HPV screen be considered as a clinically validated HPV test for use in cervical cancer screening?** *Clin Microbiol Infect* **29**: 1608–1609, doi:10.1016/j.cmi.2023.08.020.

Brentnall AR, Cuschieri K, Sargent A, Berkhof J, Rebolj M (2023) **Staged design recommendations for validating relative sensitivity of self-sample human papillomavirus tests for cervical screening.** *J Clin Epidemiol* **166**: 111227, doi:10.1016/j.jclinepi.2023.111227.

Cocuzza CE, Dhillon SK, Martinelli M, Giubbi C, Njoku RC, Bhatia R, Cuschieri K, Arbyn M (2024) **Clinical performance of the novel full genotyping OncoPredict HPV Quantitative Typing assay using the VALGENT framework.** *Intl Journal of Cancer* **154**: 538–547, doi:10.1002/ijc.34754.

Dhillon SK, Chung PYJ, Padalko E, Praet M, Pereira AR, Redzic N, Vanden Broeck D, Arbyn M (2023) **Intra- and interlaboratory reproducibility of the RIATOL qPCR HPV genotyping assay.** *J Med Virol* **95**: e29093, doi:10.1002/jmv.29093.

Downham L, Jaafar I, Rol ML, Nyawira Nyaga V, Valls J, Baena A, Zhang L, Gunter MJ, Arbyn M, Almonte M (2023) **Accuracy of HPV E6/E7 oncoprotein tests to detect high-grade cervical lesions: a systematic literature review and meta-analysis.** *Br J Cancer* **1–9**, doi:10.1038/s41416-023-02490-w.

Glinska P, Komerska K, Janik B, Olkowicz J, Jedrzejewska I, Macios A, Wieszczy P, Kaminski MF, Arbyn M, Nowakowski A (2023) **HPV testing in Polish population-based cervical cancer screening programme (HIPPO project)—study protocol of a randomised healthcare policy trial.** *BMC Cancer* **23**: 1118, doi:10.1186/s12885-023-11597-5.

Hall MT, Simms KT, Murray JM, Keane A, Nguyen DTN, Caruana M, Lui G, Kelly H, Eckert LO, Santesso N, de Sanjose S, Swai EE, Rangaraj A, Owiredo MN, Gauvreau C, Demke O, Basu P, Arbyn M, Dalal S, Broutet N, Canfell K (2023) **Benefits and harms of cervical screening, triage and treatment strategies in women living with HIV.** *Nat Med* **29**: 3059–3066, doi:10.1038/s41591-023-02601-3.

Heideman DAM, Berkhof J, Verhoef L, Ouwerkerk C, Smit PW, Oštrbenk Valenčak A, Mlakar J, Poljak M, Steenbergen RDM, Bleeker MCG (2024) **Validation of the clinical performance and reproducibility of the NeumoDX HPV assay self-sample workflow.** *J Clin Virol* 105649, doi:10.1016/j.jcv.2024.105649.

Lalande E, Clarke H, Undurraga M, Nguyen VQH, Jaksic C, Goffin F, Arbyn M, Jeronimo J, Tille J-C, Saiji E, Vassilakos P, Petignat P (2023) **Knowledge of cytology results affects the performance of colposcopy: a crossover study.** doi:10.21203/rs.3.rs-3271041/v1.

Latsuzbaia A, Keer SV, Broeck DV, Weyers S, Donders G, Sutter PD, Tjalma W, Doyen J, Vorsters A, Arbyn M (2023a) **Clinical Accuracy of Alinity m HR HPV Assay on Self- versus Clinician-Taken Samples Using the VALHUDES Protocol.** *J Mol Diagn* **25**: 957–966, doi:10.1016/j.jmoldx.2023.09.008.

Latsuzbaia A, Vanden Broeck D, Van Keer S, Weyers S, Donders G, Doyen J, Tjalma W, De Sutter P, Vorsters A, Arbyn M (2023b) **Comparison of the Clinical Accuracy of Xpert HPV Assay on Vaginal Self-Samples and Cervical Clinician-Taken Samples within the VALHUDES Framework.** *J Mol Diagn* **25**: 702–708, doi:10.1016/j.jmoldx.2023.06.004.

Oštrbenk Valenčak A, Cuschieri K, Connor L, Zore A, Smrkolj Š, Poljak M (2024) **Allplex HPV HR Detection assay fulfils all clinical performance and reproducibility validation requirements for primary cervical cancer screening.** *J Clin Virol* **170**: 105638, doi:10.1016/j.jcv.2023.105638.

Pimenoff VN, Gray P, Louvanto K, Eriksson T, Lagheden C, Söderlund-Strand A, Dillner J, Lehtinen M (2023) **Ecological diversity profiles of non-vaccine-targeted HPVs after gender-based community vaccination efforts.** *Cell Host & Microbe* **31**: 1921-1929.e3, doi:10.1016/j.chom.2023.10.001.

Poljak M, Cuschieri K, Alemany L, Vorsters A (2023) **Testing for Human Papillomaviruses in Urine, Blood, and Oral Specimens: an Update for the Laboratory.** *J Clin Microbiol* e01403-22, doi:10.1128/jcm.01403-22.

Rezhake R, Wang Y, Zhao X, Arbyn M, Shen G, Pan Q, Zhang X, Zhang Y, Zhao F, Qiao Y (2024) **Performance of Human Gene EPB41L3 and HPV 16/18 Viral DNA Methylation to Triage hrHPV-Positive Women.** *Vaccines* **12**: 46, doi:10.3390/vaccines12010046.

Simms KT, Keane A, Nguyen DTN, Caruana M, Hall MT, Lui G, Gauvreau C, Demke O, Arbyn M, Basu P, Wentzensen N, Lauby-Secretan B, Ilbawi A, Hutubessy R, Almonte M, De Sanjosé S, Kelly H, Dalal S, Eckert LO, Santesso N, Broutet N, Canfell K (2023) **Benefits, harms and cost-effectiveness of cervical screening, triage and treatment strategies for women in the general population.** *Nat Med* **29**: 3050–3058, doi:10.1038/s41591-023-02600-4.

Wang J, Elfström KM, Lagheden C, Eklund C, Sundström K, Sparén P, Dillner J (2023) **Impact of cervical screening by human papillomavirus genotype: Population-based estimations.** *PLOS Medicine* **20**: e1004304, doi:10.1371/journal.pmed.1004304.

Yilmaz E, Eklund C, Lagheden C, Robertsson KD, Lilja M, Elfström M, Arroyo Mühr LS, Dillner J (2023) **First international proficiency study on human papillomavirus testing in cervical cancer screening.** *J Clin Virol* **167**: 105581, doi:10.1016/j.jcv.2023.105581.



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