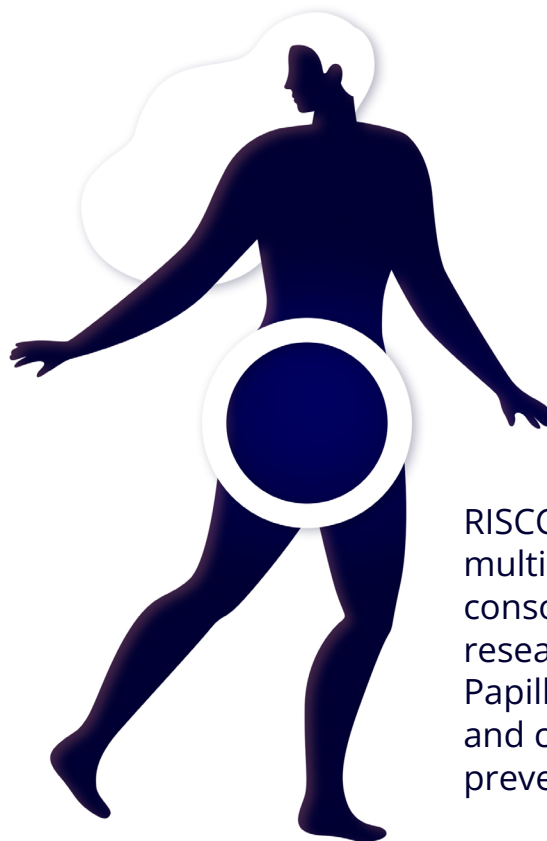




first risk-based screening for cervical cancer in Europe



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

#5

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.

If you want to receive this newsletter directly into your email inbox every 3-4 months, use the following link to subscribe to it:

www.riscc-h2020.eu/newsletter/



You will always have the option to unsubscribe if you no longer wish to receive it.

In this issue you will find:

- Describing the project in detail: Work package 5**
- News and events**
- Nationwide risk-based screening trial in Sweden**
- What's next!?**
- Publications so far**



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DESCRIBING THE PROJECT IN DETAIL

Work package 5 - Algorithms for effective and cost-effective risk-based screening

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).

Such differences in risk should be accounted for in different screening recommendations to improve the efficacy and efficiency of existing screening protocols.

In WP5 we are developing a mathematical microsimulation model of progression of oncogenic HPV types to cervical cancer to compare the effectiveness and cost-effectiveness of different risk-based cervical cancer screening algorithms. The validated model will be made publicly available as an open-source package.

This model accounts for variations over time of HPV prevalence and demography in a simulated population and incorporates a cervical cancer screening module with flexible components that allow to characterize:

women's risk profiles (defined by age, previous screening history, HPV vaccination status and HPV vaccination in the source population)

cervical cancer screening interventions (defined by combinations of screening tests, intervals between tests, number of screening rounds, and screening test accuracy)

Once set, the model can provide estimates of:

- age-specific prevalence and incidence of type-specific HPV infections, pre-cancerous lesions, invasive cervical cancer, and cancer-specific mortality

- number of screening invitations, HPV tests, triage tests, colposcopies, and treatments for cost estimations

In an initial step, we will identify the different screening algorithms used across Europe. Subsequently, we will apply these algorithms in different European countries to assess their effectiveness and cost-effectiveness.

Based on the obtained results, we will:

- assess the balance of benefits (for example, cancers or deaths prevented) versus screening harms (for examples, unnecessary colposcopies or treatments)

- provide estimates of resources needed

- compare our findings with the current screening strategy in which women follow the same screening algorithm irrespective of their baseline risk (one-size-fits-all)

This work package is led by the International Agency for Research on Cancer in France in collaboration with the Stichting VUMC, the Karolinska Institutet in Sweden, and TAUH in Finland.

Work package 5



NEWS AND EVENTS

6th meeting (16-17 November 2022)

The sixth RISCC consortium meeting was held in Amsterdam and it was the first consortium in-person meeting since the project started in January 2020. It was a very interesting meeting, both work-related and socially. We will continue with renewed spirits to develop the first cervical cancer risk-based screening program.



Next project meeting: 29-30th June, virtually

Dissemination activities

EUROGIN conference – 8-11 February 2023

35th International Papillomavirus conference – 17-21 April 2023

As usual, the members of the RISCC consortium didn't miss the opportunity to attend these conferences, aiming to present our exciting results as well as to learn from others' progress on HPV research.

RISCC partners did over 20 oral presentations in both conferences!

NATIONWIDE RISK-BASED SCREENING TRIAL IN SWEDEN

Do you want to know more about the RISCC project and what we are doing? In the next newsletter we will explain to you Work Package 6 in which we are exploring the implementation of a risk-based screening program.

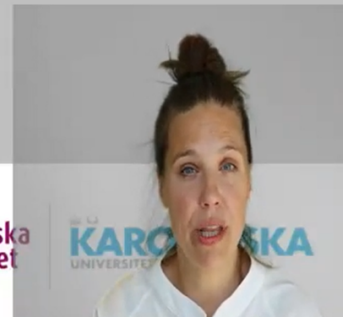
Do you want a sneak preview on what we are doing?

Use [this link](#) to watch a video by Dr. Arroyo Mühr.

A nationwide trial of risk-stratified cervical screening for faster cervical cancer elimination

Laila Sara Arroyo Mühr, PhD

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WHAT'S NEXT!?

29-30th June 2023 – Next consortium meeting

30th September 2023 – RISCC project session at the ESGO congress in Istanbul

Autumn 2023 – Roundtable with other EU-funded projects at the European Parliament

NEW PUBLICATIONS SINCE LAST NEWSLETTER

Arbyn M, Canfell K, Poljak M, Berkhof J, Sanjosé S de, Wentzensen N (2022) **HPV mRNA testing in cervical cancer screening – Authors’ reply**. The Lancet Oncology 23: e437, doi:10.1016/S1470-2045(22)00551-4.

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Bonjour M, Charvat H, Franco EL, Piñeros M, Clifford GM, Bray F, Baussano I (2021) **Global estimates of expected and preventable cervical cancers among girls born between 2005 and 2014: a birth cohort analysis**. The Lancet Public Health 6: e510–e521, doi:10.1016/S2468-2667(21)00046-3.

Bruni L, Serrano B, Roura E, Alemany L, Cowan M, Herrero R, Poljak M, Murillo R, Broutet N, Riley LM, de Sanjose S (2022) **Cervical cancer screening programmes and age-specific coverage estimates for 202 countries and territories worldwide: a review and synthetic analysis**. Lancet Glob Health 10: e1115–e1127, doi:10.1016/S2214-109X(22)00241-8.

Costa S, Verberckmoes B, Castle PE, Arbyn M (2022) **Offering HPV self-sampling kits: an updated meta-analysis of the effectiveness of strategies to increase participation in cervical cancer screening**. Br J Cancer 1–9, doi:10.1038/s41416-022-02094-w.

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Kelly H, Jaafar I, Chung M, Michelow P, Greene S, Strickler H, Xie X, Schiffman M, Broutet N, Mayaud P, Dalal S, Arbyn M, de Sanjosé S (2022) **Diagnostic accuracy of cervical cancer screening strategies for high-grade cervical intraepithelial neoplasia (CIN2+/CIN3+) among women living with HIV: A systematic review and meta-analysis.** eClinicalMedicine 53: 101645, doi:10.1016/j.eclinm.2022.101645.

Lefeuvre C, De Pauw H, Le Duc Banaszuk A-S, Pivert A, Ducancelle A, Rexand-Galais F, Arbyn M (2022) **Study Protocol: Randomised Controlled Trial Assessing the Efficacy of Strategies Involving Self-Sampling in Cervical Cancer Screening.** Int J Public Health 67: 1604284, doi:10.3389/ijph.2022.1604284.

Mlakar J, Oštrbenk Valenčak A, Kežar J, Beseničar-Pregelj L, Poljak M (2023) **Assessment of Acceptability and Determinants of Uptake and Schedule Completion of Human Papillomavirus (HPV) Vaccine by 25 to 45 Years Old Women in Slovenia.** Vaccines 11: 423, doi:10.3390/vaccines11020423.

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Singh D, Vignat J, Lorenzoni V, Eslahi M, Ginsburg O, Lauby-Secretan B, Arbyn M, Basu P, Bray F, Vaccarella S (2022) **Global estimates of incidence and mortality of cervical cancer in 2020: a baseline analysis of the WHO Global Cervical Cancer Elimination Initiative.** Lancet Glob Health doi:10.1016/S2214-109X(22)00501-0.

Taumberger N, Joura EA, Arbyn M, Kyrgiou M, Sehouli J, Gultekin M (2022) **Myths and fake messages about human papillomavirus (HPV) vaccination: answers from the ESGO Prevention Committee.** Int J Gynecol Cancer 32: 1316–1320, doi:10.1136/ijgc-2022-003685.

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