

# 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



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## DESCRIBING THE PROJECT IN DETAIL

Work package 3

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

Several factors can influence the personal risk of cervical cancer. One of them is the HPV vaccination: have women been vaccinated? If vaccinated, which vaccine? how many doses? Which age? If not vaccinated, which is the protection of other girls (and perhaps, even boys) being vaccinated, i.e herd effect?

To answer these questions, Work Package 3 will develop cervical cancer and precancer risk profiles for HPV vaccinated birth-cohorts based on data from:

Two Finnish screening studies of 80,000 women with known vaccination status randomized to frequent versus infrequent screening.

Observational multi-country study with females vaccinated as part of routine or catch-up programs in Sweden, the Netherlands, Finland, Belgium, Italy and Slovenia (n=1.75 million) with data linkage to screening, pathology and vaccination records.

Work package 3





These data will provide estimates of the impact of screening on cervical disease in vaccinated and unvaccinated women according to different levels of coverage.

This work package is led by Pirkanmaa Hospital District in Finland with the collaboration of Stichting VUMC in the Netherlands, Karolinska Institutet in Sweden, International Agency for Research on Cancer in France, Sciensano in Belgium, University of Ljubljana in Slovenia, and Azienda Ospedaliera Universitaria Città della Salute e della Scienza di Torino in Italy.

## **NEWS AND EVENTS**

#### 4th meeting (30th Nov - 1 Dec 2021)

The fourth RISCC consortium meeting was held online. It was a very fruitful meeting. We have done many advances towards the development and implementation of risk-based cervical cancer screening but there is still much work to be done.



Next project meeting: 10-11 May 2022

### **EUROGIN congress 2022**

On 10-12nd April 2022, the International Multidisciplinary HPV Congress EUROGIN (EUropean Research Organisation on Genital Infection and Neoplasia) will take place in Düsseldorf, Germany.

There are many interesting communications and workshops scheduled but we recommend you the following ones:

#### SESSIONS AND WORKSHOPS

**"Screening methods and triage 1"** on April 10, 8:15am (FC01-Room 16A)

"Fourteen-year risk of cervical precancer in HPV-negative women, stratified for previous HPV and cytology results" by **F. Inturrisi**.

"HPV primary screening of CIN3-ADC in situ: new insights and long-term performance" on April 10, 10am (FDW 1B-Hall X)

- "Triage of HPV+ women" by **M. Arbyn**
- "Performance of self-sampling" by J. Berkhof
- "Can biomarkers for diagnosis and grading of CIN help to prevent overtreatment?" by **C. Meijer**
- "Role of genotyping" by **J. Dillner**
- **"HPV vaccines: protection against CIN3-ADC in situ"** on April 10, 1:30pm (FDW 1C-Hall X)
  - "Residual risks of CIN-ADC in situ in HPV screening and vaccinated women" by **M. Lehtinen**

**"Is HPV genotyping transforming primary HPV screening?"** on April 10, 1:30pm (SS02-Room 14)

"The HPV type-specific impact on early detection and prevention of invasive cervical cancer" by **J. Dillner** 

"Quality assurance of self-sampling for cervical screening and disease management" on April 10, 3:30pm (SS03-Room 14)

"Validation of tests, self-sampling devices and storage media" by **M. Arbyn**  "The Feasibility of Personalized Screening in Organized Programs" on April 10, 3:30pm (WS01B-Room 15)

"Personalized invitation strategies" by **J. Berkhof** 

Personalized management: HPV+/triage+" by **M. Elfström** 

"Covid-19 and cervical cancer screening" on April 11, 9:30am (MSS01B-Auditorium Room 1)

"Quality assurance in cervical screening during the pandemic" by **J. Dillner** 

"Challenges imposed by constraints on the supply chain for cervical cancer screening" by **M. Poljak** 

"Challenges in validation of new assays for cervical cancer screening and management of screen+ women" on April 11, 9:30am (SS06-Room 14)

"Updated list of 2022 HPV tests validated for screening on cervical samples" by **M. Arbyn** 

"Targeting high risk populations for control of HPV related cancer – Screening" on April 11, 2pm (SS07A-HallX)

"Risk-based screening: European perspective" by **J. Berkhof** 

"New developments in colposcopy practice" on April 12, 10am (CS03-Room 14)

"ValCOLP a protocol for evaluation and comparison of colposcopy devices" by **M. Arbyn** 

Colposcopy in the era of triage markers" by **J. Berkhof** 

"HPV vaccination strategies, impact and safety by age, current knowledge" on April 12, 10am (MSS05-Room X)

"Mid-adult female vaccination and outcomes" by L. Bruni

"The implementation of gender-neutral vaccination in Finland and the outcomes from this program" by **V. Pimenoff**  "Innovative SARS-CoV-2 diagnostic devices: opportunity for worldwide HPV screening" on April 12, 10am (SS11-Room 15A)

"Can innovations in molecular COVID-19 portable testing devices and reuse of neglected technologies be transformed to advance HPV point-of-care and field testing?" by **M. Poljak** 

"Commercial HPV tests: what's on the market and what's not (and what we desperately need)?" by **A. Ostrbenk** 

"Gaps in Knowledge and promising research directions in HPV and cancer" on April 12, 1pm (SS13-Room 14)

"Which laboratory-derived data do we need to optimize cervical cancer elimination strategies?" by **J. Dillner** 

"HPV eradication - what still needs to be known?" by **M.** Lehtinen

"Assessing risk of cervical cancer in the post-vaccination era" on April 12, 1:15pm (MSS06-Room X)

"Combined S5 methylation panel in the CIN triage of vaccines" by **K. Louvanto** 

"Challenges to cervical screening from changing HPV ecology" by **V. Pimenoff** 

**"Applying Methylation assays for clinical use"** on April 12 4:30pm (CS05-Room 14)

"Management of HPV-positive women with ASC-US/LSIL by methylation markers" by **C. Meijer** 

## NEW PUBLICATIONS SINCE LAST NEWSLETTER

Arbyn M, Castle PE, Schiffman M, et al. Meta-analysis of agreement/concordance statistics in studies comparing self-versus clinician-collected samples for HPV testing in cervical cancer screening. Int J Cancer;n/a. doi:10.1002/ijc.33967

Pedersen H, Ejegod DM, Quint W, et al. **Clinical Performance of the Full Genotyping Agena MassARRAY HPV Assay Using SurePath Screening Samples within the VALGENT4 Framework.** The Journal of Molecular Diagnostics Published Online First: 3 February 2022. doi:10.1016/j.jmoldx.2021.12.009

Arbyn M, Latsuzbaia A, Castle PE, et al. **HPV testing of selfsamples: Influence of collection and sample handling procedures on clinical accuracy to detect cervical precancer.** The Lancet Regional Health – Europe 2022;14. doi:10.1016/j. lanepe.2022.100332

Hautekiet J, Prigge E-S, Obermueller T, et al. A framework for metaanalysis through standardized survival curves. arXiv:211113132 [stat] Published Online First: 25 November 2021.http://arxiv.org/ abs/2111.13132 (accessed 10 Jan 2022).

Ritchie D, Arbyn M, Basu P, et al. **Europe's Path to Eliminating Cervical Cancer as a Public Health Problem.** The Lancet Regional Health – Europe 2022;12. doi:10.1016/j.lanepe.2021.100276

Stanczuk GA, Currie H, Forson W, et al. **Self-sampling as the principal modality for population based cervical screening: Five-year follow-up of the PaVDaG study.** Int J Cancer 2021;n/a. doi:10.1002/ijc.33888

Bhatia R, Boada EA, Bonde JH, et al. **Papilloplex HR-HPV test has non-inferior clinical performance for detection of human papillomavirus infection: assessment using the VALGENT framework.** J Clin Pathol Published Online First: 14 November 2021. doi:10.1136/jclinpath-2021-207864 Dick S, Vink FJ, Heideman DAM, et al. **Risk-stratification of HPV**positive women with low-grade cytology by FAM19A4/miR124-2 methylation and HPV genotyping. Br J Cancer 2021;:1–6. doi:10.1038/s41416-021-01614-4

Inturrisi F, Aitken CA, Melchers WJG, et al. Clinical performance of high-risk HPV testing on self-samples versus clinician samples in routine primary HPV screening in the Netherlands: An observational study. The Lancet Regional Health - Europe 2021;:100235. doi:10.1016/j.lanepe.2021.100235

Chargari C, Arbyn M, Leary A, et al. **Increasing global accessibility to high-level treatments for cervical cancers.** Gynecologic Oncology Published Online First: 27 October 2021. doi:10.1016/j. ygyno.2021.10.073

Wang J, Elfstrom K, Borgfeldt C, et al. **A pilot study of risk-stratified cervical cancer screening** [version 1; peer review: 1 approved with reservations]. Open Research Europe 2021;1. doi:10.12688/ openreseurope.13398.1

Pimenoff VN, Cleries R. Inferring viral occurrence patterns through a synthetic data simulation. bioRxiv 2021; :2021. 07.13.452220. doi:10.1101/2021.07.13.452220



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