

Long-term follow-up of the Finnish randomized HPV screening trial

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Special thanks to my PhD student Maija! She did the main work for this study but she could not be here today.



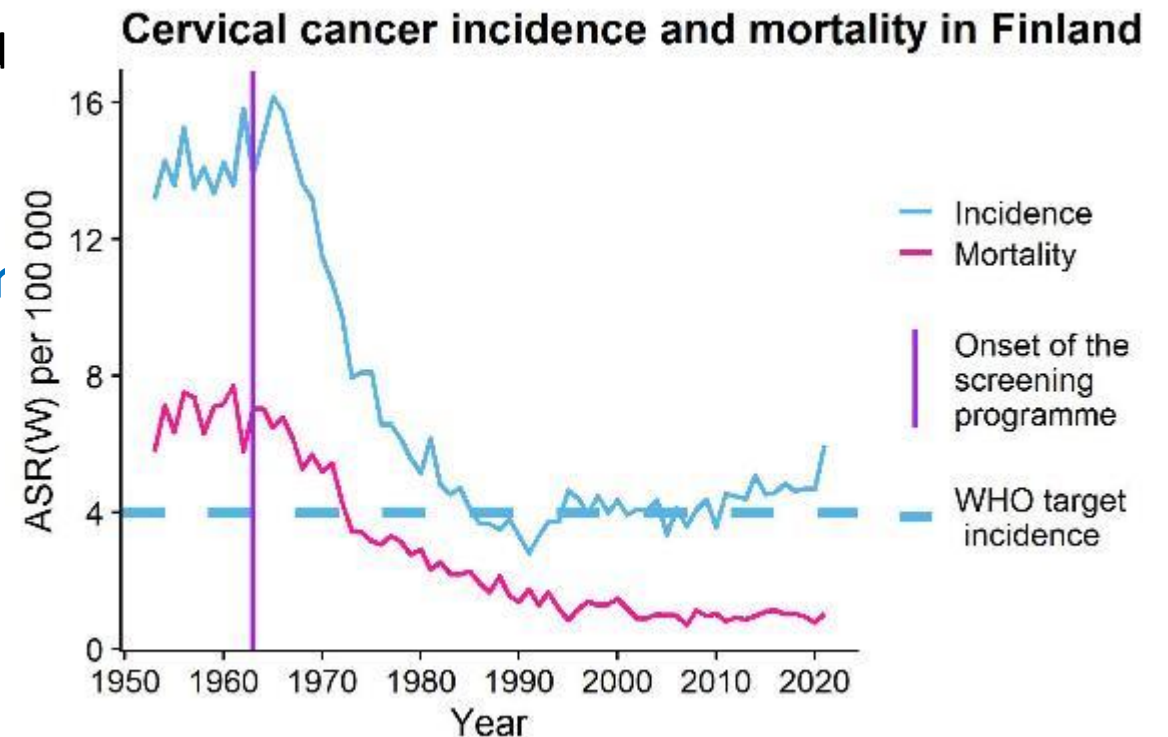
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Background and study question

Primary HPV screening

- Recommended by European Guidelines
- Decreases, in short term, the incidence of cervical cancer. especially from adenocarcinoma
- Increases numbers of referrals to colposcopy and
- Only a limited evidence on (long-term) incidence

Does HPV screening have better long-term

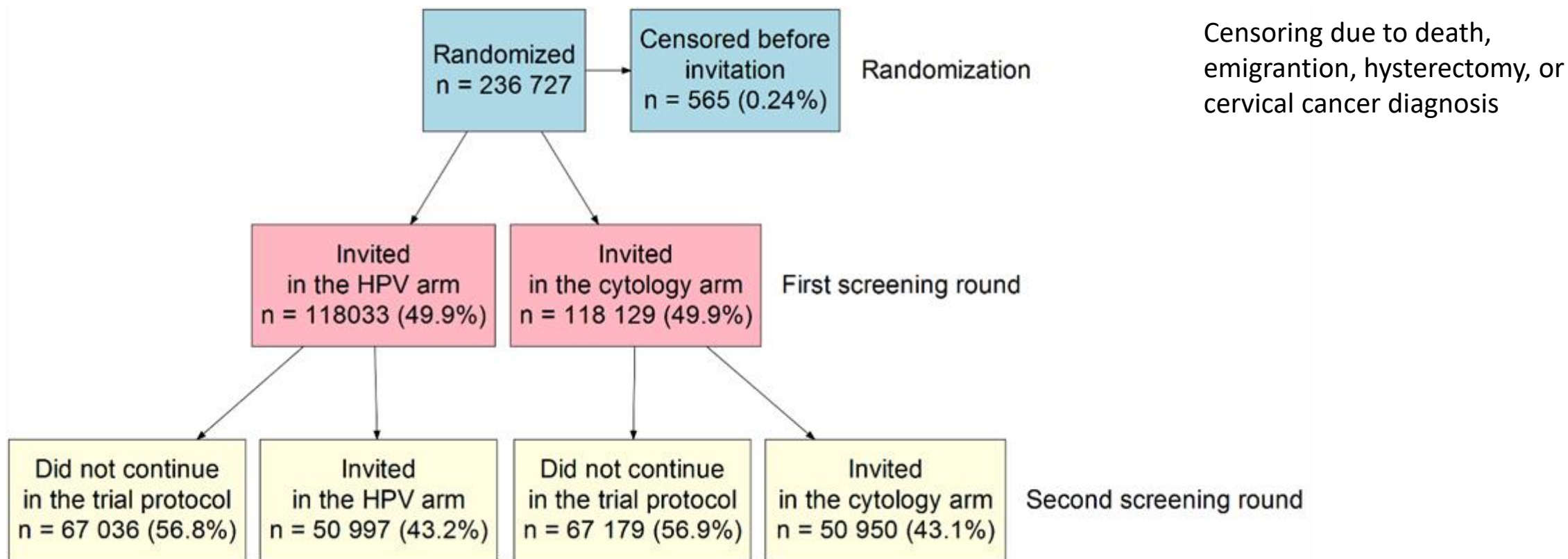


Material: Implementation trial

Randomized HPV trial within the organized screening programme in Southern Finland

- Over 236 000 individuals randomized in 2003–2007
- 1:1 randomization to primary HPV or cytology screening
 - HPV screening = Hybrid capture 2 followed by cytology triage for HPV positives
- Age at randomization, 25–65 years
- Conducted over two five-year screening intervals in 2003–2012

Material and methods



Material and methods

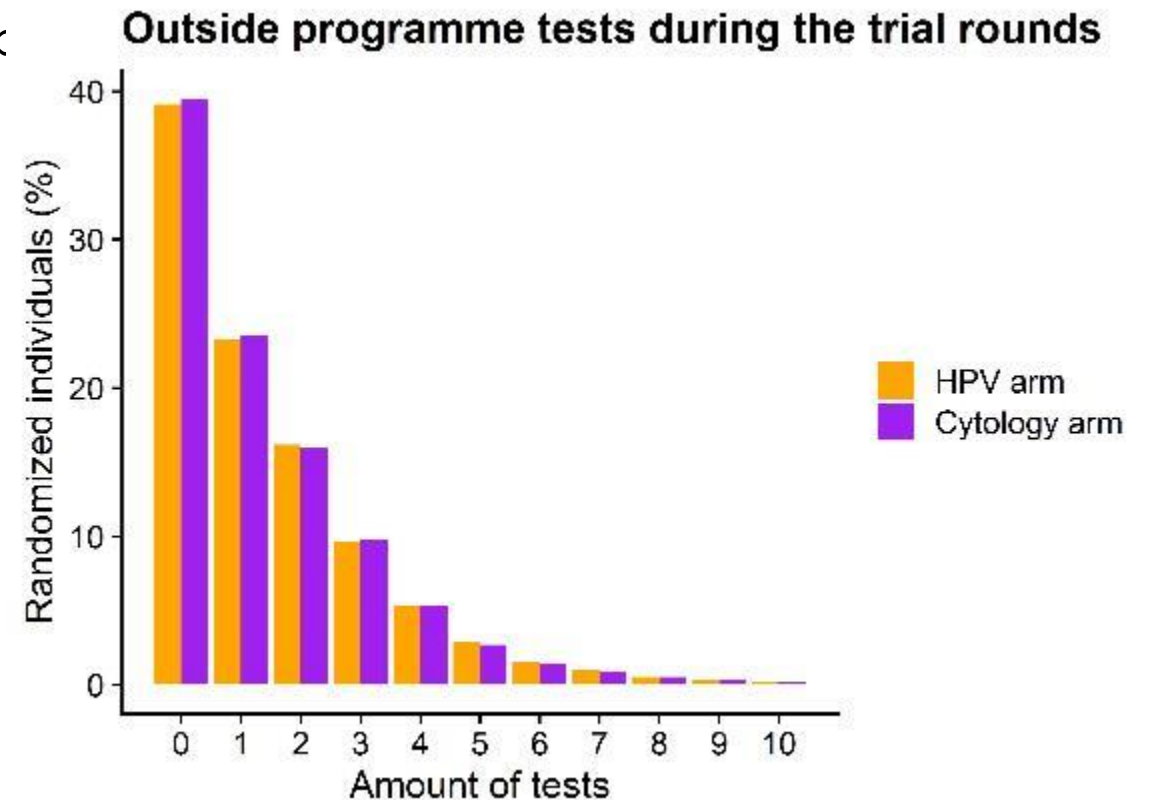
- Individual registry-based follow-up from first invitation to trial (2003–2007) to cervical cancer diagnosis or death
 - Follow-up until the end of 2020
- Comprehensive research data on cervical smears taken outside the screening programme
- Incidence and mortality analyses were performed intention to screen principle

Results

- Median follow-up time of 15 years, the maximum 18 years
- A total of 3.5 million person-years was evenly distributed between the study arms
- Randomized groups were similar in all studied k

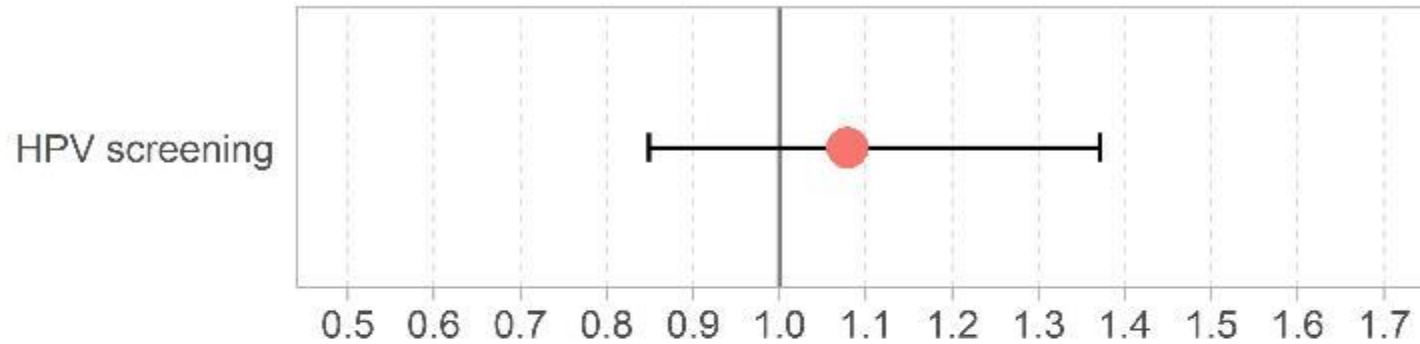
- Age group at invitation
- Sociodemographic factors
- Previous screening findings

- Histological distribution of cancers was similar between the study arms:
 - Adenocarcinoma: 31% vs. 31%



Results

Incidence rate ratio

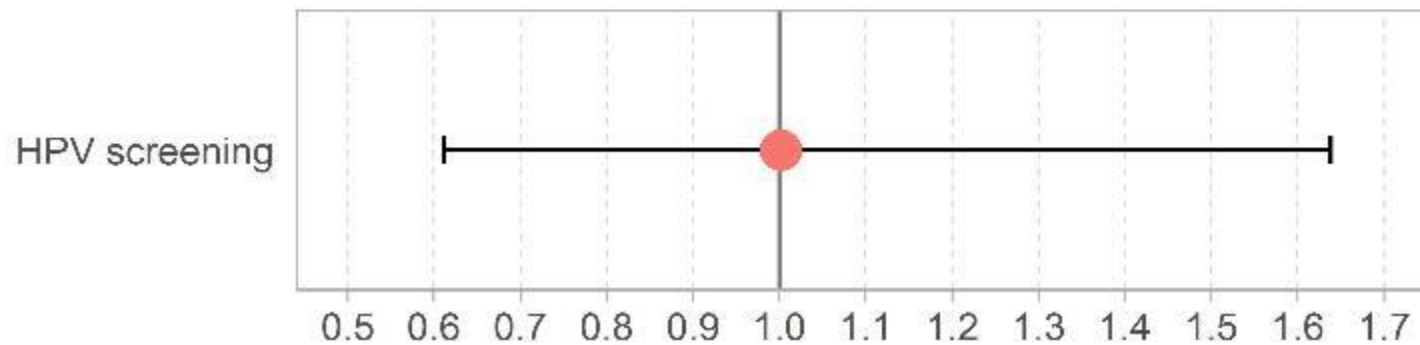


Cervical cancers:

HPV: 139

Cytology: 129

Mortality rate ratio



Cervical cancer deaths:

HPV: 32

Cytology: 32



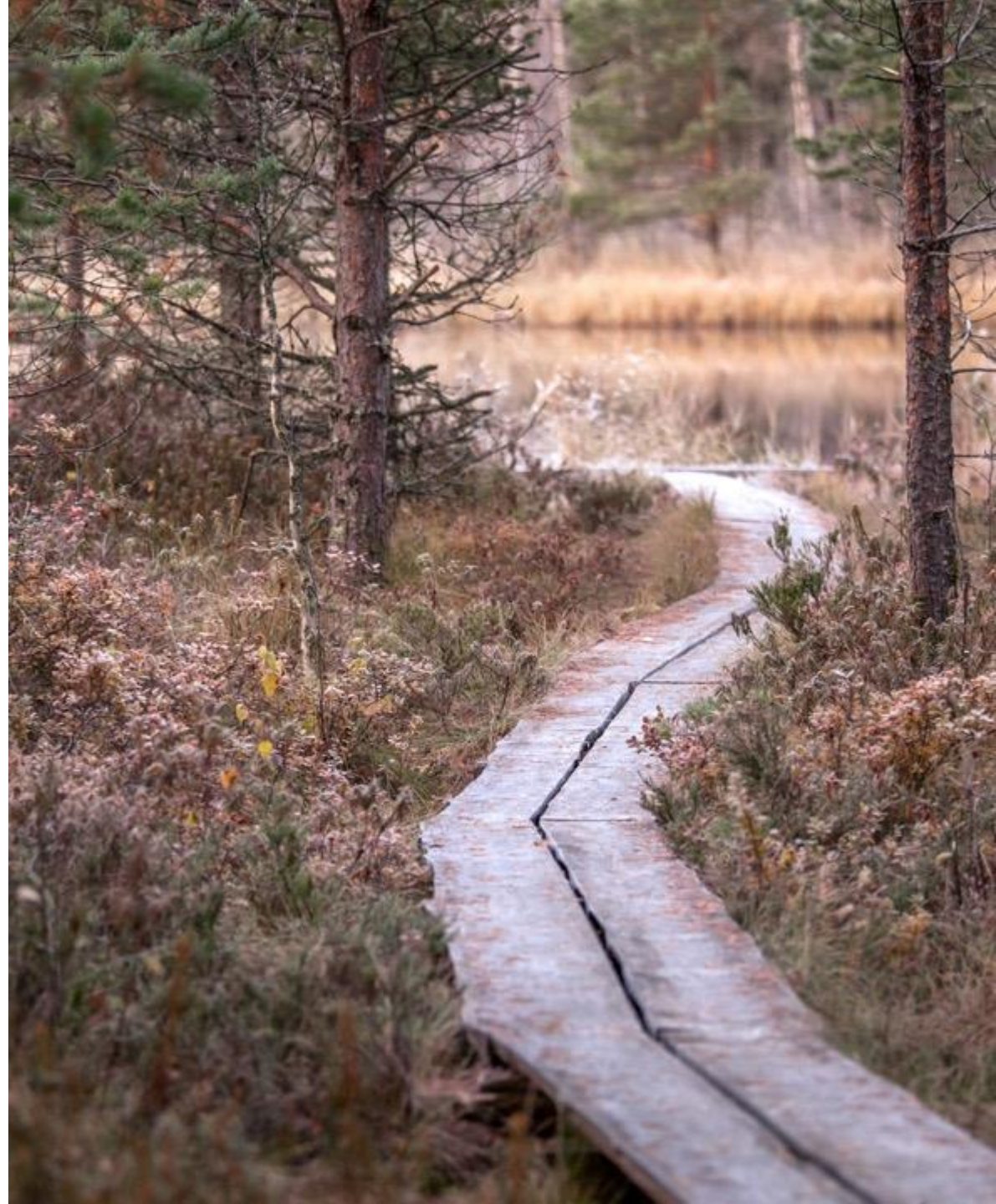
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Analyses were adjusted for age group at first invitation and calendar period

Conclusions and discussion

- In Finland, HPV and cytology screening showed similar effectiveness in the long-term follow-up
- The sensitivity analyses showed that this is not due to the protocol dropouts, or cervical testing outside the screening programme
- Our unexpected findings are likely to be due the low risk of cervical cancer
- HPV screening has many benefits. Thus it and HPV vaccinations are the most promising way to fight against cervical cancer. One should, however, focus on creating optimal triage options for HPV screening to minimize its harms.

THANK YOU!





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