FICAN science webinar series

Wednesday 21.5.2025 at 15-16

A randomised pragmatic population-based trial of prostate cancer screening (ProScreen)

This time the webinar is organized by **FICAN Mid**. The seminar will be held online (Microsoft Teams) and is open to everyone interested in cancer research.

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Meeting ID: 384 919 436 576 Passcode: eP3LW3Ty

Speaker



prof. Anssi Auvinen, Tampere University

Get to know the Speaker: https://www.tuni.fi/en/about-us/epidemiology#switcher-trigger-overview

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Abstract

We have shown in the ERSPC trial that PSA-based screening can reduce prostate cancer mortality, but due to extensive overdiagnosis of low-risk cases, the balance of benefits and harms is questionable.

We have designed a screening protocol aimed at minimising overdiagnosis, but maintaining the mortality impact. The screening intervention consist of three tests, provided in a stepwise fashion: First PSA, for men with PSA3 ng/ml also a kallikrein panel (4Kscore) and if it exceeds 7.5%, a referral to MRI. Men with a suspicious MRI findings (PI-RADS score 3–5) are referred to targeted prostate biopsy.

We have randomised 113,357 men aged 50–63 from Helsinki and Tampere metropolitan areas, with a quarter allocated to screening and the rest to the control arm.

Results from the first screening round show that large majority (80%) of the screen-detected cases are high-grade cancers (ISUP grade group 2–5). Compared with the control arm, one additional high-grade cancer was detected per 200 men, while the excess of low-grade cases (grade group 1) was considerably smaller (one excess case per 800 men).

Relevant references for this talk

- Auvinen A, Tammela T, Mirtti T, et al. Prostate cancer screening with PSA, kallikrein panel and MRI: The ProScreen randomized trial. JAMA 2024;331:1452-59
- Rannikko A, Leht M, Mirtti T, ym. Population-based randomized trial of screening for clinically significant prostate cancer: A pilot study. BJU Int 2022;130:193-199
- Bratt O, Auvinen A, Godtman AR, ym. Screening for prostate cancer. BMJ Oncol 2023;2:e000039

