Is the decreased prostate cancer mortality in the ERSPC study attributable to screening or an effect of better treatments?

To screen or not to screen for prostate cancer in a population-based manner has been an ongoing discussion for decades in Sweden and many other countries. In February 2018 The National Board of Health and Welfare (Socialstyrelsen) again took a decision not to introduce general screening in Sweden, which caused a lot of attention in media. A brief overview of prostate cancer screening will be given in the first part of the seminar.

The ERSPC study (ERSPC = European Randomized Study of Screening for Prostate Cancer), the largest ever randomized study on screening for prostate cancer, has showed a clear decrease in prostate cancer mortality with a 21% (95% CI: 9-31%) relative reduction for the screening vs control group. The result has however been questioned – is the decrease really an effect of screening or rather that the screening group was given better treatment? The second part of the seminar will be devoted to the statistical analysis and modelling carried out in response to this.