



# READ IT BEFORE YOUR PATIENTS

## Prostate

### Fifteen-Year Outcomes after Monitoring, Surgery, or Radiotherapy for Prostate Cancer

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*N Engl J Med . 2023 Apr 27;388(17):1547-1558.*

*doi: 10.1056/NEJMoa2214122. Epub 2023 Mar 11.*

#### BACKGROUND

Between 1999 and 2009 in the United Kingdom, 82,429 men between 50 and 69 years of age received a prostate-specific antigen (PSA) test. Localized prostate cancer was diagnosed in 2664 men. Of these men, 1643 were enrolled in a trial to evaluate the effectiveness of treatments, with 545 randomly assigned to receive active monitoring, 553 to undergo prostatectomy, and 545 to undergo radiotherapy.

#### METHODS

At a median follow-up of 15 years (range, 11 to 21), we compared the results in this population with respect to death from prostate cancer (the primary outcome) and death from any cause, metastases, disease progression, and initiation of long-term androgen-deprivation therapy (secondary outcomes).

#### RESULTS

Follow-up was complete for 1610 patients (98%). A risk-stratification analysis showed that more than one third of the men had intermediate or high-risk disease at diagnosis. Death from prostate cancer occurred in 45 men (2.7%): 17 (3.1%) in the active-monitoring group, 12 (2.2%) in the prostatectomy group, and 16 (2.9%) in the radiotherapy group ( $P = 0.53$  for the overall comparison). Death from any cause occurred in 356 men (21.7%), with similar numbers in all three groups. Metastases developed in 51 men (9.4%) in the active-monitoring group, in 26 (4.7%) in the prostatectomy group, and in 27 (5.0%) in the radiotherapy group. Long-term androgen-deprivation therapy was initiated in 69 men (12.7%), 40 (7.2%), and 42 (7.7%), respectively; clinical progression occurred in 141 men (25.9%), 58 (10.5%), and 60 (11.0%), respectively. In the active-monitoring group, 133 men (24.4%) were alive without any prostate cancer treatment at the end of follow-up. No differential effects on cancer-specific mortality were noted in relation to the baseline PSA level, tumor stage or grade, or risk-stratification score. No treatment complications were reported after the 10-year analysis.

#### CONCLUSIONS

After 15 years of follow-up, prostate cancer-specific mortality was low regardless of the treatment assigned. Thus, the choice of therapy involves weighing trade-offs between benefits and harms associated with treatments for localized prostate cancer. (Funded by the National Institute for Health and Care Research; ProtecT Current Controlled Trials number, ISRCTN20141297; ClinicalTrials.gov number, NCT02044172.)