The prostate-specific antigen (PSA) test to screen men for prostate cancer

Probabilities of benefits and harms

Patient’s values and preferences

→ Yes → DECISION → No → Later

This document prepares the clinician to discuss scientific data with the patient so they can make an informed decision together.

Presenting the PSA test to patients

What is this test for?

- The PSA blood test estimates the risk of having prostate cancer. If the test shows the risk to be high, the physician offers to do a biopsy of the prostate to verify if the man has prostate cancer.

Who might consider being tested?

- Men between 50 and 75 years of age with at least a 10-year life expectancy.
- Men at higher risk (with one or more affected first-degree relatives - brother, father, or African American men) may consider screening at an earlier age (40 years old).

Why do patient preferences matter when making this decision?

- There are pros and cons to taking this test:
  - **PROS**: The test prevents 1 death from prostate cancer for each 1000 men screened on average 2 times every 4 years during 11 years.
  - **CONS**: The test could detect a slow-growing cancer that may never cause a health problem, leading to unnecessary treatments. Autopsies show that a significant proportion of prostate cancers never become clinically significant. Overall mortality is not reduced.

- There is a lack of evidence on screening outcomes:
  - After 11 to 13 years of follow-up, the 2 best available studies showed either a small reduction or no reduction in mortality in men invited to screening every year during ten years compared to men not invited to screening.
  - One small study suggests that screening over 14 years might improve survival.

- Both doing or not doing the test are acceptable options:
  - **Major guidelines (USPSTF, AUA, ACP, CUA)** disagree on whether to be screened or not. However, all recommend informed decision-making. We propose that:
    - the decision takes into account patient’s values and preferences
    - the clinician shares this decision with the patient

Fig 5 : PSA – AFTER