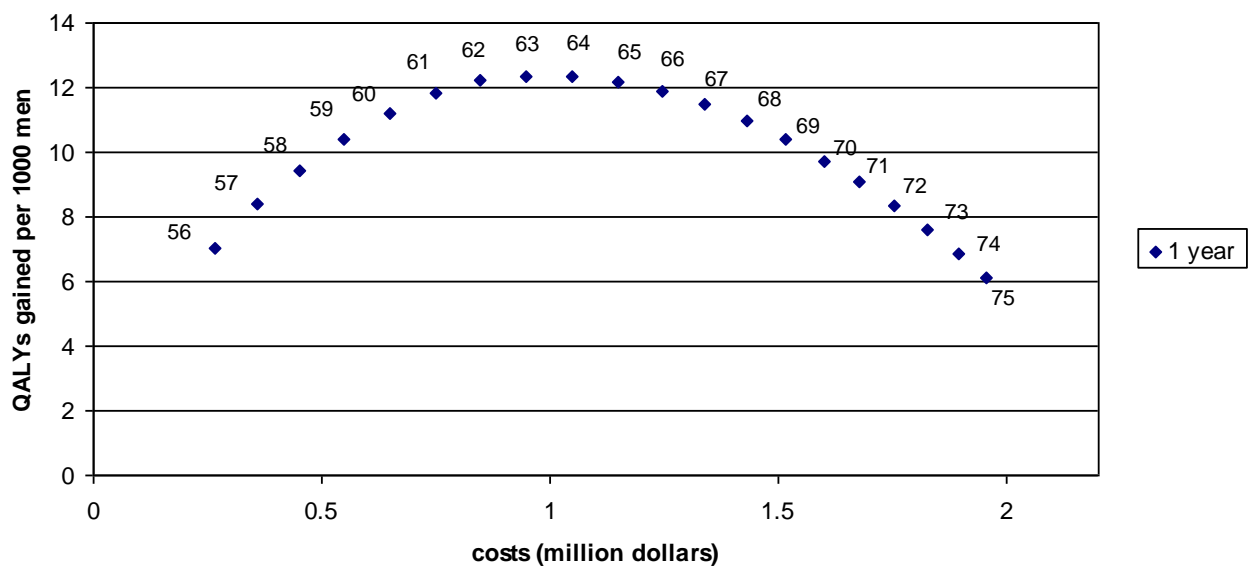


Supplementary Materials

Cost-effectiveness of prostate cancer screening: a simulation study based on ERSPC data

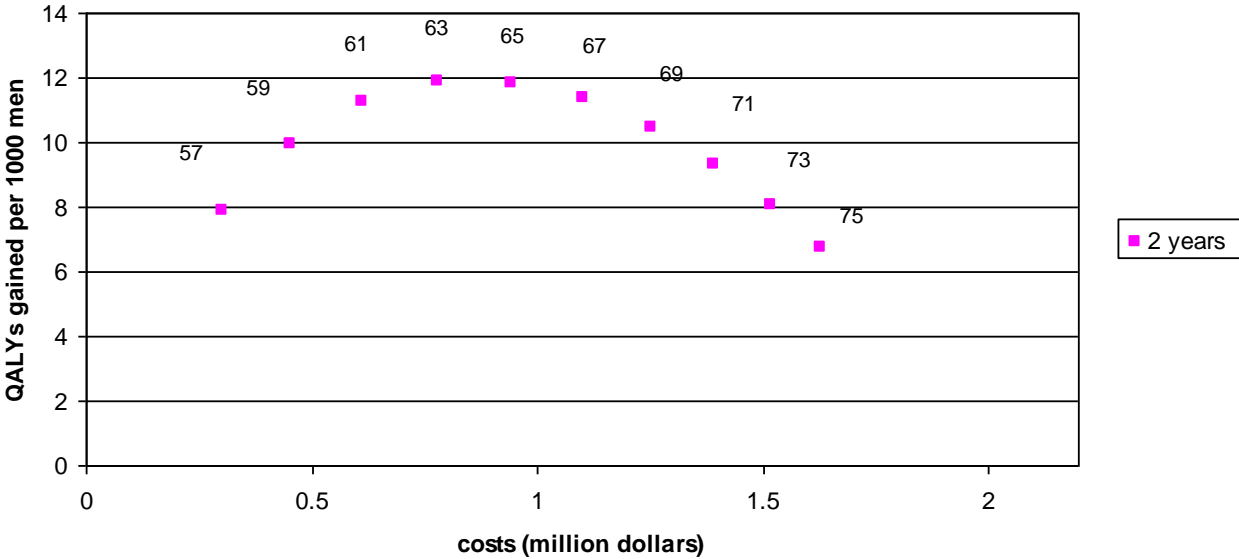
Explanation of Figure 2B of the manuscript

In the Figure the QALYs gained are depicted against the net costs (the additional cost for prostate cancer screening, diagnosis and treatment compared to the situation without screening) in million dollars per 1000 men. Each dot in the Figure represents one screening scenario. The costs and effects are discounted with 3.5%. For clarification, we split Figure 2B of the manuscript into the Supplementary Figures 1 to 5 below. Supplementary Figure 1 presents annual screening from age 55 years to various end ages. The end ages are indicated in the figure. Therefore, the most left dot in the Figure represents screening at ages 55 and 56 and the next dot screening at ages 55, 56 and 57. After age 64 the QALYs gained are decreasing, whereas the costs are increasing. Therefore, these strategies are less effective.

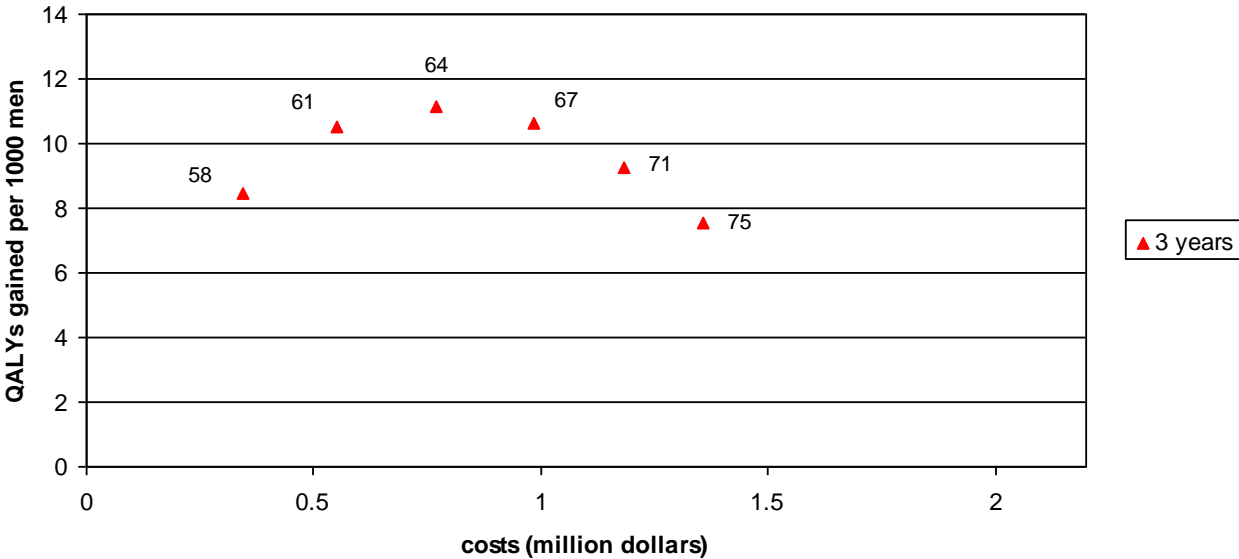


Supplementary Figure 1. Annual screening starting at age 55. Costs are in 2008 US dollars.

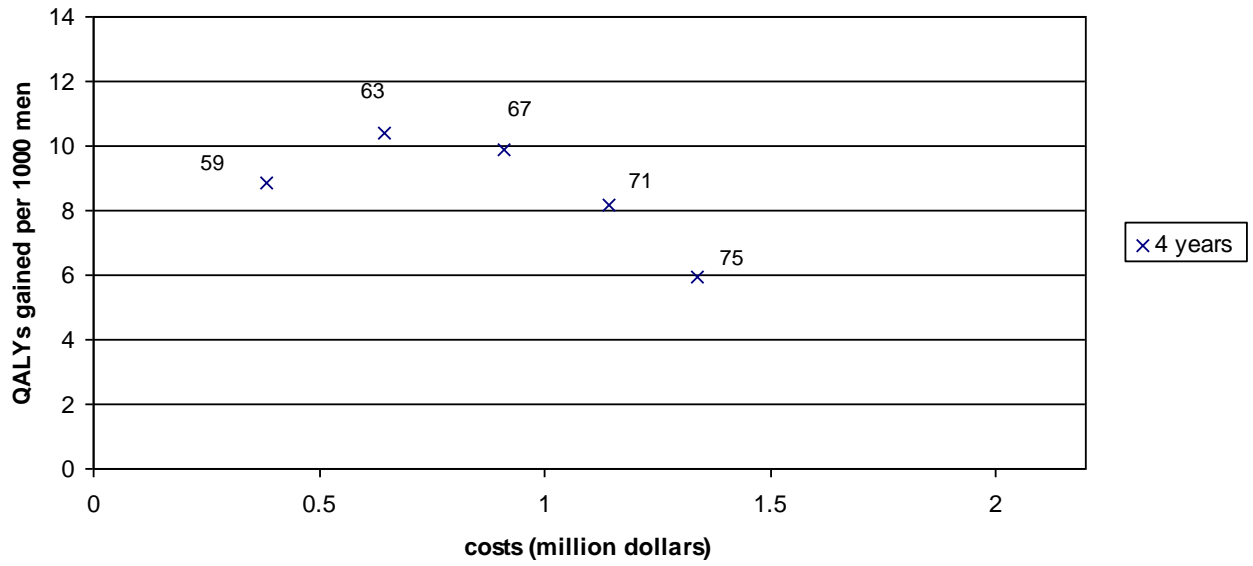
Supplementary Figures 2, 3 and 4 show the screening strategies with 2, 3 and 4 year intervals. After age 63 or 64 the QALYs gained decrease at all strategies.



Supplementary Figure 2. Screening at 2 year intervals starting at age 55. Costs are in 2008 US dollars.

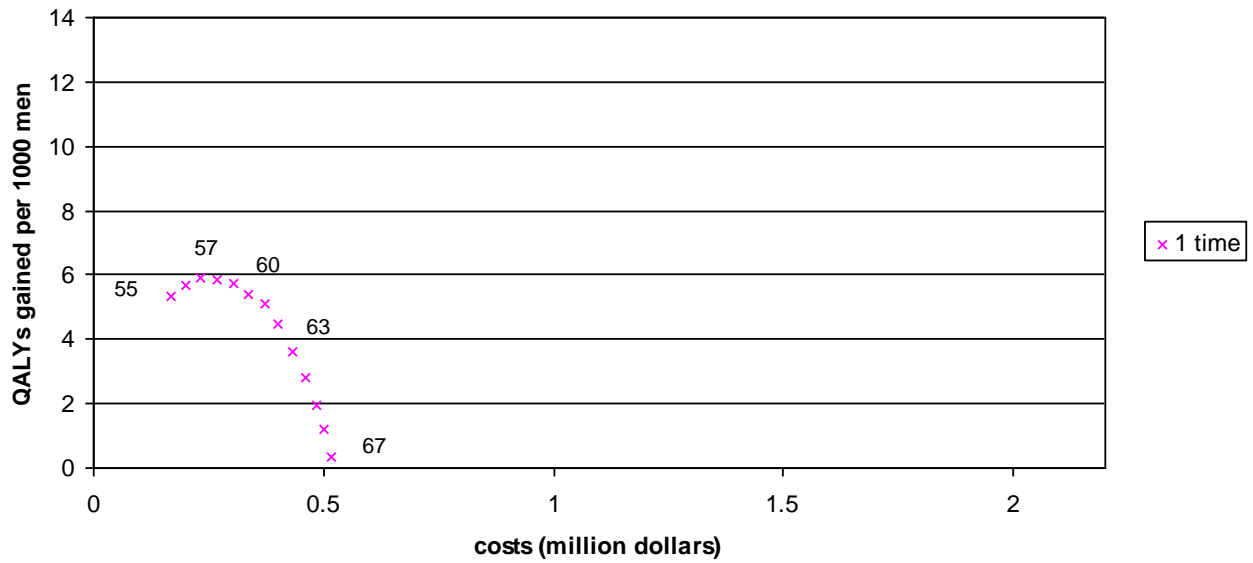


Supplementary Figure 3. Screening at 3 year intervals starting at age 55. Costs are in 2008 US dollars.



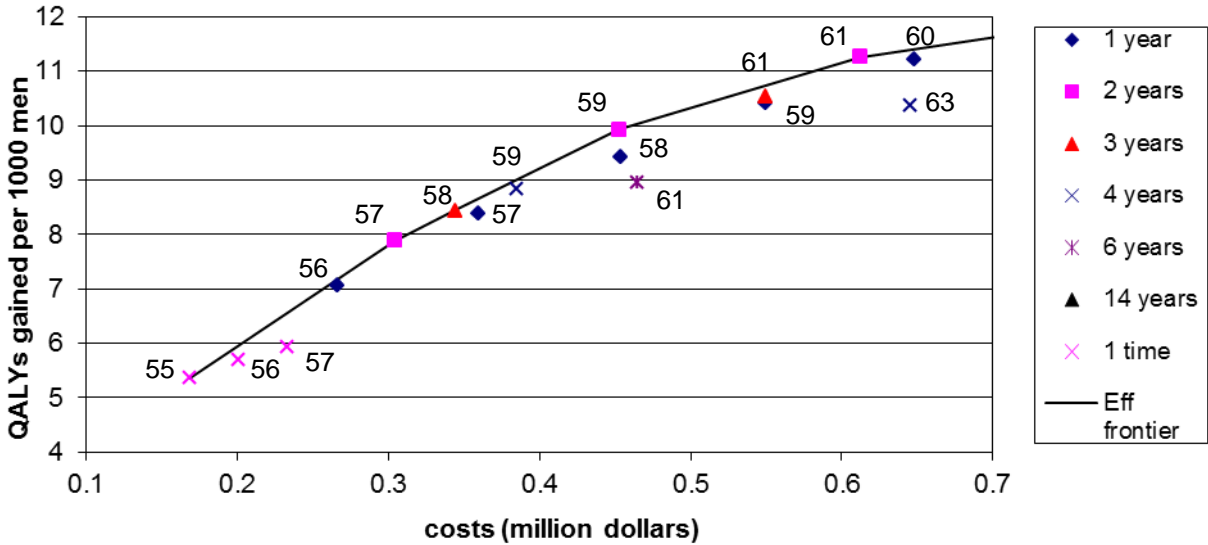
Supplementary Figure 4. Screening at 4 year intervals starting at age 55. Costs are in 2008 US dollars.

In Supplementary Figure 5 the once in a life time screens at ages 55 to 67 are presented. After age 57 the QALYs gained decrease. The QALYs gained become negative after age 67, therefore these strategies are omitted in the Figure.



Supplementary Figure 5. Once in a life-time screening at different ages. Costs are in 2008 US dollars.

Supplementary Figure 6 presents a close-up of the part with the cost-effective strategies in Figure 2B.



Supplementary Figure 6. QALYs gained (all 3.5% discounted) per 1000 men, of PSA screening strategies varying by interval and end age. The screens start at age 55, except for the once in a life-time screens. At the points in the Figure, the end ages are indicated. The efficient strategies are connected by the efficient frontier (Eff frontier). Costs are in 2008 US dollars.