In an effort to investigate the long-term outcomes of active surveillance (AS) among men with prostate cancer (PC), Ventimiglia et al.1 developed a simulation model with a 30-year follow-up trajectory for men with PC managed with AS. The data used to develop the model were retrieved from the Prostate Cancer data Base Sweden (PCBaSe) and covered a follow-up period from 1992 to 2014. Men aged 40 to 75 years at diagnosis of very low-risk, low-risk, or intermediate-risk PC according to modified National Comprehensive Cancer Network risk categorization, and who did not receive an active treatment, were identified, including a total of 23,655 men. The model was used to estimate PC-related and non–PC-related causes of death as well as the proportion of remaining life-years without active PC treatment until death or age 85 years. The proportions of men who died of PC before age 85 years were 9%, 13%, and 15% of men with very low-risk, low-risk, and intermediate-risk PC, respectively. The mean proportion of remaining life-years without active treatment of very low-risk, low-risk, and intermediate-risk PC was 48%, 36%, and 29%, respectively, for men diagnosed at 55 years of age compared with 77%, 66%, and 60%, respectively, for men diagnosed at 70 years of age. The findings suggest that among included patients, AS was a safe management approach for men above 65 years of age with low-risk PC.

Although the Ventimiglia et al.1 study has limitations related to variable disease classification and deferred treatment indications across different follow-up periods,2 the findings are nonetheless important considering that men with PC on AS—probably those with low-risk disease—remain at risk of PC-related death for decades after diagnosis owing to an increased life expectancy. As such, investigating the long-term outcomes of AS helps assess its safety and identify the target patient populations for whom it could be tailored. Fully assessing the long-term outcomes among men treated with AS is challenging owing to the need to investigate long-term PC disease trajectory, which may involve several subsequent treatments owing to the advancement of disease at several time points. Given that AS has been commonplace since 2005, data involving follow-up periods longer than 15 years are limited. Ventimiglia et al.1 created a state transition model that estimated PC disease trajectory, including changes in treatment approach and outcomes up to 30 years after the start of AS. This model was applied in men with different risk categories of PC in an effort to identify populations who would benefit most from AS in terms of low PC death risk and treatment-free life-years. Their findings suggest that AS may be a safe disease management strategy in men older than 65 years with low-risk PC and younger than 65 years with very low-risk PC.

Prostate cancer is the second-most diagnosed cancer among men worldwide,3 with its burden expected to increase even further owing to population aging.4 Most patients are diagnosed with low-risk cancer that may not necessarily require active treatment, especially given that systemic therapies for PC (eg, hormone therapy and chemotherapy) pose additional risks of associated adverse events, including cardiovascular disease and other cancers.5 In this regard, AS has been increasingly used in the US and Europe over the past 2 decades as a preferred therapy for healthy men with very low-risk PC and an initial treatment for healthy men with low-risk PC.6-7 Hence, AS strikes a balance between reducing the implementation of unnecessary treatments—thereby reducing the risk of associated adverse events—and limiting the risk of death from cancer. In terms of long-term outcomes, Ventimiglia et al.1 found that AS was of greater benefit in older men with low-risk PC compared with younger men with intermediate-risk PC. These results may be useful in
informing clinical practice with regard to disease management and follow-up of men with PC regarding the optimal selection of treatment strategies and their allocation to patient populations that will benefit most from their implementation.

ARTICLE INFORMATION
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