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The 5-Year Relative Survival of Older Patients With Prostate Cancer Is Insignificantly Different From the 5-Year Survival of All Men of a Similar Age

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Huynh-Le et al recently reported age dependence of modern clinical risk groups for localized prostate cancer in a population-based study. They found that older age was significantly associated with a higher Gleason score and more advanced disease.¹

Using the Surveillance, Epidemiology, and End Results (SEER) database, we have examined survival data to corroborate the results of the study by Huynh-Le et al.¹ SEER data from population-based cancer registries include approximately 28% of the US population.² We analyzed 5-year relative survival data from 34,707 patients with prostate cancer who were aged 75 years. We selected SEER*Stat relative survival, which represents cancer survival in the absence of other causes of death. Relative survival adjusts for general survival of the US population for race, sex, age, and the date at which the age was coded.³

The SEER 5-year relative survival rate for 15,552 patients with prostate cancer who were aged 75 to 79 years was 60.1%. Among 10,850 patients with prostate cancer who were aged 80 to 84 years, the 5-year relative survival rate was 50.1%. Among 8305 patients with prostate cancer who were aged 85 years, the 5-year relative survival rate was 36%. This survival decline with age was statistically significant ($P < .001$) and indicates that the age-associated risk of clinically significant localized prostate cancer, as identified by Huynh-Le et al, might translate into worse 5-year survival.

However, the 5-year survival of all men must be considered. Calculated from the US 2002 standard life table,⁴ the 5-year survival probability of men aged 79 years in the US population is 60% and is 50% at age 84 years, 40% at age 85 years, and 20% at age 89 years.⁵

Huynh-Le et al concluded that healthy older men may benefit from prostate-specific antigen screening. We question this conclusion because the 5-year relative survival of older patients with prostate cancer is insignificantly different from the 5-year survival of all men of a similar age.

CONFLICT OF INTEREST DISCLOSURES

The authors made no disclosures.

REFERENCES

1. Huynh-Le MP, Myklebust TA, Feng CH, et al. Age dependence of modern clinical risk groups for localized prostate cancer—a population-based study. *Cancer*. Published online January 3, 2020. doi:10.1002/cncr.32702
2. Horner MJ, Ries LAG, Krapcho M, et al. SEER Cancer Statistics Review, 1975–2006. National Cancer Institute; 2009.
3. Cho H, Howlader N, Mariotto AB, Cronin KA. Estimating relative survival for cancer patients from the SEER program using expected rates based on Ederer I versus Ederer II method. Technical Report. Surveillance Research Program, National Cancer Institute; 2011.
4. Arias E United States life tables, 2002. *Natl Vital Stat Rep*. 2004;53:1–38.
5. Pilat M Life expectancy in the U.S. population. Wolfram Demonstrations Project Published March 7, 2011. Accessed January 6, 2020 <http://demonstrations.wolfram.com/LifeExpectancyInTheUSPopulation/>