Androgen Deprivation Therapy and Alzheimer's Disease

TO THE EDITOR: The study by Nead et al¹ reported a relationship between androgen deprivation therapy and future risk of Alzheimer's disease in men with prostate cancer. In their article, androgen deprivation therapy was clearly used more often in patients with factors that were found to be associated with a higher incidence of Alzheimer's disease.² It is conceivable that further unmeasured or hidden confounders were present to put the hormonal treatment population at a disadvantage. For instance, hormonal treatment could have been used less critically in patients with mild symptoms of dementia or in those of lower socioeconomic status. It is hardly possible to control for such confounders in a population that underwent meaningful selection by use of the treatment of interest as in this study.¹ In a more homogeneous sample that was possibly less susceptible to selection by Alzheimer's disease-related risk factors, such as brachytherapy for prostate cancer with or without luteinizing hormone-releasing hormone agonist therapy, use of luteinizing hormone-releasing hormone agonist was associated with a decreased risk of death from Alzheimer's disease.³ Unless the results from Nead et al¹ will be reproduced in largely unselected samples or in randomized trials, the association observed between androgen deprivation therapy and risk of Alzheimer's disease should be communicated with

caution, particularly to patients with prostate cancer in whom early hormonal treatment may be associated with meaningful clinical benefit.^{4,5}

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AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

Disclosures provided by the authors are available with this article at www.jco.org.

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