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REPLY: Prostate Cancer and Cardiovascular Risk Factors

We thank Drs Lin and Kao for their thoughtful letter in response to our paper.[1] We agree that the points raised warrant further discussion.

In our study, 35 of 2,807 participants (1.2%) were on chemotherapy (all docetaxel), in conjunction with androgen deprivation therapy (ADT). There was no significant difference in the proportion who had ≥3 of 5 poorly controlled cardiovascular risk factors among participants on docetaxel compared with those who were not on docetaxel (48.6% [17/35] vs 51.4% [1,426/2,772]; $P = 0.74$).

Radiotherapy was part of the management strategy for 817 of 2,808 participants (29.1%) in our study. Most (83%) of these individuals had an elevated Framingham Risk Score (≥20% 10-year predicted cardiovascular risk), which is consistent with the tendency to treat unfavorable intermediate-risk prostate cancer with radiotherapy. ADT use was an inclusion criterion in our study because our goal is to prospectively evaluate the adverse effects of ADT.

In the recent European of Cardiology Society (ESC) Cardio-Oncology guidelines, a relative change in global longitudinal strain (GLS) has been incorporated into the definition of mild and moderate asymptomatic cancer therapy-related cardiac dysfunction (CTRCD).[2] GLS, in addition to 3-dimensional left ventricular ejection fraction, is recommended in all patients with cancer having transthoracic echocardiography.[2] However, the strongest evidence supporting GLS for diagnosis and monitoring of CTRCD comes from studies using anthracyclines and anti-HER2 (Human Epidermal Receptor 2)-targeted therapies.[3,4] Although taxanes and ADT have been associated with CTRCD, the dominant cardiotoxic effect is arterial vascular disease.[5] Thus, until future evidence supports its use, routine transthoracic echocardiography is not presently recommended in the guidelines as surveillance for ADT complications.[2]

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The authors attest they are in compliance with human studies committees and animal welfare regulations of the authors' institutions and Food and Drug Administration guidelines, including patient consent where appropriate. For more information, visit the Author Center.

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