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Research Letter

The potential contribution of aromatase inhibitors to frailty in breast cancer patients with cardiovascular events



To the Editor,

We read with great interest the article by Yang et al., recently published in your journal, which investigates the impact of frailty on cardiovascular risk in breast cancer patients [1]. The authors demonstrated that cardiovascular events were more likely to occur in frail patients undergoing chemotherapy and targeted therapy. While we concur with the hypothesis proposing a higher cardiovascular risk in frail patients, we observed a notable absence of discussion on the underlying causes of frailty in breast cancer patients. Therefore, we wish to contribute a perspective that focuses on the side effects of adjuvant therapy.

Aromatase inhibitor (AI) is a common choice for adjuvant therapy in postmenopausal breast cancer patients, with implication for cardiovascular disease [2]. Notably, osteoporosis has been identified as a recognized side effect of AI, suggesting a potential correlation with frailty [3]. Additionally, it has been reported that patients with osteoporosis often present with coronary artery calcification [4].

Hence, we seek clarification on whether hormone therapy with AI is encompassed within the authors' term "targeted therapy." Furthermore, we kindly request the authors to explore the prevalence of osteoporosis, its association with frailty, and its implications for cardiovascular outcomes.

In the authors' concluding remarks, they suggest that "assessing frailty may help identify breast cancer patients who are at a higher risk of cardiotoxicity and may benefit from interventions to mitigate this risk." We believe that directing attention towards osteoporosis as a contributing factor to frailty will shed light on the potential connection between breast cancer therapy and cardiovascular events. Thank you for considering our perspective.

Ethical statement

No ethical approval or institutional oversight required for this project. As this is a commentary to the previously published research article, no participant consent was required.

CRediT authorship contribution statement

Yu Hiasa: Writing – original draft. **Akinori Higaki:** Writing – review

& editing, Conceptualization. **Osamu Yamaguchi:** Writing – review & editing, Supervision.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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