We appreciate the insightful comments of Dr. Kawada regarding our recently published manuscript, and thank the Editor for providing an opportunity to respond to his comments.

First, the events of cardiac death and worsening heart failure are often treated as a composite end point in other studies, as well as in our study, because the 2 events conflict. When analyzed separately as cardiac death and worsening heart failure in the Cox proportional hazard analysis, insomnia was a predictor of cardiac death (hazard ratio [HR] 1.178, P=0.046) and worsening heart failure (HR 2.411, P<0.001).

Second, although we agree that depression and cognitive impairment are important factors in heart failure patients, unfortunately we did not have enough data to include those factors as confounders. Hence, we clearly mentioned this point in the limitations of our study.

Third, when analyzed separately based on sex in the Cox proportional hazard analysis, insomnia was a predictor of cardiac events in both male and female patients (male, HR 1.961, P<0.001; female, HR 1.754, P=0.003), and there was no interaction between the effect of insomnia and sex difference in our study population (P=0.543). In addition, male sex was not a predictor of cardiac events in this study (HR 0.977, P=0.842). Moreover, smoking habit was not a predictor of cardiac events (HR 0.838, P=0.116) in our heart failure patients, although smoking habit is generally associated with cardiovascular events in the general population or in patients with cardiovascular disease as Dr. Kawada mentioned. Unfortunately, we did not have enough data regarding drinking habits.

We hope these responses are helpful in providing additional understanding of our study.

References


Akiomi Yoshihisa, MD, PhD
Yuki Kanno, MD
Yasuchika Takeishi, MD, PhD
Department of Cardiovascular Medicine, Fukushima Medical University, Fukushima, Japan
(on behalf of the authors)