

**Additional file 3:** The web-based calculator for predicting RV dysfunction. By access

<https://gaoyzcmu.shinyapps.io/APERVD/> or scanning QR code at lower right corner, the risk of RV dysfunction can be calculated by entering the items in the right column.

c Tn-I: cardiac troponin I; NT-pro BNP, N-terminal pro-brain natriuretic peptide; RV, right ventricle; LV, left ventricle