

**Table S1.** Association between low bFMD and ICU admission.

<b>Model 1</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	2.258	1.088–4.684	0.029
<b>Model 2</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.670	0.795–3.507	0.176
<b>Model 3</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.905	0.817–4.445	0.136
<b>Model 4</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	3.113	1.314–7.373	0.010
<b>Model 5</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.886	0.871–4.083	0.107

Five Cox proportional hazard models (i.e., Model 1–5) were plotted by including the time to ICU admission/in-hospital death as the time variable, the composite endpoint of ICU-admission/in-hospital death as the status variable and the following covariates: 1) low bFMD (bFMD < 4.4%), age, male gender, and BMI (Model 1), (2) low bFMD (bFMD < 4.4%), age, male gender, BMI, PaO<sub>2</sub>/FiO<sub>2</sub> and CURB-65 score (Model 2), (3) low bFMD (bFMD < 4.4%), age, male gender, BMI, PaO<sub>2</sub>/FiO<sub>2</sub>, CURB-65 score, eGFR, leukocytes, CRP, D-dimer, hs-cTn, and LDH (Model 3), (4) low bFMD (bFMD < 4.4%), age, male gender, BMI, type 2 diabetes, current smoking, CKD, hypertension, and history of previous CV event (Model 4), (5) low bFMD (bFMD < 4.4%, age, male gender, BMI, ACE-inhibitors, ARBs, statins, DOACs, VKAs, LMWH, anti-platelets, BBs, CCBs, diuretics, insulin, and oral hypoglycemic agents (Model 5). Abbreviations: bFMD, brachial flow-mediated dilation; CI, confidence interval; HR, hazard ratio.

**Table S2.** Association between low bFMD and in-hospital deaths.

<b>Model 1</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.533	1.004–2.343	0.048
<b>Model 2</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.402	0.911–2.157	0.124
<b>Model 3</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.427	0.846–2.408	0.182
<b>Model 4</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.325	0.824–2.132	0.246
<b>Model 5</b>	<b>HR</b>	<b>95% CI</b>	<b><i>p</i></b>
Low bFMD (<4.4%)	1.654	1.054–2.594	0.029

Five Cox proportional hazard models (i.e., Model 1–5) were plotted by including the time to ICU admission/in-hospital death as the time variable, the composite endpoint of ICU-admission/in-hospital death as the status variable and the following covariates: (1) low bFMD (bFMD < 4.4%), age, male gender, and BMI (Model 1), (2) low bFMD (bFMD < 4.4%), age, male gender, BMI, PaO<sub>2</sub>/FiO<sub>2</sub> and CURB-65 score (Model 2), (3) low bFMD (bFMD < 4.4%), age, male gender, BMI, PaO<sub>2</sub>/FiO<sub>2</sub>, CURB-65 score, eGFR, leukocytes, CRP, D-dimer, hs-cTn, and LDH (Model 3), (4) low bFMD (bFMD < 4.4%), age, male gender, BMI, type 2 diabetes, current smoking, CKD, hypertension, and history of previous CV event (Model 4), (5) low bFMD (bFMD < 4.4%, age, male gender, BMI, ACE-inhibitors, ARBs, statins, DOACs, VKAs, LMWH, anti-platelets, BBs, CCBs, diuretics, insulin, and oral hypoglycemic agents (Model 5). Abbreviations: bFMD, brachial flow-mediated dilation; CI, confidence interval; HR, hazard ratio.