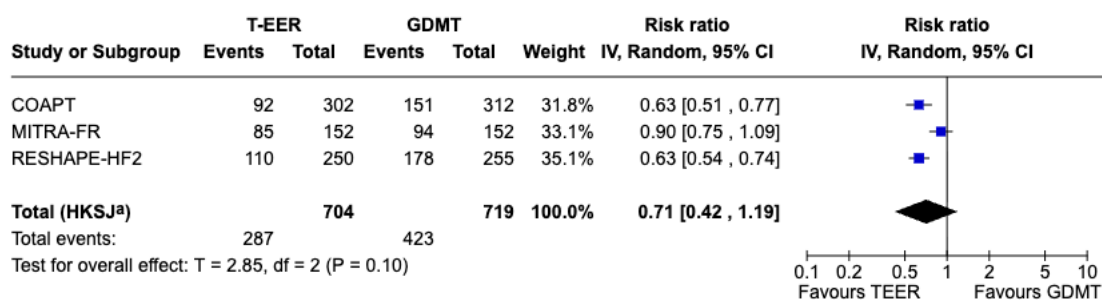


Supplementary data

Hospitalization due to heart failure

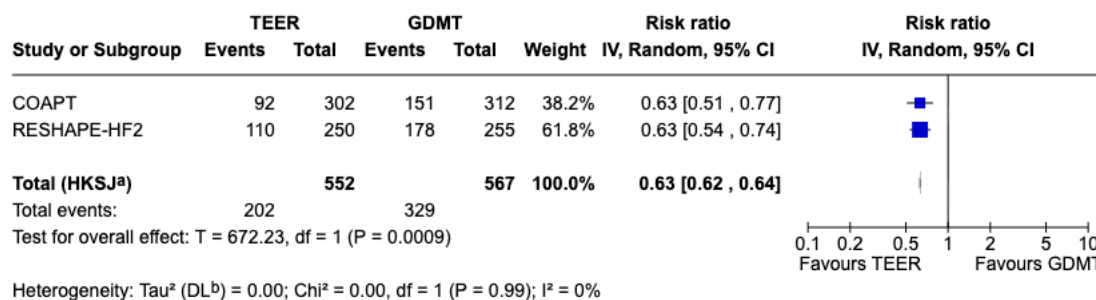


Footnotes

<sup>a</sup>CI calculated by Hartung-Knapp-Sidik-Jonkman method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

Figure S1. Forest plot of sensitivity analysis showing the RR for hospitalization due to heart failure using the Hartung–Knapp–Sidik–Jonkman method.

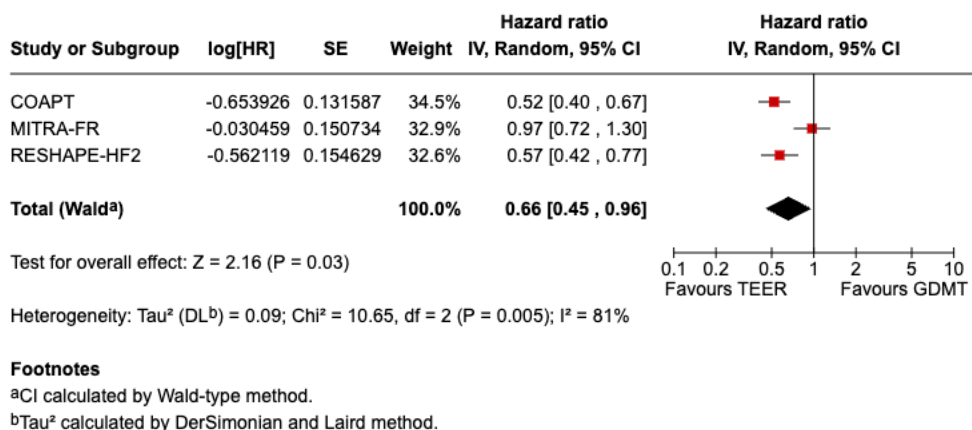


Footnotes

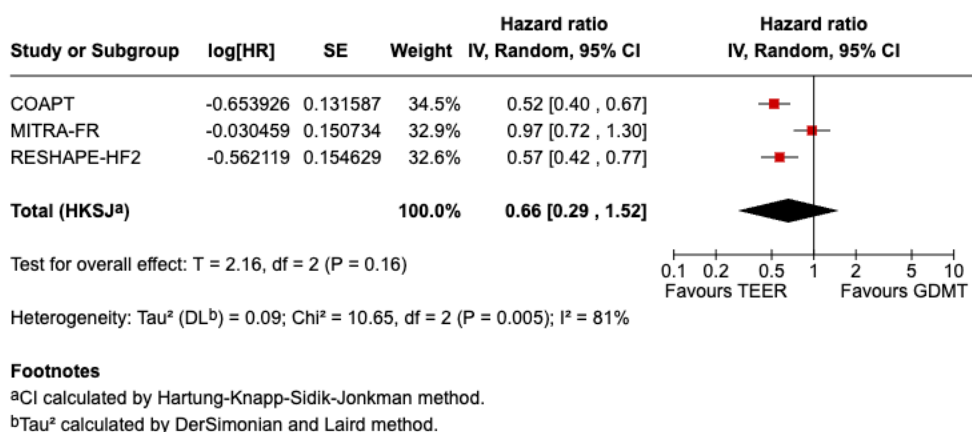
<sup>a</sup>CI calculated by Hartung-Knapp-Sidik-Jonkman method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

Figure S2. Exploratory sensitivity analysis of RR for heart failure hospitalization excluding one trial (Hartung–Knapp–Sidik–Jonkman method).

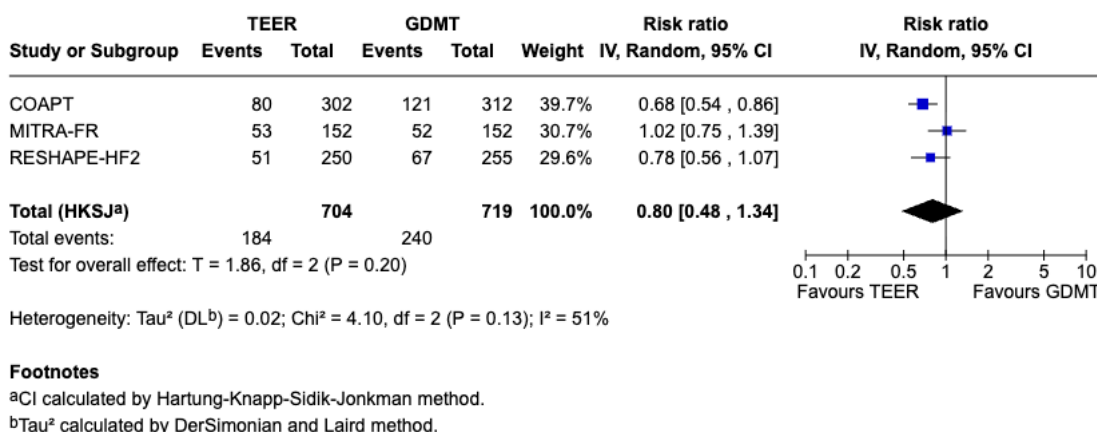


**Figure S3.** Forest plot of HR for hospitalization due heart failure.

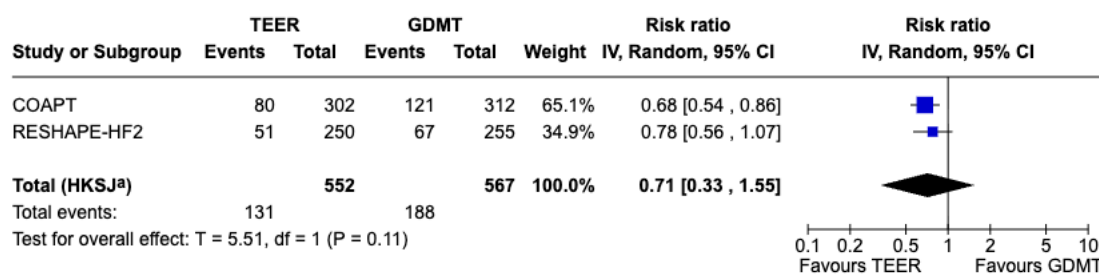


**Figure S4.** Forest plot of sensitivity analysis showing the HR for hospitalization due to heart failure using the Hartung–Knapp–Sidik–Jonkman method.

### Death from any cause



**Figure S5.** Forest plot of sensitivity analysis showing the RR for death from any cause using the Hartung–Knapp–Sidik–Jonkman method.

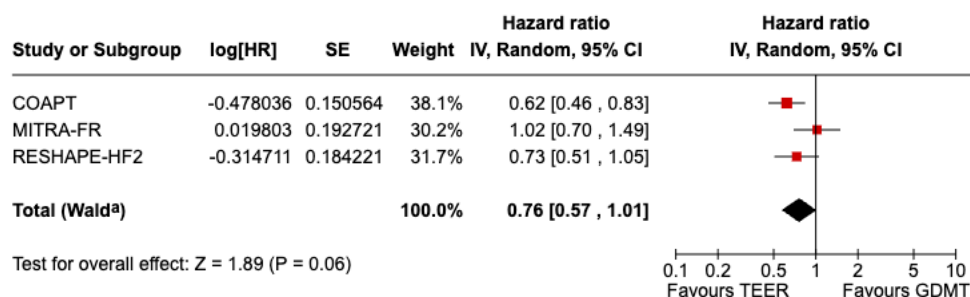


**Footnotes**

<sup>a</sup>CI calculated by Hartung-Knapp-Sidik-Jonkman method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

**Figure S6.** Exploratory sensitivity analysis of RR for death from any cause excluding one trial (Hartung–Knapp–Sidik–Jonkman method).

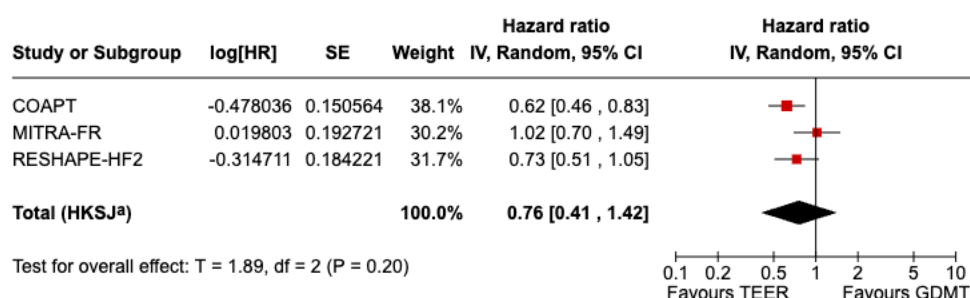


**Footnotes**

<sup>a</sup>CI calculated by Wald-type method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

**Figure S7.** Forest plot of HR of death from any cause.



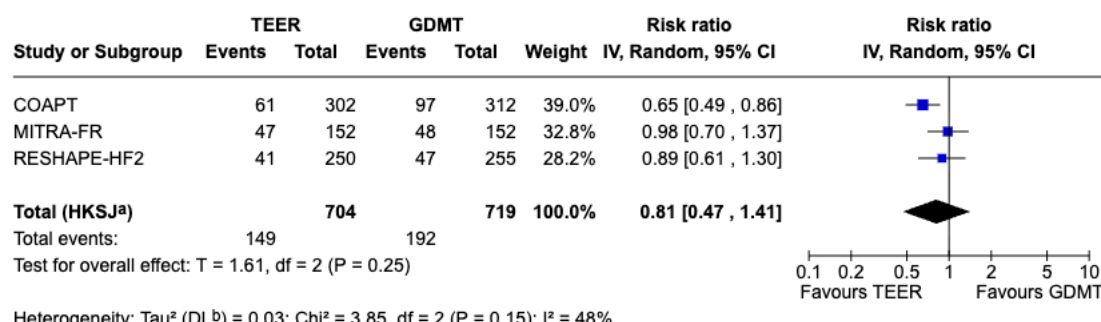
**Footnotes**

<sup>a</sup>CI calculated by Hartung-Knapp-Sidik-Jonkman method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

**Figure S8.** Forest plot of sensitivity analysis showing the HR for death from any cause using the Hartung–Knapp–Sidik–Jonkman method.

**Death from cardiovascular causes.**

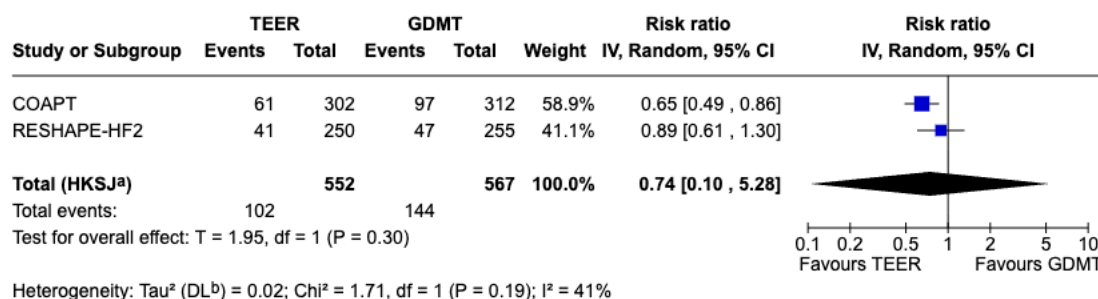


**Footnotes**

<sup>a</sup>CI calculated by Hartung-Knapp-Sidik-Jonkman method.

<sup>b</sup> $\text{Tau}^2$  calculated by DerSimonian and Laird method.

**Figure S9.** Forest plot of sensitivity analysis showing the RR for death from cardiovascular causes using the Hartung–Knapp–Sidik–Jonkman method.

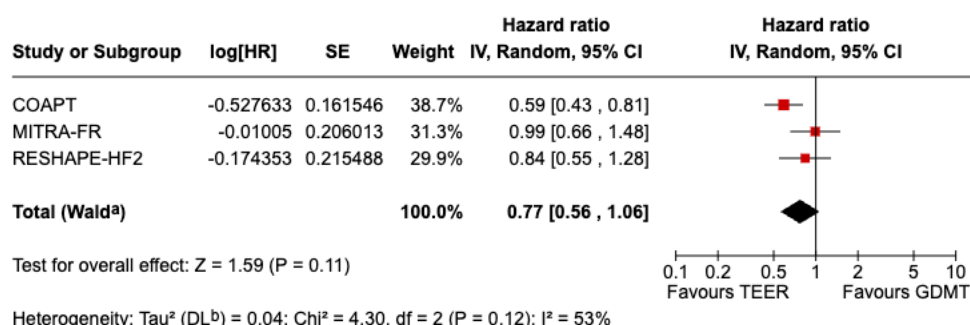


**Footnotes**

<sup>a</sup>CI calculated by Hartung-Knapp-Sidik-Jonkman method.

<sup>b</sup> $\text{Tau}^2$  calculated by DerSimonian and Laird method.

**Figure S10.** Exploratory sensitivity analysis of RR for death from cardiovascular causes excluding one trial (Hartung–Knapp–Sidik–Jonkman method).

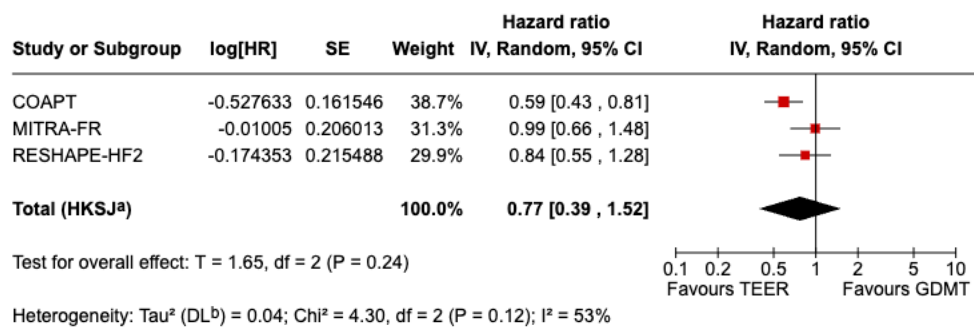


**Footnotes**

<sup>a</sup>CI calculated by Wald-type method.

<sup>b</sup> $\text{Tau}^2$  calculated by DerSimonian and Laird method.

**Figure S11.** Forest plot of HR of death from cardiovascular causes.



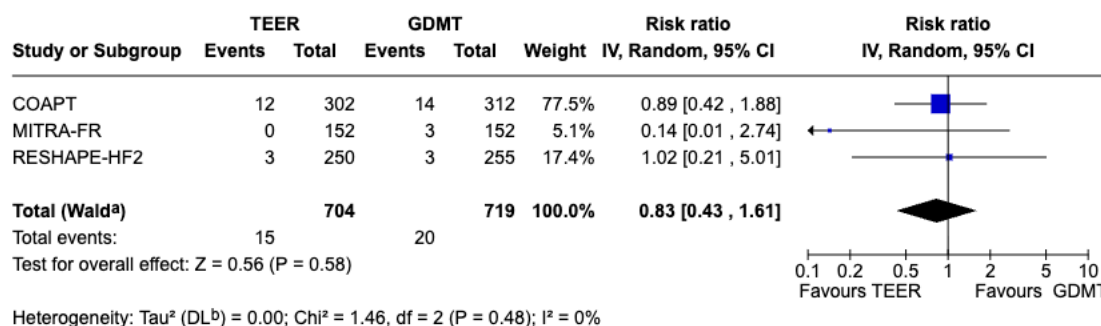
**Footnotes**

<sup>a</sup>CI calculated by Hartung-Knapp-Sidik-Jonkman method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

**Figure S12.** Forest plot of sensitivity analysis showing the HR for death from cardiovascular causes using the Hartung–Knapp–Sidik–Jonkman method.

**Myocardial infarction**



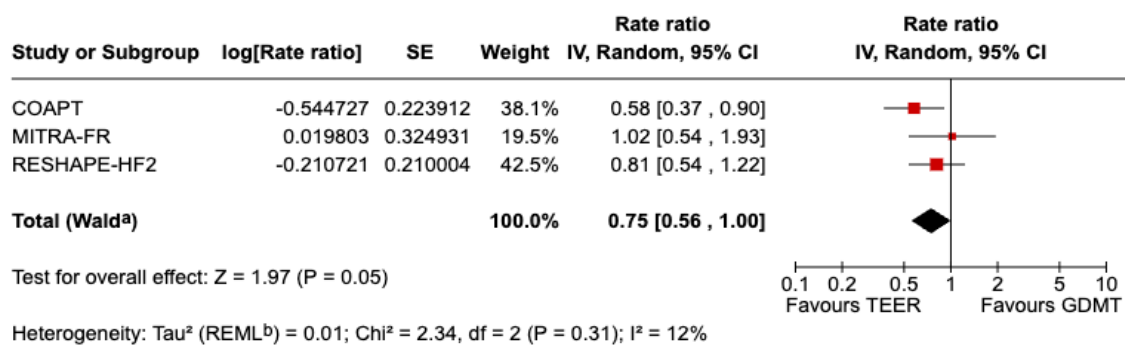
**Footnotes**

<sup>a</sup>CI calculated by Wald-type method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

**Figure S13.** Forest plot of RR of myocardial infarction.

### Hospitalization due to heart failure or death any cause



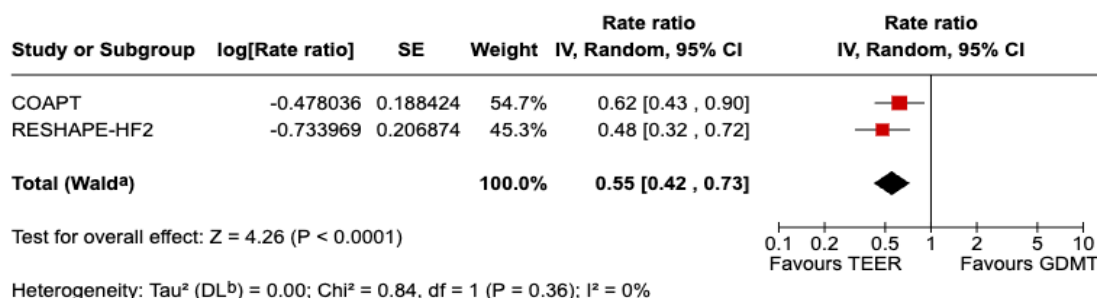
**Footnotes**

<sup>a</sup>CI calculated by Wald-type method.

<sup>b</sup>Tau<sup>2</sup> calculated by Restricted Maximum-Likelihood method.

**Figure S14.** Forest plot of rate ratio of hospitalization due to heart failure or death for any cause stratified by mitral regurgitation grade 3+.

### Hospitalization due to heart failure or death any cause



**Footnotes**

<sup>a</sup>CI calculated by Wald-type method.

<sup>b</sup>Tau<sup>2</sup> calculated by DerSimonian and Laird method.

**Figure S15.** Forest plot of rate ratio of hospitalization due to heart failure or death for any cause stratified by mitral regurgitation grade 4+.