

## F.8 Tricuspid regurgitation – right ventricular function on cardiac MRI

**Table 21: Clinical evidence profile: Right ventricular function on cardiac MRI**

Quality assessment							No of patients		Effect	Quality
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Right ventricular function on CMR	Control	Relative (95% CI)	
<b>RVEF per 5% higher to predict cardiac death following TR surgery - adjusted HR (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										
1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision	none	75		HR 0.71 (0.53 to 0.97)	⊕000 VERY LOW

<b>RVEF &lt;46% vs ≥46% to predict cardiac death following TR surgery - unadjusted estimate from data provided - Cardiac death following TR surgery - unadjusted estimate (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										
1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision	none	23	52	HR 5.06 (1.56 to 16.46)	⊕○○○ VERY LOW
<b>10ml/m2 increments of RV-ESVI to predict cardiac death following TR surgery - adjusted HR (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										
1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision	none	75		HR 1.18 (1.03 to 1.37)	⊕○○○ VERY LOW
<b>RV-ESVI ≥76 ml/m2 vs RV-ESVI &lt;76 ml/m2 to predict cardiac death following TR surgery - unadjusted estimate (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										
1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision	none	50	25	HR 0.29 (0.09 to 0.91)	⊕○○○ VERY LOW
<b>RVEF per 5% higher to predict major postoperative cardiac events (cardiac death or unplanned cardiac-related readmission) following TR surgery - adjusted HR (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										
1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision	none	75		HR 0.8 (0.65 to 0.97)	⊕○○○ VERY LOW
<b>RVEF &lt;46% vs ≥46% to predict major postoperative cardiac events (cardiac death or unplanned cardiac-related readmission) following TR surgery - unadjusted estimate from data provided - Major postoperative cardiac events (cardiac death or unplanned cardiac-related readmission) following TR surgery - unadjusted estimate (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										
1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	no serious imprecision	none	23	52	HR 3.94 (1.59 to 9.76)	⊕○○○ VERY LOW
<b>10ml/m2 increments of RV-ESVI to predict major postoperative cardiac events (cardiac death or unplanned cardiac-related readmission) following TR surgery - adjusted for age, sex, NYHA class, haemoglobin level and glomerular filtration rate - Major postoperative cardiac events (cardiac death or unplanned cardiac-related readmission) following TR surgery - adjusted HR (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										
1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious <sup>3</sup>	none	75		HR 1.1 (1 to 1.22)	⊕○○○ VERY LOW
<b>RV-ESVI ≥76 ml/m2 vs RV-ESVI &lt;76 ml/m2 to predict major postoperative cardiac events (cardiac death or unplanned cardiac-related readmission) following TR surgery - unadjusted estimate (Severe isolated functional TR and underwent isolated TR surgery) (follow-up median 57 months)</b>										

1	cohort studies	very serious <sup>1</sup>	no serious inconsistency	serious <sup>2</sup>	serious <sup>3</sup>	none	50	25	HR 0.46 (0.19 to 1.11)	⊕000 VERY LOW
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<sup>1</sup> Downgraded by 1 increment if the majority of the evidence was at high risk of bias, and downgraded by 2 increments if the majority of the evidence was at very high risk of bias

<sup>2</sup> Population - all underwent intervention for severe functional TR so does not represent population where there is uncertainty about whether there is an indication for intervention; and outcome - only includes cardiac deaths and not all deaths.

<sup>3</sup> 95% CI crosses null line