

Supplementary Figure 1 A: The network of eligible studies for 1-yr survival [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for 1-yr survival. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.


Supplementary Figure 2 A: The network of eligible studies for 2-year survival [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B League table of the analysis for 2-yr survival. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.


Supplementary Figure 3 A: The network of eligible studies for 3-yr survival [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for 3-yr survival. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D : Intervention ranking in SUCRA\% histogram.


Supplementary Figure 4 A: The network of eligible studies for 4 -yr survival [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for $4-\mathrm{yr}$ survival. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D : Intervention ranking in SUCRA\% histogram.

B
.35(0.004, 37.0) Robot assisted
.35(0.004, 37.0) Robot assisted
0.086(0.002, 1.3) 0.25(0.005,4.3) Transthoracic
0.086(0.002, 1.3) 0.25(0.005,4.3) Transthoracic
0.077(0.001,2.4) 0.23(0.003,7.7) 2.9(0.027,280) Transhiatal
0.077(0.001,2.4) 0.23(0.003,7.7) 2.9(0.027,280) Transhiatal
C


Supplementary Figure 5 A: The network of eligible studies for 5-yr survival [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for $5-\mathrm{yr}$ survival. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.


Supplementary Figure 6 A: The network of eligible studies for total adverse events [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for total adverse events. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C : Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.

B

| Laparoscopic |  |  |
| :---: | :---: | :---: |
| $0.65(0.018,21.0)$ | Hybrid |  |
| $0.61(0.029,9.9)$ | $0.97(0.020,35.0)$ | Transhiatal |

$\begin{array}{cccc} \\ 0.59(0.08,4.0) & 0.93(0.048,18.0) & 0.96(0.12,9.6) & \text { Transthoracic }\end{array}$
C



Supplementary Figure 7 A: The network of eligible studies for cardiac adverse events [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for cardiac adverse events. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C : Cumulative probability of interventions rank; D: Intervention ranking in SUCRA \% histogram.


Supplementary Figure 8 A: The network of eligible studies for anastomic leakage [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for anastomic leakage. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D : Intervention ranking in SUCRA \% histogram.


Supplementary Figure 9 A: The network of eligible studies for atrial fibrillation [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for atrial fibrillation. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D : Intervention ranking in SUCRA \% histogram.


Supplementary Figure 10 A: The network of eligible studies for wound infection [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for wound infection. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C : Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.


Supplementary Figure 11 A: The network of eligible studies for total pulmonary adverse events [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for total pulmonary adverse events. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C: Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.


Supplementary Figure 12 A: The network of eligible studies for vocal chord paralysis [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for vocal chord paralysis. Comparisons should be read from left to right. The values are presented in risk ratios, with corresponding credible interval; C : Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.


Supplementary Figure 13 A : The network of eligible studies for length of hospitalization [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for length opf hospitalization. Comparisons should be read from left to right. The values are presented in weighted mean differences (days), with corresponding credible interval; C : Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.


Supplementary Figure 14 A: The network of eligible studies for blood loss [The width of the lines is proportional to the number of trials comparing every pair of treatments, and the size of every circle is proportional to the number of randomly assigned participants (sample size)]; B: League table of the analysis for blood loss. Comparisons should be read from left to right. The values are presented in weighted mean differences (milliliters), with corresponding credible interval; C : Cumulative probability of interventions rank; D: Intervention ranking in SUCRA\% histogram.

