eTable 2
Summary of findings

Summary of findings for the main comparison

Overall analysis

Patient or population: Adult patients with cardiac arrest
Settings: In-hospital or out-of-hospital based
Intervention: Extracorporeal cardiopulmonary resuscitation (ECPR)
Comparison: No ECPR

Certainty assessment						Summary of findings				
						No of patients		Effects		
Number of studies, design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias	ECPR	Control	Relative (95% CI)	Absolute (95% CI)	Certainty
Long-term in-hospital neurologically intact survival										
3 observational Studies*	Serious limitations§	No serious limitations	No serious limitations	No serious limitations	Publication bias strongly suspected‖	37/164 (22.6%)	32/474 (6.8%)	RR 3.21 (1.74–5.94)	149 more per 1000 (from 50 more to 334 more)	⨁⊖⊖⊖ Very low¶
Long-term out-of-hospital neurologically intact survival										
3 observational Studies†	Serious limitations§	No serious limitations	No serious limitations	No serious limitations	Publication bias strongly suspected‖	45/366 (12.3%)	44/746 (5.9%)	RR 3.11 (1.50–6.47)	124 more per 1000 (from 29 more to 323 more)	⨁⊖⊖⊖ Very low¶
Long-term in-hospital or out-of-hospital neurologically intact survival										
6 observational tudies‡	Serious limitations§	No serious limitations	No serious limitations	No serious limitations	Publication bias strongly suspected‖	82/530 (15.5%)	76/1220 (6.2%)	RR 3.11 (2.06–4.69)	131 more per 1000 (from 66 more to 230 more)	⨁⊖⊖⊖ Very low¶

The risk in the intervention group (and its 95% confidence interval) is based on the comparison group and the relative effect of the intervention (and its 95% CI).
CI = confidence interval; RR = risk ratio.

GRADE Working Group grades of evidence
High certainty: We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate certainty: We are moderately confident in the effect estimate; the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
Low certainty: Our confidence in the effect estimate is limited; the true effect may be substantially different from the estimate of the effect.
Very low certainty: We have very little confidence in the effect estimate; the true effect is likely to be substantially different from the estimate of effect.

Notes: In the GRADE approach to quality of evidence the observational studies without special strengths or important limitations provide low quality evidence. Based on GRADE criteria, the overall quality/certainty of evidence was very low across all outcomes, irrespective of where the point estimate and confidence interval lies. We are uncertain whether ECPR compared with no ECPR and/or conventional CPR improves long-term neurologically intact survival after cardiac arrest (as the certainty of the evidence has been assessed as very low).
* Chen et al. 2008,[48] Shin et al. 2013,[49] Siao et al. 2015[50]
† Kim et al. 2014,[45] Maekawa et al. 2013,[46] Sakamoto et al. 2014[47]
‡ Chen et al. 2008,[48] Shin et al. 2013,[49] Siao et al. 2015,[50] Kim et al. 2014,[45] Maekawa et al. 2013,[46] Sakamoto et al. 2014[47]
§ High risk of confounding.
‖ Unable to assess publication bias due to limited number of studies.
¶ Downgraded by one level for serious risk of bias in all included studies.