Appendix A Review questions according to the PICO Scheme

❖ Question 1: In adults resuscitated from in-hospital cardiac arrest (P) and treated with TTM (I), survival to hospital discharge (O)
❖ Question 2: In adults resuscitated from in-hospital cardiac arrest (P) and treated with TTM (I), good neurological outcome, defined as grade 1 or 2 (O) of brain function.
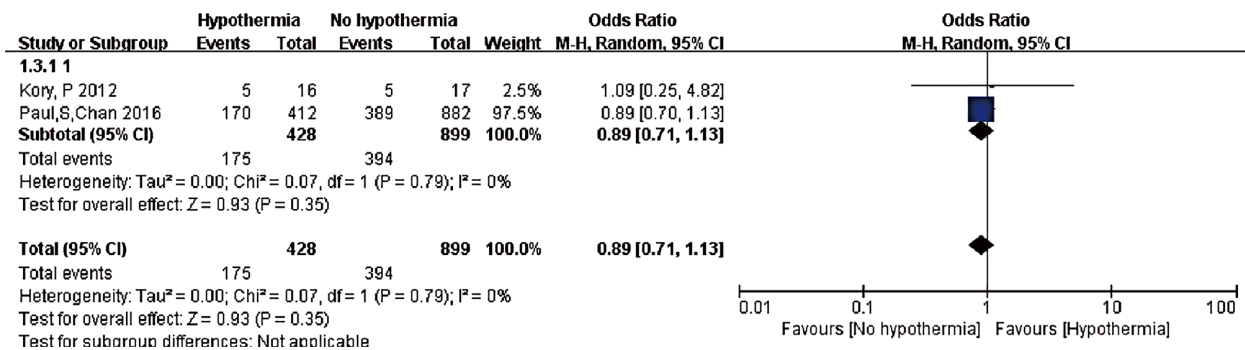

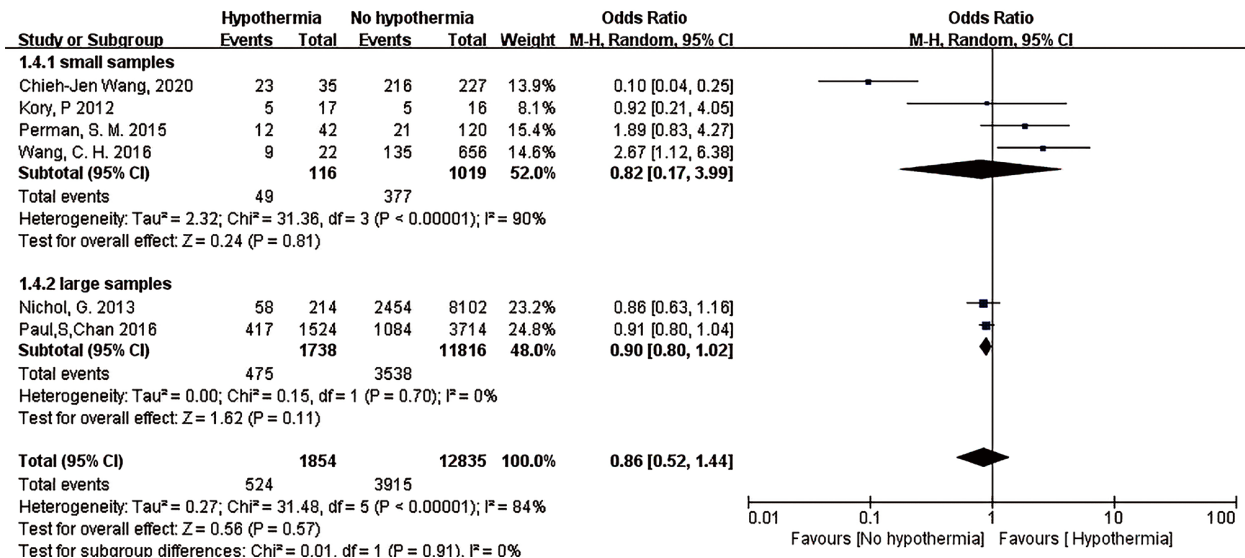**Figure S1** Survival to hospital discharge in shockable initial rhythms.

Figure S2 Survival to hospital discharge in different sample content.
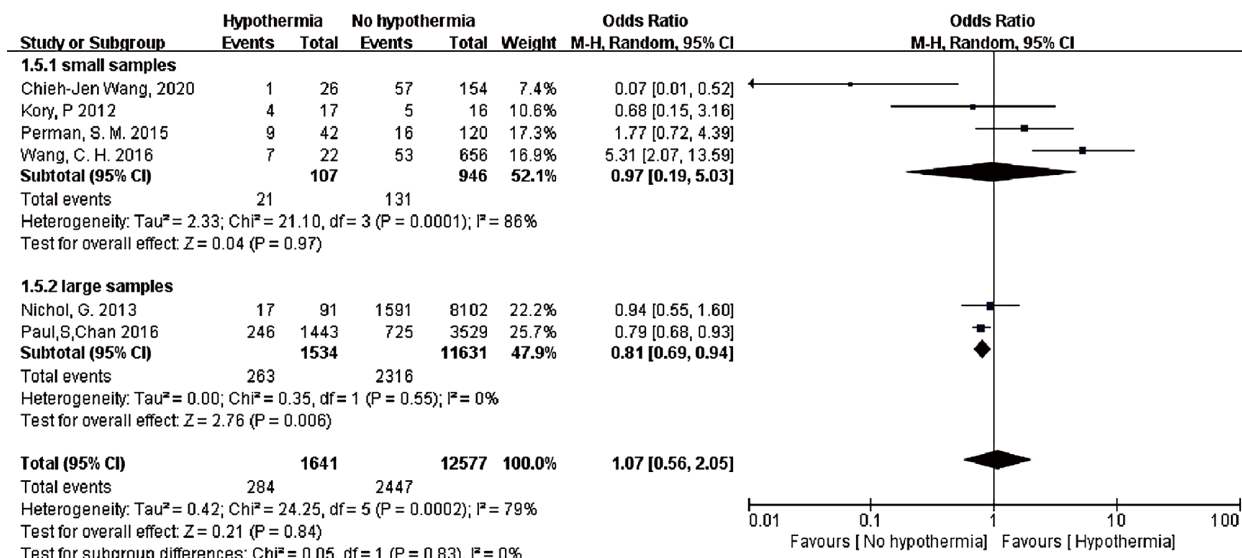
Figure S3 Good neurological outcomes in different sample content.

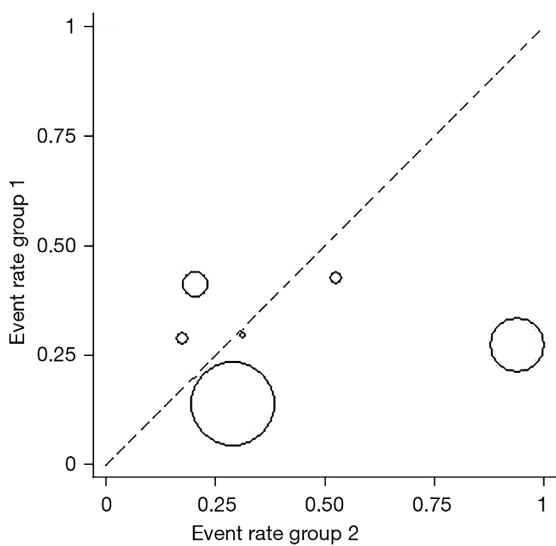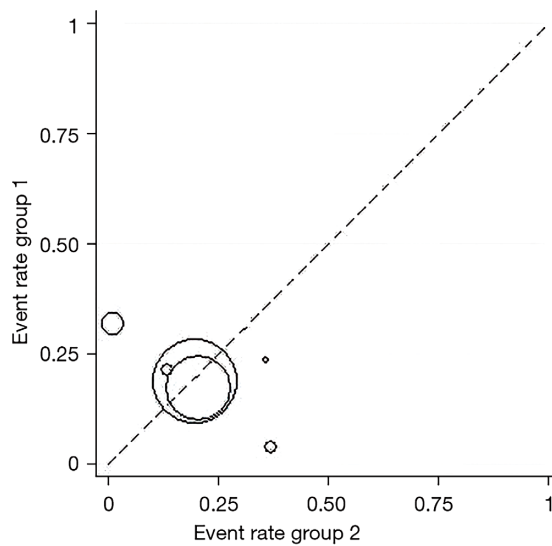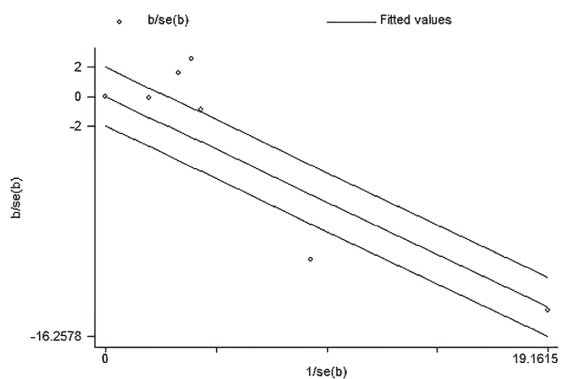**Figure S4** Survival to hospital discharge L'Abbe plot.

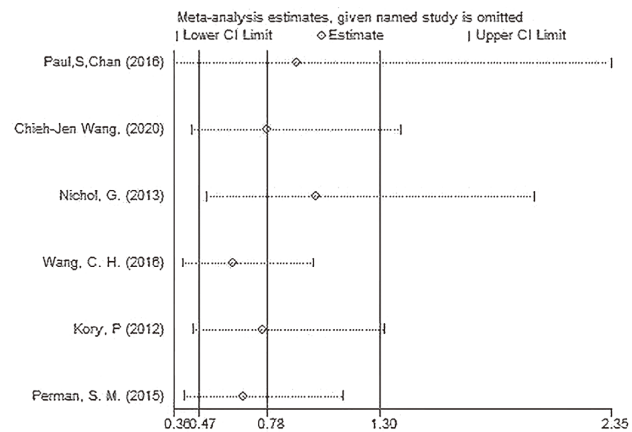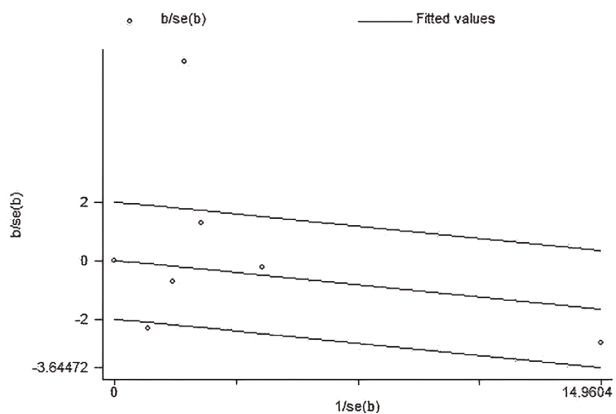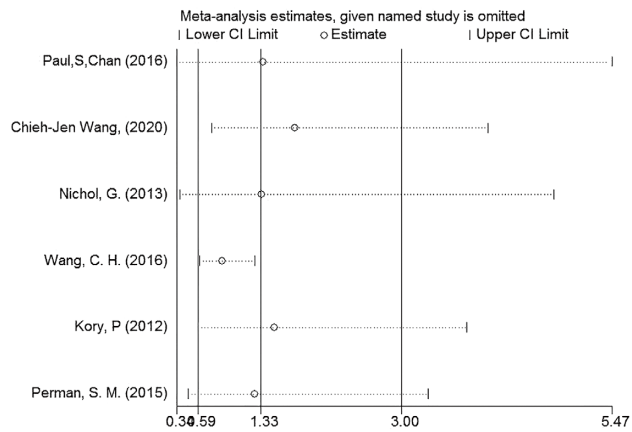**Figure S5** Good neurological outcomes L'Abbe plot.

Figure S6 Survival to hospital discharge Galbraith plot.

Figure S7 Good neurological outcomes Galbraith plot.

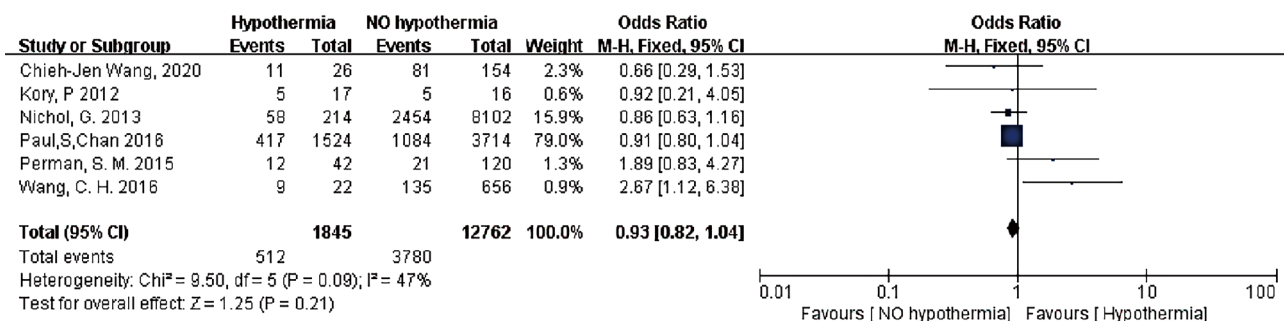**Figure S8** Impact map of a single study in the discharged survival group.

Figure S9 Impact map of a single study in the good neurological outcome group.

Study or Subgroup	Hypothermia Events	Total	NO hypothermia Events	Total	Weight	Odds Ratio M-H, Fixed, 95% CI
Chieh-Jen Wang, 2020	11	26	81	154	2.3%	0.66 [0.29, 1.53]
Kory, P 2012	5	17	5	16	0.6%	0.92 [0.21, 4.05]
Nichol, G. 2013	58	214	2454	8102	15.9%	0.86 [0.63, 1.16]
Paul,S,Chan 2016	417	1524	1084	3714	79.0%	0.91 [0.80, 1.04]
Perman, S. M. 2015	12	42	21	120	1.3%	1.89 [0.83, 4.27]
Wang, C. H. 2016	9	22	135	656	0.9%	2.67 [1.12, 6.38]
Total (95% CI)		**1845**		**12762**	**100.0%**	**0.93 [0.82, 1.04]**
Total events	512		3780			

Heterogeneity: Chi² = 9.50, df = 5 (P = 0.09); I² = 47%
Test for overall effect: Z = 1.25 (P = 0.21)

Figure S10 Randomized effect model diagram of the discharged survival group.

Study or Subgroup	Hypothermia Events	Total	NO hypothermia Events	Total	Weight	Odds Ratio M-H, Fixed, 95% CI
Chieh-Jen Wang, 2020	1	26	57	154	3.9%	0.07 [0.01, 0.52]
Kory, P 2012	4	17	5	16	1.0%	0.68 [0.15, 3.16]
Nichol, G. 2013	17	91	1591	8102	7.1%	0.94 [0.55, 1.60]
Paul,S,Chan 2016	246	1443	725	3529	85.9%	0.79 [0.68, 0.93]
Perman, S. M. 2015	9	42	16	120	1.6%	1.77 [0.72, 4.39]
Wang, C. H. 2016	7	22	53	626	0.6%	5.05 [1.97, 12.92]
Total (95% CI)		**1641**		**12547**	**100.0%**	**0.82 [0.71, 0.95]**
Total events	284		2447			

Heterogeneity: Chi² = 23.44, df = 5 (P = 0.0003); I² = 79%
Test for overall effect: Z = 2.70 (P = 0.007)

Figure S11 Neurological function randomization effect model diagram.

Study or Subgroup	Hypothermia Events	Total	NO hypothermia Events	Total	Weight	Odds Ratio M-H, Random, 95% CI
Chieh-Jen Wang, 2020	11	26	81	154	2.0%	0.66 [0.29, 1.53]
Kory, P 2012	5	17	5	16	0.6%	0.92 [0.21, 4.05]
Nichol, G. 2013	58	214	2454	8102	15.2%	0.86 [0.63, 1.16]
Paul,S,Chan 2016	417	1524	1084	3714	80.0%	0.91 [0.80, 1.04]
Perman, S. M. 2015	12	42	21	120	2.1%	1.89 [0.83, 4.27]
Wang, C. H. 2016	9	22	135	656	0.0%	2.67 [1.12, 6.38]
Total (95% CI)		**1823**		**12106**	**100.0%**	**0.91 [0.81, 1.03]**
Total events	503		3645			

Heterogeneity: Tau² = 0.00; Chi² = 3.76, df = 4 (P = 0.44); I² = 0%
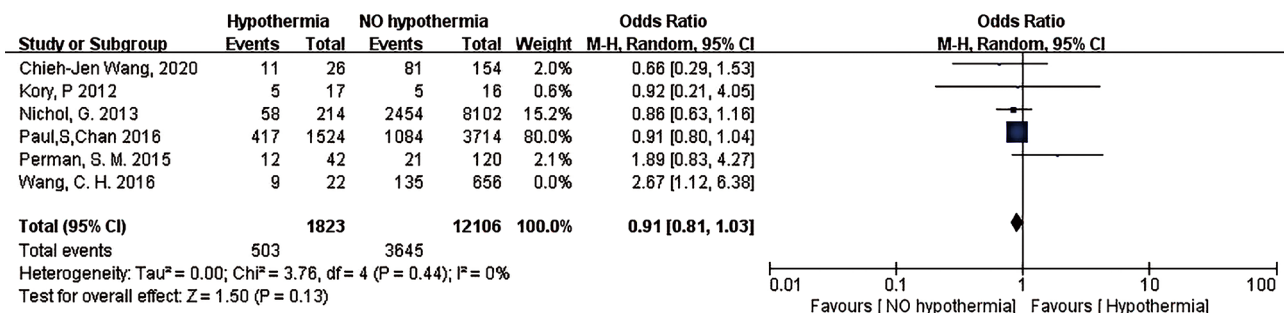Test for overall effect: Z = 1.50 (P = 0.13)

Figure S12 Single study removal impact diagram of discharge survival.
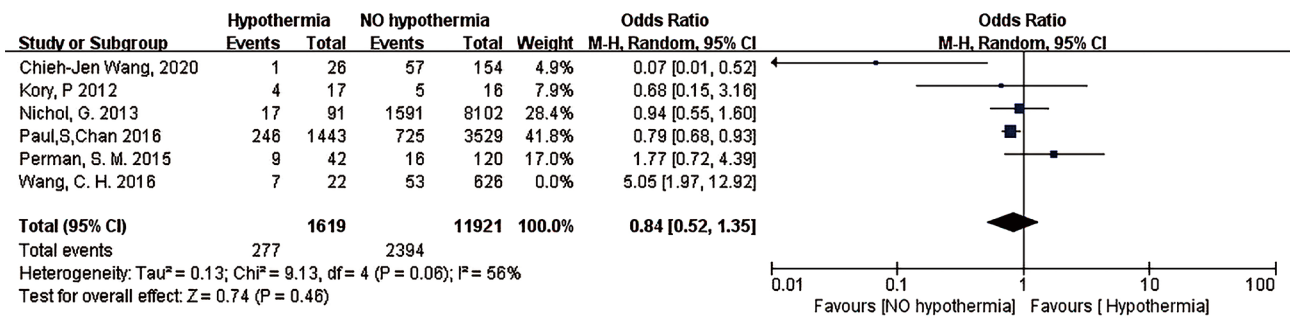
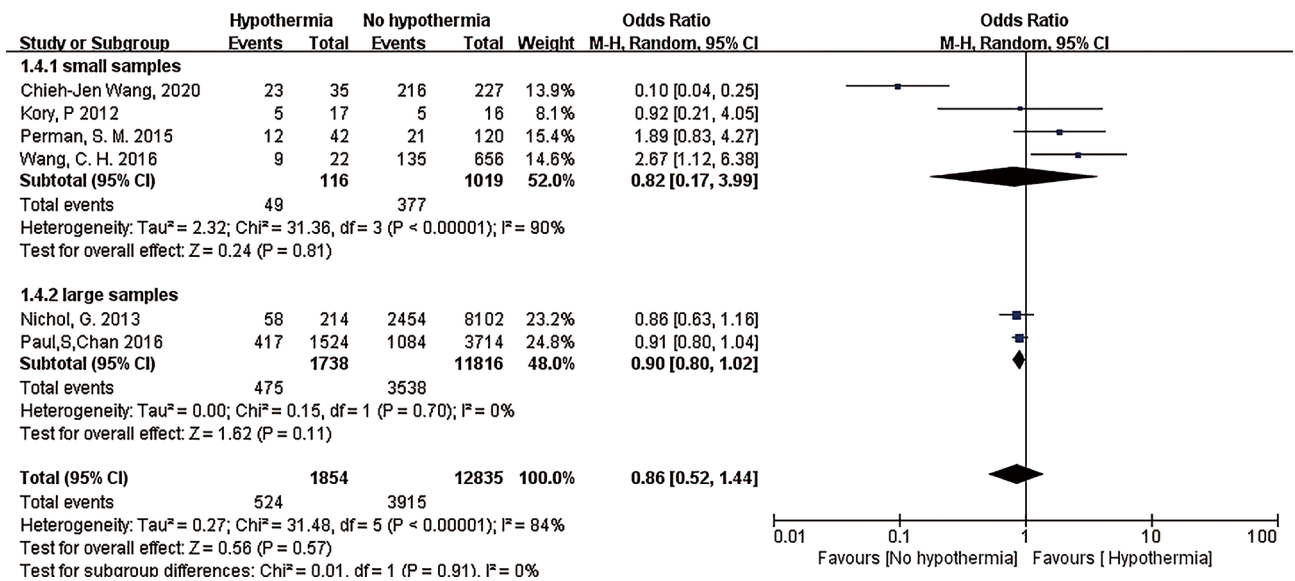**Figure S13** Single study removal impact diagram of neurological outcome.

Figure S14 Funnel chart.