Table SI. The search strategy.

Database	Search strategy
PubMed	(((((((Remote Ischaemic Conditioning) OR (Limb Ischaemic Conditioning)) OR (Remote ischaemic treatment)) OR (Remote ischaemic adaptation)) OR ((((((Remote ischaemic preconditioning) OR (Distant ischaemic preconditioning)) OR (ischaemic preconditioning)) OR (Limb ischaemic preconditioning))) OR ((Remote ischaemic perconditioning) OR (Limb ischaemic perconditioning))) OR ((Remote ischaemic postconditioning) OR (Limb ischaemic postconditioning))) OR (((((((RIC) OR (RIPerC)) OR (RIPostC)) OR (RIP)) OR (RIPC)) OR (RPC)) OR (IperC)) OR (rIPC))) AND (((((hepatic ischemia-reperfusion) OR (liver graft)) OR (liver transplantation)) OR (liver resection)) OR (hepatectomy))
OVID	#1 (Remote Ischaemic Conditioning or Limb Ischaemic Conditioning or Remote ischaemic treatment or Remote ischaemic adaptation or (Remote ischaemic preconditioning or Distant ischaemic preconditioning or ischaemic preconditioning or Remote Ischaemic Conditioning or remote ischaemic adaptation or Limb ischaemic preconditioning) or (Remote ischaemic perconditioning or Limb ischaemic perconditioning) or (Remote ischaemic postconditioning or Limb ischaemic postconditioning) or (RIC or RIPerC or RIPostC or RIP or RIPC or RPC or IperC or rIPC)).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word] #2 (hepatic ischemia-reperfusion or liver graft or liver transplantation or liver resection or hepatectomy).mp. [mp=title, book title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms, population supplementary concept word, anatomy supplementary concept word] #3 #1 AND #2
Web of Science	(((((TS=(Remote Ischaemic Conditioning or Limb Ischaemic Conditioning or Remote ischaemic treatment or Remote ischaemic adaptation)) OR TS=(Remote ischaemic preconditioning or Distant ischaemic preconditioning or ischaemic preconditioning or Limb ischaemic preconditioning)) OR TS=(Remote ischaemic perconditioning or Limb ischaemic perconditioning)) OR TS=(Remote ischaemic postconditioning or Limb ischaemic postconditioning)) OR TS=(RIC or RIPerC or RIPostC or RIP or RIPC or RPC or IperC or rIPC)) AND TS=(hepatic ischemia-reperfusion or liver graft or liver transplantation or liver resection or hepatectomy)
Embase	#1 'limb ischaemic conditioning':ab,ti OR 'remote ischaemic treatment':ab,ti OR 'remote ischaemic preconditioning':ab,ti OR 'distant ischaemic preconditioning':ab,ti OR 'ischaemic preconditioning':ab,ti OR 'remote ischaemic conditioning':ab,ti OR 'remote ischaemic adaptation':ab,ti OR 'limb ischaemic preconditioning':ab,ti OR 'remote ischaemic perconditioning':ab,ti OR 'limb ischaemic perconditioning':ab,ti OR 'remote ischaemic postconditioning':ab,ti OR 'limb ischaemic postconditioning':ab,ti OR ric:ab,ti OR riperc:ab,ti OR ripostc:ab,ti OR rip:ab,ti OR rpc:ab,ti OR iperc:ab,ti OR ripc:ab,ti #2 'hepatic ischemia-reperfusion':ab,ti OR 'liver graft':ab,ti OR 'liver transplantation':ab,ti OR 'liver resection':ab,ti OR hepatectomy:ab,ti #3 #1 AND #2

Table SII. Treatment effects of different factors based on secondary outcomes.

	LDH			TNF-α			Apoptosis index (%)		
Overall effect/factors	No. of experiments (animals)	SMD (95% CI)	P-value	No. of experiments (animals)	SMD (95% CI)	P-value	No. of experiments (animals)	SMD (95% CI)	P-value
Overall effect	17 (186)	-1.64 (-2.43, -0.84)	< 0.0001	26 (324)	-2.53 (-3.23, -1.84)	<0.00001	10 (138)	-4.15 (-5.14, -3.15)	<0.00001
Time of administration									
RIPC	12 (138)	-1.68 (-2.69, -0.67)	0.001	18 (192)	-2.16 (-2.98, -1.35)	<0.00001	4 (42)	-4.03 (-5.29, -2.77)	<0.00001
RIPerC and RIPostC	5 (48)	-1.59 (-2.94, -0.23)	0.02	8 (132)	-3.30 (-4.67, -1.93)	<0.00001	6 (96)	-4.35 (-5.93, -2.78)	<0.00001
Species									
All rats	13 (132)	-1.44 (-2.23, -0.66)	0.0003	14 (168)	-2.67 (-3.64, -1.70)	<0.00001	4 (48)	-3.67 (-5.02, -2.32)	<0.00001
Sprague Dawley rats	5 (60)	-2.64 (-4.68, -0.61)	0.01	11 (120)	-2.90 (-4.16, -1.64)	<0.00001	3 (36)	-3.18 (-4.31, -2.04)	<0.00001
Wistar rats	8 (72)	-0.91 (-1.51, -0.32)	0.003	3 (48)	-2.23 (-3.86, -0.60)	0.007	1 (12)	-6.46 (-9.82, -3.11)	0.0002
All mice				12 (156)	-2.41 (-3.48, -1.34)	<0.00001	6 (90)	-4.48 (-5.98, -2.98)	<0.00001
C57BL/6 mice				11 (134)	-2.38 (-3.58, -1.19)	<0.0001	6 (90)	-4.48 (-5.98, -2.98)	<0.00001
Wild-type mice				1 (22)	-2.79 (-4.03, -1.56)	<0.00001			
New Zealand white rabbits	4 (54)	-2.22 (-4.77, 0.34)	0.09						
HIRI model (mins)									
All OLT	8 (72)	-2.22 (-4.77, 0.34)	0.003	6 (90)	-3.51 (-5.26, -1.76)	<0.0001	6 (90)	-4.48 (-5.98, -2.98)	<0.00001
OLT (120)				3 (30)	-3.34 (-4.65, -2.03)	<0.00001	3 (30)	-4.24 (-5.79, -2.69)	<0.00001
OLT (235.7 ± 18.3)				3 (60)	-3.71 (-6.99, -0.43)	0.03	3 (30)	-4.83 (-7.73, -1.94)	0.001
OLT(480)	8 (72)	-2.22 (-4.77, 0.34)	0.003						
All 70% liver I/R	3 (36)	-1.06 (-2.59, 0.47)	0.17	12 (138)	-1.86 (-2.68, -1.04)	<0.00001	2 (24)	-4.21 (-8.04, -0.39)	0.03
70% liver I/R (30)				1 (10)	-1.42 (-2.89, 0.06)	0.06			
70% liver I/R (60)	3 (36)	-1.06 (-2.59, 0.47)	0.17	11 (128)	-1.92 (-2.83, -1.01)	<0.0001	2 (24)	-4.21 (-8.04, -0.39)	0.03
All THI	4 (54)	-2.22 (-4.77, 0.34)	0.09						
THI (25)	4 (54)	-2.22 (-4.77, 0.34)	0.09						
Hindlimb I/R (240)	2 (24)	-5.90 (-8.13, -3.66)	<0.00001	2 (24)	-6.33 (-8.70, -3.97)	<0.00001	2 (24)	-3.74 (-5.28, -2.19)	<0.00001
All HSR-I/R				6 (72)	-2.13 (-3.67, -0.58)	0.007			
HSR-I/R (60)				5 (50)	-2.01 (-3.83, -0.18)	0.03			
HSR-I/R (150)				1 (22)	-2.79 (-4.03, -1.56)	<0.00001			
Operation of RIC									
Non-invasive	6 (78)	-3.37 (-5.76, -0.97)	0.006	10 (112)	-2.24 (-3.44, -1.04)	0.0003	2 (24)	-3.74 (-5.28, -2.19)	<0.00001
Invasive	11 (108)	-0.97 (-1.54, -0.39)	0.0009	16 (212)	-2.72 (-3.61, -1.83)	<0.00001	8 (114)	-4.33 (-5.60, -3.07)	<0.00001
Number of limbs occluded									
One limb	7 (90)	-1.64 (-3.03, -0.25)	0.02	13 (130)	-1.86 (-2.85, -0.86)	0.0002	2 (24)	-4.21 (-8.04, -0.39)	0.03
Two libms	10 (96)	-1.63 (-2.60, -0.65)	0.001	13 (194)	-3.19 (-4.17, -2.20)	<0.00001	8 (114)	-4.23 (-5.31, -3.14)	<0.00001

Number of cycles									
1 cycle				5 (36)	-1.66 (-3.86, 0.54)	0.14	2 (24)	-4.21 (-8.04, -0.39)	0.03
2 cycles	3 (36)	-1.06 (-2.59, 0.47)	0.17	1 (12)	-2.50 (-4.17, -0.84)	0.003			
3 cycles	6 (78)	-3.37 (-5.76, -0.97)	0.006	12 (156)	-3.07 (-4.34, -1.80)	<0.00001	5 (84)	-4.32 (-5.95, -2.70)	<0.00001
4 cycles	8 (72)	-0.91 (-1.51, -0.32)	0.003	8 (120)	-2.40 (-3.22, -1.58)	<0.00001	3 (30)	-4.24 (-5.79, -2.69)	<0.00001
Duration of each cycle									
1 min	1 (12)	-5.12 (-7.90, -2.35)	0.0003	1 (12)	-5.60 (-8.59, -2.62)	0.0002	1 (12)	-3.84 (-6.07, -1.62)	0.0007
3 mins				1 (20)	-1.28 (-2.26, -0.30)	0.01			
4 mins	9 (84)	-1.29 (-2.17, -0.41)	0.004						
5 mins				15 (214)	-2.72 (-3.66, -1.77)	<0.00001	6 (96)	-4.31 (-5.88, -2.75)	<0.00001
6 mins				3 (30)	-3.34 (-4.65, -2.03)	<0.00001	3 (30)	-4.24 (-5.79, -2.69)	<0.00001
10 mins	7 (90)	-1.64 (-3.03, -0.25)	0.02	6 (48)	-1.59 (-3.20, 0.03)	0.05			
Total duration of limb ischaemia									
≤ 5 min	1 (12)	-5.12 (-7.90, -2.35)	0.0003	2 (24)	-4.80 (-6.66, -2.94)	<0.00001	3 (36)	-3.86 (-5.85, -1.87)	0.0001
10-15 mins	1 (12)	-7.33 (-11.10, -3.56)	0.0001	15 (176)	-2.18 (-3.20, -1.16)	<0.0001	4 (72)	-4.49 (-6.55, -2.42)	<0.0001
20-25 mins	11 (108)	-0.97 (-1.54, -0.39)	0.0009	8 (112)	-2.60 (-3.38, -1.81)	<0.00001	3 (30)	-4.24 (-5.79, -2.69)	<0.00001
30 mins	4 (54)	-2.22 (-4.77, 0.34)	0.09	1 (12)	-3.25 (-5.20, -1.30)	0.001			
Time of assessment[a]									
0 h	3 (38)	-3.62 (-9.11, 1.88)	0.20	3 (34)	-4.02 (-9.41, 1.38)	0.14	2 (24)	-3.74 (-5.28, -2.19)	<0.00001
0.5 h				1 (6)	1.13 (-0.81, 3.07)	0.25			
1 h	4 (44)	-0.56 (-1.56, 0.44)	0.27	2 (22)	-1.83 (-5.23, 1.57)	0.29			
2 h	3 (38)	-3.12 (-5.04, -1.20)	0.001	6 (78)	-2.28 (-3.41, -1.14)	<0.0001	2 (30)	-2.91 (-4.49, -1.34)	0.0003
3 h	3 (30)	-2.09 (-3.10, -1.08)	<0.0001	2 (18)	-3.05 (-5.60, -0.51)	0.02			
6 h				5 (70)	-2.66 (-3.77, -1.55)	<0.00001	2 (24)	-4.21 (-8.04, -0.39)	0.03
12 h				1 (10)	-2.55 (-4.44, -0.65)	0.008			
24 h	2 (18)	-1.74 (-2.98, -0.49)	0.006	4 (56)	-2.16 (-3.91, -0.41)	0.02	2 (30)	-5.46 (-7.67, -3.25)	<0.00001
72 h				2 (30)	-5.02 (-6.69, -3.36)	<0.00001	2 (30)	-5.28 (-7.00, -3.55)	<0.00001
168 h	2 (18)	-0.26 (-1.24, 0.73)	0.61						

[a]Time of post-reperfusion. RIPC, remote ischaemic pre-conditioning; RIPerC, remote ischaemic per-conditioning; RIPostC, remote ischaemic post-conditioning; OLT, orthotopic liver transplantation; I/R, ischaemia-reperfusion; 70% liver I/R, complete ischaemia of the median lobe and left lateral lobe (LLL) was achieved by clamping of the portal veins, hepatic arteries, and biliary branches using atraumatic microvascular clip; Hindlimb I/R, liver injury caused by the I/R injury of the hindlimb; HSR-I/R, haemorrhagic shock-resuscitation (HSR) following trauma contributes to organ dysfunction by causing I/R; THI, total hepatic ischaemia; SMD, standardised mean difference; CI, confidence interval; ALT, alanine transaminase; AST, aspartate aminotransferase.