

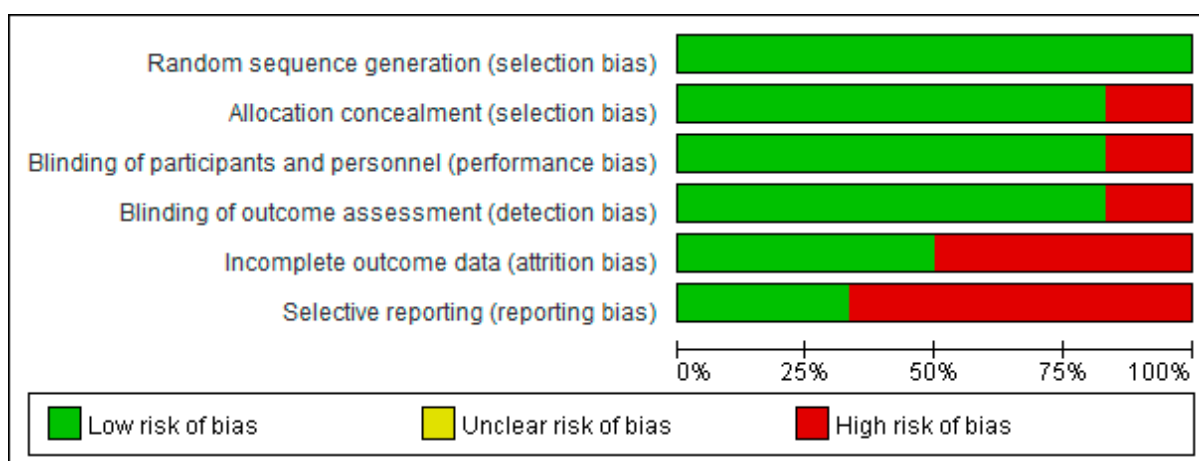
Table S1. Comprehensive list presenting the search strategy.

Embase		
No.	Searches	Results
1	body mass index.ti,ab.	22667
2	body weight.ti,ab.	13283
3	BMI.ti,ab.	10350
4	obesity.ti,ab.	100038
5	overweight.ti,ab.	22742
6	underweight.ti,ab.	1120
7	1 or 2 or 3 or 4 or 5 or 6	158528
8	(return of spontaneous circulation or ROSC).ti,ab. or exp heart arrest/ or cardiac arrest*.ti,ab. or cardiovascular arrest*.ti,ab. or heart arrest*.ti,ab. or cardiopulmonary arrest*.ti,ab. or asystol*.ti,ab. or pulseless electrical activity.ti,ab. or exp ventricular fibrillation/ or exp advanced cardiac life support/ or (advanced cardiac life support or ACLS).ti,ab. or exp cardiopulmonary resuscitation/ or CPR.mp. or cardiopulmonary resuscitation.ti,ab.	225563
9	7 and 8	684
Medline		
No.	Searches	Results
1	body mass index.ti,ab.	15585
2	body weight.ti,ab.	85251
3	BMI.ti,ab.	5398
4	obesity.ti,ab.	70263
5	overweight.ti,ab.	16438
6	underweight.ti,ab.	888
7	1 or 2 or 3 or 4 or 5 or 6	179224
8	(return of spontaneous circulation or ROSC).ti,ab. or exp heart arrest/ or cardiac arrest*.ti,ab. or cardiovascular arrest*.ti,ab. or heart arrest*.ti,ab. or cardiopulmonary arrest*.ti,ab. or asystol*.ti,ab. or pulseless electrical activity.ti,ab. or exp ventricular fibrillation/ or exp advanced cardiac life support/ or (advanced cardiac life support or ACLS).ti,ab. or exp cardiopulmonary resuscitation/ or CPR.mp. or cardiopulmonary resuscitation.ti,ab.	98574
9	7 and 8	257
Cochrane library		
No.	Searches	Results
1	MeSH descriptor: [Body Mass Index] explode all trees	10410
2	MeSH descriptor: [Body Weight] explode all trees	29197
3	MeSH descriptor: [Obesity] explode all trees	14556
4	MeSH descriptor: [Overweight] explode all trees	17275
5	MeSH descriptor: [Underweight] explode all trees	297
6	1 or 2 or 3 or 4 or 5	33853
7	MeSH descriptor: [Return of Spontaneous Circulation] explode all trees	1
8	MeSH descriptor: [Heart arrest] explode all trees	2001
9	MeSH descriptor: [Resuscitation] explode all trees	5207
	MeSH descriptor: [Advanced Cardiac Life Support] explode all trees	60
	#7 or #8 or #9 or #10	6496
15	#6 and #11	156

Table S2. Patients characteristics.

Author	N	BMI, kg/m ²	Age, year	Male sex, %	Witnessed, %	Bystander CPR, %	Shockable rhythm, %	HTN, %	DM, %	TTM, %
Aoki	517	Total	-	-	-	-	-	-	-	33.8
	68	< 25	67.3 ± 14.2	73	75	59	1.8	31	12	0
Bunch	78	25-30	62 ± 13.3	81	82	41	1.7	34	16	0
	67	> 30	61.0 ± 12.5	81	92	46	1.8	38	30	0
	6	<18.5	55.5 ± 27.2	50	33.3	0	0	16.7	0	100
Chen	79	18.5-25	54.0 ± 16.6	58.2	45.6	49.4	43.0	40.5	21.5	100
	88	25-30	59.3 ± 17.9	71.6	48.9	36.4	45.5	45.5	14.8	100
	88	>30	59.6 ± 15.2	53.4	68.2	37.5	44.3	58.0	43.2	100
Galatian	16	< 25	58.8 ± 12.3	68.75	-	-	6.3	-	-	0
ou	68	> 25	59.4 ± 12.6	73.5	-	-	16.2	-	-	0
	818	Total	60.9 (50.8-72.7)	70.2	88.8	52.6	54.3	44.5	18.3	100
	27	<18.5	58.0 (45.0-77.2)	44.4	81.5	18.5	33.3	18.5	0	100
Geri	377	18.5-25	58.7 (47.7-72.7)	68.2	84.9	40.6	53.6	23.9	9.8	100
	264	25-30	60.9 (51.1-72.4)	79.9	89.4	46.2	59.1	36.4	12.5	100
	150	>30	65.1 (55.9-72.6)	62.7	91.3	43.3	51.3	47.3	24.7	100
	605	Total	63 (53–74)	69.75	74.21	51.0	41.88	48.76	31.51	37.19
	75	<18.5	71 (62–79)	70.67	73.33	52.7	14.86	41.33	21.33	22.67
Lee	333	18.5-24.9	63 (54–75)	69.97	73.27	49.4	45.29	46.08	30.72	36.64
	163	25-29.9	61 (51–72)	70.55	76.69	51.5	45.00	57.41	37.04	44.17
	34	≥30	56.5 (42–72)	61.76	73.53	60.6	52.94	50	35.29	41.18

Figure S1. Assessment of study quality.



	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)
Aoki 2018	+	-	-	+	-	-
Bunch 2007	+	+	+	+	-	-
Chen 2021	+	+	+	+	+	-
Galatianou 2017	+	+	+	-	-	-
Geri 2016	+	+	+	+	+	+
Lee 2021	+	+	+	+	+	+

Figure S2. Subgroup analysis according to quality of study for the association between body mass index categories and neurological outcomes in patients with return of spontaneous circulation after out-of-hospital cardiac arrest.

