

Supplementary Table 1. Literature search strategy

Ovid:

Database(s): Embase 1988 to 2018 Week 11, EBM Reviews - Cochrane Central Register of Controlled Trials February 2018, EBM Reviews - Cochrane Database of Systematic Reviews 2005 to March 7, 2018, Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

Search Strategy:

#	Searches	Results
1	exp Acute Coronary Syndrome/	60165
2	exp Myocardial Infarction/	466063
3	exp heart infarction/	294219
4	((("coronary arter*" adj3 occlusion) or (heart adj2 infarct*) or "acute coronary syndrome*" or "cardiac infarct*" or "cardial infarct*" or "cardiogenic shock" or "heart attack*" or "myocardial infarct*" or "myocardial stunning" or "myocardium infarct*" or "premonitory infarction sign" or "subendocardial infarct*").ti,ab,hw,kw.	650947
5	1 or 2 or 3 or 4	655559
6	exp Extracorporeal Membrane Oxygenation/	24776
7	exp Extracorporeal Circulation/	135934
8	exp Oxygenators, Membrane/	2206

9	exp Heart-Lung Machine/	2878
10	(7 or 9) and oxygen*.mp.	39197
11	8 and (extracorporeal or "extra corporeal").mp.	1225
12	((("extra corporeal" adj3 oxygenation) or ("extra pulmonary" adj3 oxygenation) or (extracorporeal adj3 oxygenation) or (extrapulmonary adj3 oxygenation) or ECMO or "extracorporeal life support*" or "mechanical circulatory support*").ti,ab,hw,kw.	39960
13	6 or 10 or 11 or 12	53508
14	((percutaneous* adj5 ("left ventricular" or "left ventricle*") adj5 (assist* or unloading)) or (percutaneous* adj5 LVAD) or Impella or pLVAD).ti,ab,hw,kw.	1902
15	5 and 13 and 14	493
16	limit 15 to yr="1975 -Current"	492
17	remove duplicates from 16	355

Scopus:

1	TITLE-ABS-KEY(("coronary arter*" W/3 occlusion) or (heart W/2 infarct*) or "acute coronary syndrome*" or "cardiac infarct*" or "cardial infarct*" or "cardiogenic shock" or "heart attack*" or "myocardial infarct*" or "myocardial stunning" or "myocardium infarct*" or "premonitory infarction sign" or "subendocardial infarct*")
2	TITLE-ABS-KEY(("extra corporeal" W/3 oxygenation) or ("extra pulmonary" W/3 oxygenation) or (extracorporeal W/3 oxygenation) or

	(extrapulmonary W/3 oxygenation) or ECMO or "extracorporeal life support*" or "mechanical circulatory support*")
3	TITLE-ABS-KEY((percutaneous* W/5 ("left ventricular" or "left ventricle*") W/5 (assist* or unloading)) OR (percutaneous* W/5 LVAD) OR Impella OR pLVAD)
4	PUBYEAR AFT 1974
5	1 and 2 and 3 and 4
6	PMID(0*) OR PMID(1*) OR PMID(2*) OR PMID(3*) OR PMID(4*) OR PMID(5*) OR PMID(6*) OR PMID(7*) OR PMID(8*) OR PMID(9*)
7	5 and not 6

Supplementary Table 2. New-Castle Ottawa Scale for assessment of bias

Author/Year	Selection				Comparability	Outcome		
	Representativeness	Selection	Ascertainment	Outcome	Comparability	Assessment	Follow-up	Follow-up adequacy
Akkani 2018	*	*	*	*	*	*	*	*
Mourad 2017	*	*	*	*	*	*	*	*
Pappalardo 2017	*	*	*	*	**	*	*	*
Patel 2018	*	*	*	*	*	*	*	*
Tepper 2017	*	*	*	*	**	*	*	*

Footnote: The asterisk (*) denoted a maximum score achieved by the given study in the New-Castle Ottawa Scale