

B.1 Clinical search literature search strategy

Searches were constructed using a PICO framework where population (P) terms were combined with Intervention (I) and in some cases Comparison (C) terms. Outcomes (O) are rarely used in search strategies for interventions as these concepts may not be well described in title, abstract or indexes and therefore difficult to retrieve. Search filters were applied to the search where appropriate.

Table 12: Database date parameters and filters used

Database	Dates searched	Search filter used
Medline (OVID)	1995 - 14 October 2020	Exclusions
Embase (OVID)	1995 - 14 October 2020	Exclusions

Medline (Ovid) search terms

1.	exp Heart Valve Diseases/
2.	exp heart valves/
3.	((primary or secondary) adj valv* disease*).ti,ab.
4.	((valv* or flap* or leaflet*) adj1 (heart or cardiac) adj (disease* or disorder* or failure or failed or dysfunction* or insufficien* or repair* or replace* or damage* or leak*).ti,ab.
5.	((mitral or aortic or tricuspid or pulmon*) adj (valv* or flap* or leaflet*) adj (disease* or disorder* or failure or failed or dysfunction* or insufficien* or repair* or replace* or damage* or leak*).ti,ab.
6.	((mitral or aortic or tricuspid or pulmon*) adj3 (prolapse or regurgitation or stenosis or atresia or insufficienc*).ti,ab.
7.	exp Heart Murmurs/
8.	((heart or cardiac) adj murmur*).ti,ab.
9.	or/1-8
10.	letter/
11.	editorial/
12.	news/
13.	exp historical article/
14.	Anecdotes as Topic/
15.	comment/
16.	case report/
17.	(letter or comment*).ti.
18.	or/10-17
19.	randomized controlled trial/ or random*.ti,ab.
20.	18 not 19

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21.	animals/ not humans/
22.	exp Animals, Laboratory/
23.	exp Animal Experimentation/
24.	exp Models, Animal/
25.	exp Rodentia/
26.	(rat or rats or mouse or mice).ti.
27.	or/20-26
28.	9 not 27
29.	limit 28 to English language
30.	(exp child/ or exp pediatrics/ or exp infant/) not (exp adolescent/ or exp adult/ or exp middle age/ or exp aged/)
31.	29 not 30
32.	Magnetic Resonance Imaging/
33.	magnetic resonance angiography/
34.	(mri* or nmr* or magnetic resonance).ti,ab.
35.	(cmr or ((cardiac or cardiovascular) adj mr)).ti,ab.
36.	tomography, x-ray computed/ or computed tomography angiography/
37.	((x-ray or radiograph* or compute*) adj3 tomograph*).ti,ab.
38.	Coronary Angiography/ and (compute* or ct or tomograph*).ti,ab.
39.	((compute* or ct or tomograph*) adj3 angiograph*).ti,ab.
40.	((heart or cardiac or myocardial or imag* or scan* or diagnos*) adj2 (ct or cat)).ti,ab.
41.	(cta or ccta or tro-cta or msct).ti,ab.
42.	or/32-41
43.	31 and 42

Embase (Ovid) search terms

1.	exp valvular heart disease/
2.	exp heart valve/
3.	((primary or secondary) adj valv* disease*).ti,ab.
4.	((valv* or flap* or leaflet*) adj1 (heart or cardiac) adj (disease* or disorder* or failure or failed or dysfunction* or insufficien* or repair* or replace* or damage* or leak*).ti,ab.
5.	((mitral or aortic or tricuspid or pulmon*) adj (valv* or flap* or leaflet*) adj (disease* or disorder* or failure or failed or dysfunction* or insufficien* or repair* or replace* or damage* or leak*).ti,ab.
6.	((mitral or aortic or tricuspid or pulmon*) adj3 (prolapse or regurgitation or stenos?s or atresia or insufficienc*).ti,ab.
7.	exp heart murmur/
8.	((heart or cardiac) adj murmur*).ti,ab.
9.	or/1-8
10.	letter.pt. or letter/
11.	note.pt.
12.	editorial.pt.
13.	Case report/ or Case study/
14.	(letter or comment*).ti.
15.	or/10-14
16.	randomized controlled trial/ or random*.ti,ab.
17.	15 not 16

18.	animal/ not human/
19.	Nonhuman/
20.	exp Animal Experiment/
21.	exp Experimental animal/
22.	Animal model/
23.	exp Rodent/
24.	(rat or rats or mouse or mice).ti.
25.	or/17-24
26.	9 not 25
27.	limit 26 to English language
28.	(exp child/ or exp pediatrics/) not (exp adult/ or exp adolescent/)
29.	27 not 28
30.	nuclear magnetic resonance imaging/ or magnetic resonance angiography/
31.	(mri* or nmr* or magnetic resonance).ti,ab.
32.	(cmr or ((cardiac or cardiovascular) adj mr)).ti,ab.
33.	computed tomographic angiography/
34.	x-ray computed tomography/
35.	tomography, x-ray computed/ or computed tomography angiography/
36.	((x-ray or radiograph* or compute*) adj3 tomograph*).ti,ab.
37.	coronary angiography/ and (compute* or ct or tomograph*).ti,ab.
38.	((compute* or ct or tomograph*) adj3 angiograph*).ti,ab.
39.	((heart or cardiac or myocardial or imag* or scan* or diagnos*) adj2 (ct or cat)).ti,ab.
40.	(cta or ccta or tro-cta or msct).ti,ab.
41.	or/30-40
42.	29 and 41