

Supplemental Material

Table S1. Searching strategies in one of the databases.

Table S2. Results of quality assessment of included studies using Newcastle-OttawaQuality Assessment Scale (NOS).

Table S3. The sensitive analysis of ventricular fibrillation (VF)/ventricular tachycardia(VT)/appropriate ICD discharge events.

Figure S1. The comparisons of pre procedure left ventricular outflow tract (LVOT) pressure gradient (mmHg) and NYHA class III/IV patients between ASA groups and SM groups; (a) pre-procedure LVOT pressure gradient; (b) NYHA class III/IV.

Figure S2. The comparisons of baseline interventricular septal diameter (IVSd, mm) and left ventricular end diastolic diameter (LVEDd, mm) between ASA groups and SM groups; (a) IVSd; (b) LVEDd.

Figure S3. valuation of publication bias in the studies comparing ventricular arrhythmiasby funnel plot. RR, risk ratio.

Figure S4. Evaluation of publication bias in the studies comparing sudden cardiac death (SCD)/resuscitated sudden cardiac arrest (SCA) by funnel plot. RR, risk ratio.

Figure S5. Meta-regression for interaction of LVOT pressure gradient reduction with VT/VF incidence between ASA and SM groups.

Figure S6. Meta-regression for interaction of baseline EF (%) with VT/VF incidence between ASA and SM groups.

Figure S7. Meta-regression for interaction of baseline IVSd (mm) with VT/VF incidence between ASA and SM groups.

Figure S8. Meta-regression for interaction of baseline NYHA class III/IV proportion (%) with VT/VF incidence between ASA and SM groups.

Table S1. Searching strategies in one of the databases.

Searching order	Typed text
#1	Hypertrophic obstructive cardiomyopathy
#2	Idiopathic hypertrophic sub-aortic stenosis
#3	Asymmetric septal hypertrophy
#4	#3 OR #2 OR #1
#5	Septal reduction therapy
#6	Septal myectomy
#7	Morrow septal myectomy
#8	Modified morrow septal myectomy
#9	#8 OR #7 OR #6 OR #5
#10	alcohol septal ablation
#11	Percutaneous transluminal myocardial ablation
#12	#11 OR #10
#13	#12 AND #9 AND #4

Table S2. Results of quality assessment of included studies using Newcastle-Ottawa Quality Assessment Scale (NOS).

Study/year	1	2	3	4	5A	5B6	7	8	Score
Nagueh SF, 2001	★	★	★	—	★	★	★	★	7
Qin JX, 2001	★	★	★	—	—	—	★	★	★ 6
Firoozi S, 2002	★	★	★	—	★	★	★	★	7
Jiang TY, 2004	★	★	★	—	★	—	★	★	6
Ralph-Edwards A, 2005	★	★	★	—	★	★	★	—	★ 7
Van der Lee C, 2005	★	★	★	—	★	★	★	★	7
Valeti US, 2007	★	★	★	—	★	★	★	★	7
Ten Cate FJ, 2010	★	★	★	—	★	—	★	★	★ 7
Sorajja P, 2012	★	★	★	—	★	★	★	★	★ 8
Steggerda RC, 2014	★	★	★	—	★	—	★	★	6
Vriesendorp PA, 2014	★	★	★	—	★	—	★	★	★ 7
Samardhi H, 2014	★	★	★	—	★	—	★	★	6
Sedehi D, 2015	★	★	★	—	★	★	★	★	6
Yang YJ, 2016	★	★	★	—	★	—	★	★	★ 7
Cavigli L, 2018	★	★	★	—	★	—	★	★	★ 7
Guo HC, 2018	★	★	★	—	★	—	★	★	★ 7
Nguyen A, 2019	★	★	★	—	★	★	★	★	7
Kimmelstiel C, 2019	★	★	★	—	★	★	★	★	★ 8
Lemor A, 2020	★	★	★	—	★	★	★	★	7
Afanasyev AV, 2020	—	—	—	—	★	★	★	★	★ 8

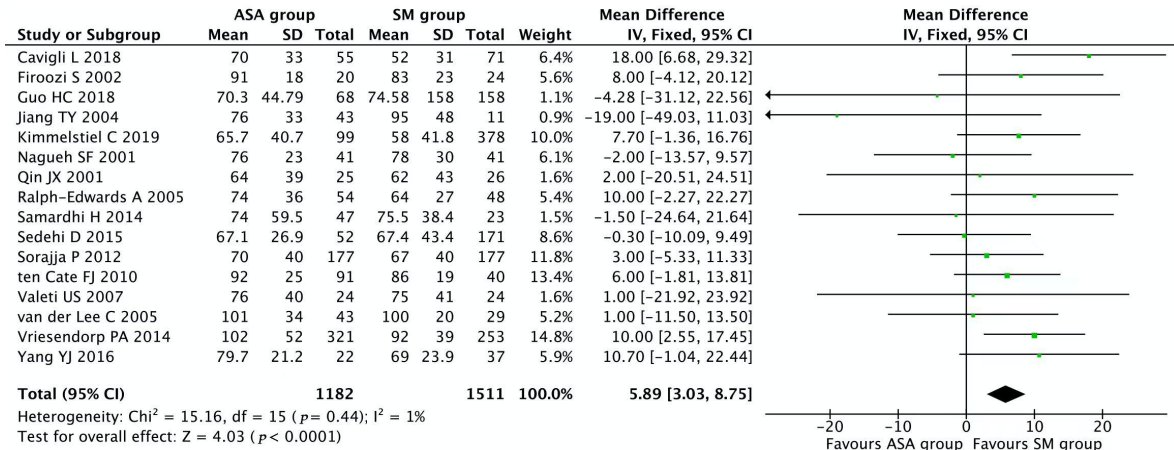
(1) Indicates the exposed cohort was truly representative; (2) the non-exposed cohort was drawn from the same community; (3) ascertainment of the exposure; (4) the outcome of interest was not present at the start of the study; (5A) cohorts were comparable on the basis of diagnosis of obstructive hypertrophic cardiomyopathy. (5B) cohorts were comparable under the matching of other baseline characteristics. (6) quality of outcome assessment; (7) Follow-up was long enough for outcome to occur; (8) complete follow-up (> 80% follow-up or description of those lost).

Table S3. The sensitive analysis of ventricular fibrillation/ventricular tachycardia/appropriate ICD discharge events.

Study	Risk ratio	Confidence interval
Nagueh SF, 2001	1.97	1.64-2.37
Jiang TY, 2004	1.97	1.64-2.37
van der Lee C, 2005	1.95	1.63-2.34
Valeti U, 2007	1.97	1.64-2.37
ten Cate FJ, 2010	1.92	1.60-2.31
Sorajja P, 2012	1.96	1.63-2.35
Samardhi H, 2014	1.97	1.64-2.37
Vriesendorp PA, 2014	1.90	1.58-2.28
Steggerda RC, 2014	1.96	1.63-2.35
Yang YJ, 2016	1.98	1.65-2.37
Kimmelstiel C, 2019	2.01	1.68-2.42
Lemor A, 2020	4.16	2.12-8.16

Figure S1. The comparison of pre procedure left ventricular outflow tract (LVOT) pressure gradient (mmHg) between ASA groups and SM groups

(a) comparison of pre-procedure LVOT pressure gradient.



(b) comparison of baseline NYHA III/IV patients.

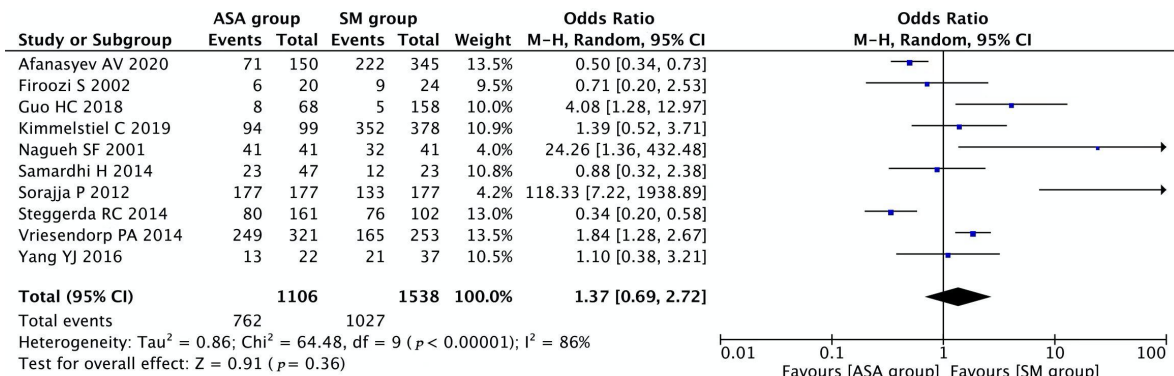
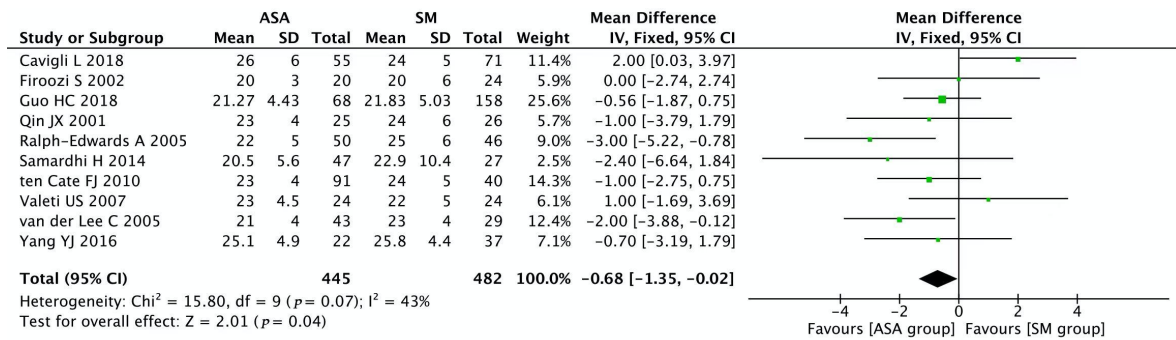


Figure S2. The comparisons of baseline interventricular septal diameter (IVSd, mm) and left ventricular end diastolic diameter (LVEDd, mm) between ASA groups and SM groups.

(a) comparison of baseline IVSd.



(b) comparison of baseline LVEDd.

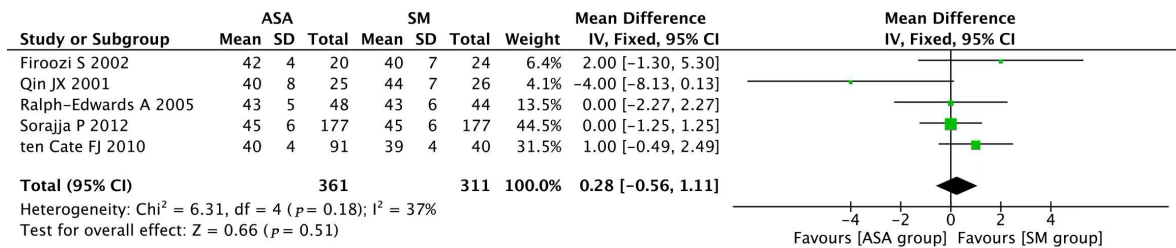


Figure S3. Evaluation of publication bias in the studies comparing ventricular arrhythmias by funnelplot.

RR, risk ratio.

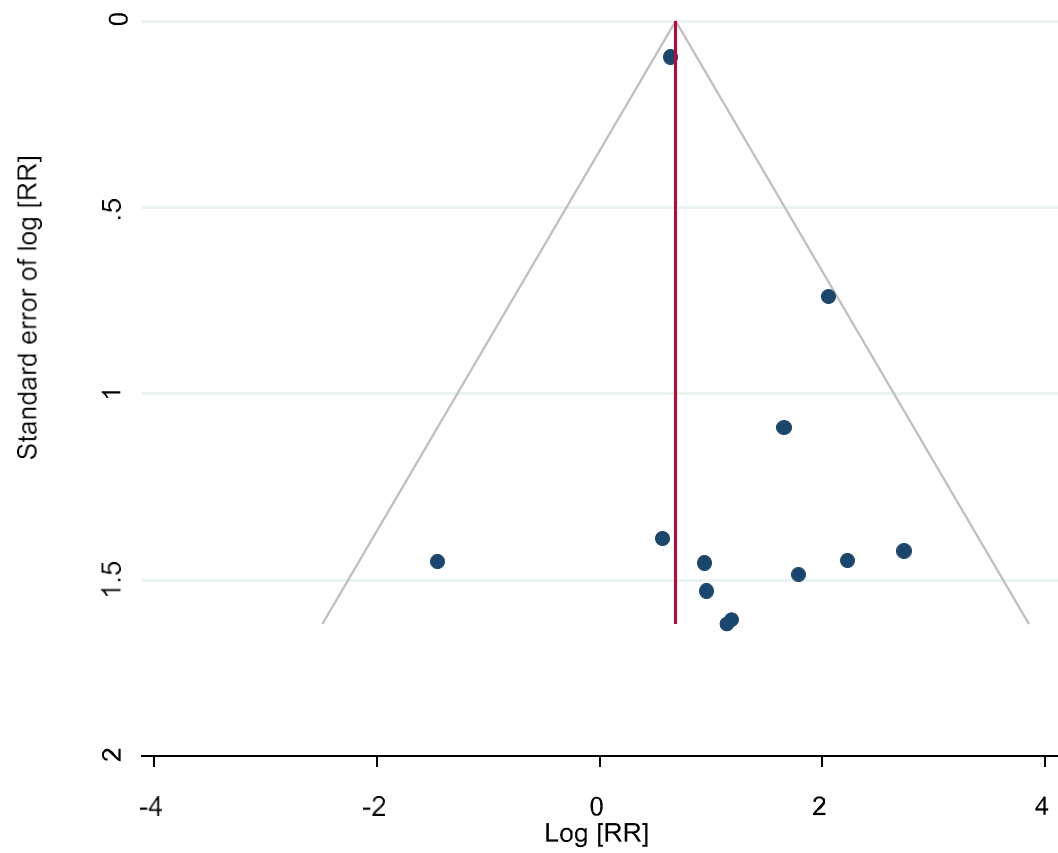


Figure S4. Evaluation of publication bias in the studies comparing sudden cardiac death (SCD)/resuscitated sudden cardiac arrest (SCA). RR, risk ratio.

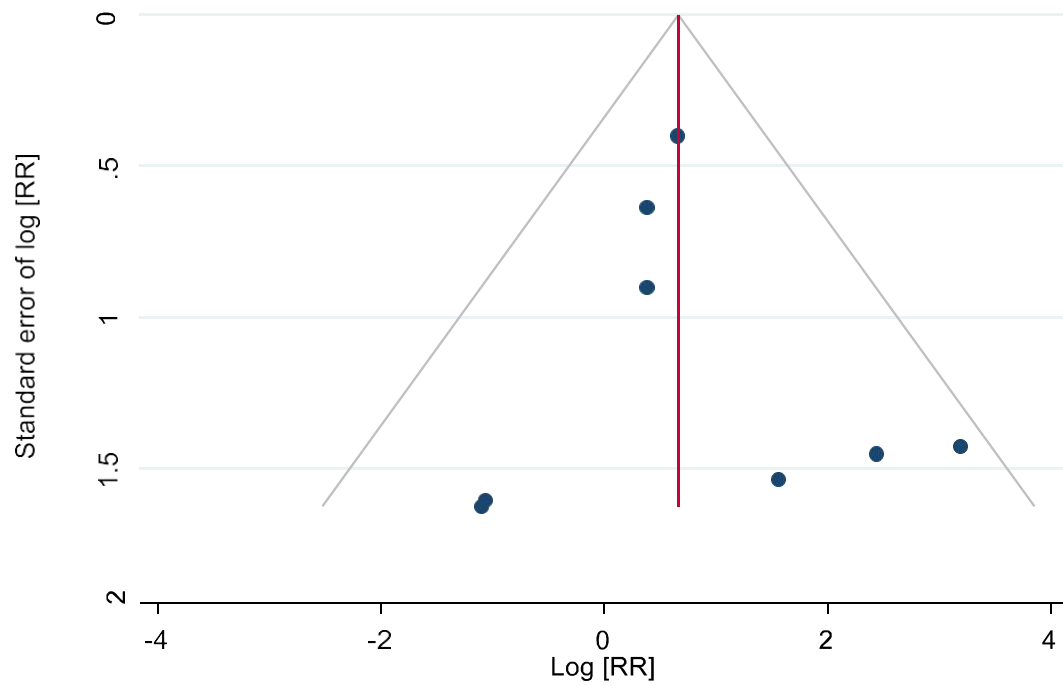


Figure S5. Meta-regression for interaction of LVOT pressure gradient reduction with VT/VF

incidence between ASA and SM groups.

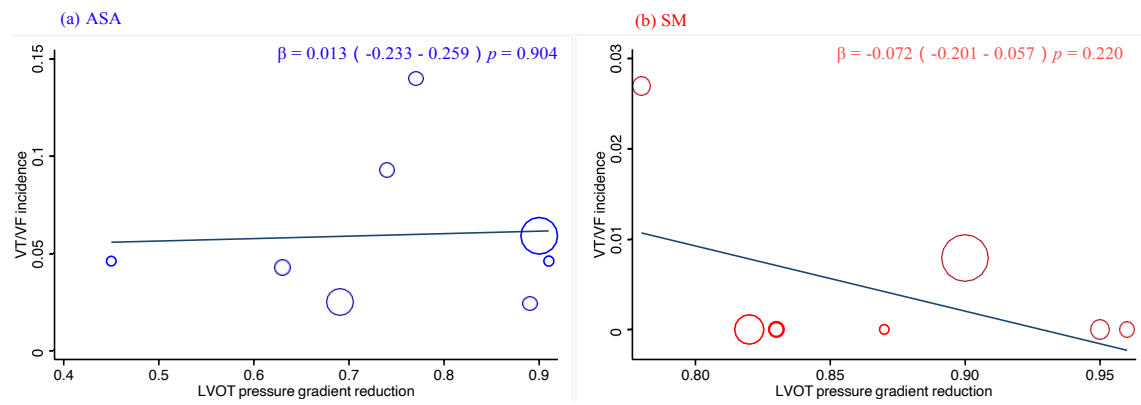


Figure S6. Meta-regression for interaction of baseline EF (%) with VT/VF incidence between ASA and SM groups.

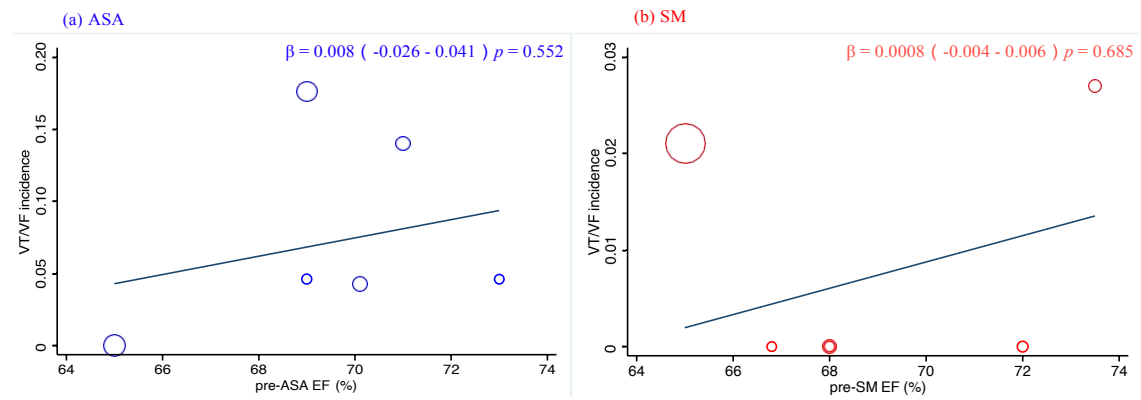


Figure S7. Meta-regression for interaction of baseline IVSd (mm) with VT/VF incidence between ASA and SM groups.

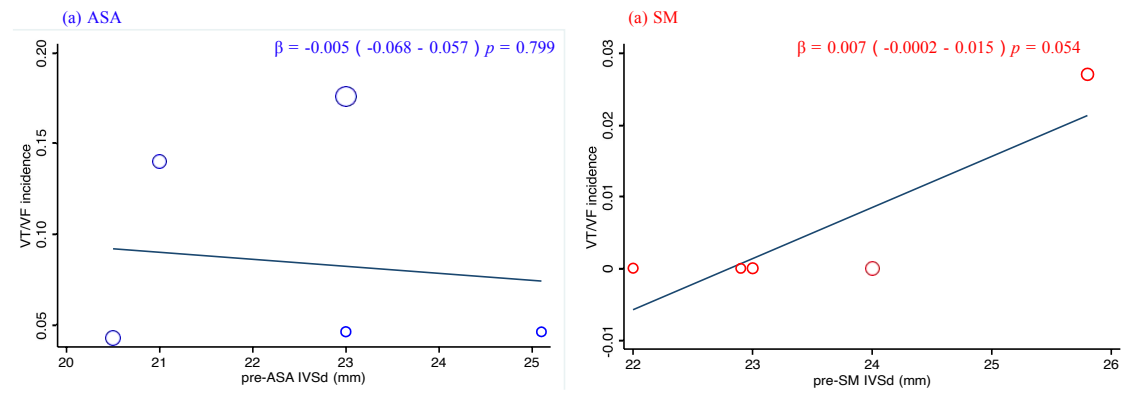


Figure S8. Meta-regression for interaction of baseline NYHA class III/IV proportion (%) with VT/VF incidence between ASA and SM groups.

