Supplementary materials

Table S1. Detailed search strategy.

Database	Search string
PubMed MEDLINE 387 results	((((("Cardiomyopathy, Hypertrophic"[Mesh]) OR (Hypertrophic Cardiomyopathies)) OR (Hypertrophic Obstructive Cardiomyopathies)) OR (Hypertrophic Obstructive Cardiomyopathy)) AND (((((Mavacamten) OR ("MYK-461")) OR (Aficamten)) OR (CK-274)) OR (Cardiac myosin inhibitors))
ClinicalTrials.gov 31 results	Hypertrophic Cardiomyopathy | Aficamten OR Aficamten \ (CK-3773274\) \ (5 mg, 10 mg, 15 mg, and 20 mg\) OR Mavacamten OR cardiac myosin inhibitor OR MYK-461
Cochrane Library 114 results	Cardiomyopathy, Hypertrophic MeSH AND cardiac myosin inhibitor OR Mavacamten OR MYK-461 OR Aficamten OR CK-274 OR CK-3773274

MeSH: Medical Subject Headings.

Table S2. PICO table, inclusion & exclusion criteria.

Patient	Hypertrophic cardiomyopathy
Intervention	Cardiac myosin inhibitors, either mavacamten or aficamten
Comparator	Placebo drug

Outcome	Primary outcomes: • change in resting LVOT gradient Secondary outcomes: • proportion of patients achieving NYHA class improvement ≥ 1 • change in left ventricular ejection fraction (LVEF)
Study design	Randomized controlled trials
Inclusion criteria	• RCTs have patients with hypertrophic cardiomyopathy. • RCTs with patients being treated with Cardiac Myosin Inhibitors, either Mavacamten or Aficamten, compared with placebo • No restriction on race, age, gender, ethnicity, or publication date will be applied
Exclusion criteria	• Any observational study, case report, case series, conference paper • Patients not being treated with cardiac myosin inhibitors • Non-English language articles and non-randomized, one-arm studies

LVOT: left ventricular outflow tract; NYHA: New York Heart Association; LVEF: left ventricular ejection fraction; RCTs: randomized controlled trials.

Table S3. Datasheet for the decrease in resting LVOT gradient.

Author	TE	seTE	treat1	treat2	treat1.long	treat.long	Versus	Publication year
Olivotto et al. 2020	–62.60	0.8608	MV	PL	Mavacamten	Placebo	MV vs. PL	2020
Desai et al. 2022	–65.30	1.3315	MV	PL	Mavacamten	Placebo	MV vs. PL	2022

Tian et al.2023	–57.83	8.2256	MV	PL	Mavacamten	Placebo	MV vs. PL	2023
Maron et al. 2023	–59.00	1.7183	AF	PL	Aficamten	Placebo	AF vs. PL	2023
Maron et al. 2024	–29.63	5.3563	AF	PL	Aficamten	Placebo	AF vs. PL	2024

LVOT: left ventricular outflow tract; TE: True Effect; seTE: standard error of True Effect; MV: mavacamten; PL: placebo; AF: aficamten. treat1 and treat2: these columns represent the first and second treatment groups, respectively; treat1.long and treat.long: these columns represent the full name of the abbreviations (treatment) used in the treat1 and treat2 columns, respectively.

Table S4. Datasheet for NYHA class improvement.

Author	**TE**	**seTE**	**treat1**	**treat2**	**treat1.long**	**treat.long**	**Versus**	**Publication year**
Olivotto et al. 2020	2.0813	0.1468	MV	PL	Mavacamten	Placebo	MV vs. PL	2020
Ho et al. 2020	1.1536	0.3522	MV	PL	Mavacamten	Placebo	MV vs. PL	2020
Desai et al. 2022	2.9167	0.276	MV	PL	Mavacamten	Placebo	MV vs. PL	2022
Tian et al.2023	4.000	0.4751	MV	PL	Mavacamten	Placebo	MV vs. PL	2023
Maron et al. 2023	1.7411	0.4517	AF	PL	Aficamten	Placebo	AF vs. PL	2023
Maron et al. 2024	2.4068	0.1652	AF	PL	Aficamten	Placebo	AF vs. PL	2024

NYHA: New York Heart Association; TE: True Effect; seTE: standard error of True Effect; MV: mavacamten; PL: placebo; AF: aficamten. treat1 and treat2: these columns represent the first and

second treatment groups, respectively; treat1.long and treat.long: these columns represent the full name of the abbreviations (treatment) used in the treat1 and treat2 columns, respectively.

Table S5. Datasheet for the decrease in LVEF.

Author	TE	seTE	treat1	treat2	treat1.long	treat.long	Versus	Publication year
Olivotto et al. 2020	–5.2	0.036	MV	PL	Mavacamten	Placebo	MV vs. PL	2020
Ho et al. 2020	–1.8	0.463	MV	PL	Mavacamten	Placebo	MV vs. PL	2020
Desai et al. 2022	–4.0	0.765	MV	PL	Mavacamten	Placebo	MV vs. PL	2022
Tian et al.2023	0.01	1.361	MV	PL	Mavacamten	Placebo	MV vs. PL	2023
Maron et al. 2023	–12.0	0.575	AF	PL	Aficamten	Placebo	AF vs. PL	2023
Maron et al. 2024	–4.8	0.791	AF	PL	Aficamten	Placebo	AF vs. PL	2024

LVEF: left ventricular ejection fraction; TE: True Effect; seTE: standard error of True Effect; MV: mavacamten; PL: placebo; AF: aficamten. treat1 and treat2: these columns represent the first and second treatment groups, respectively; treat1.long and treat.long: these columns represent the full name of the abbreviations (treatment) used in the treat1 and treat2 columns, respectively.

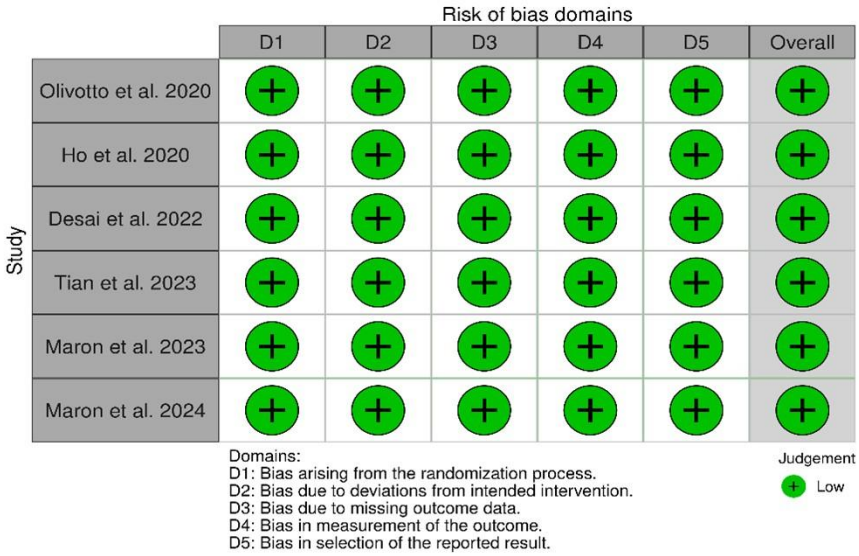

Figure S1. Quality assessment of the included randomized controlled trials (RCTs).

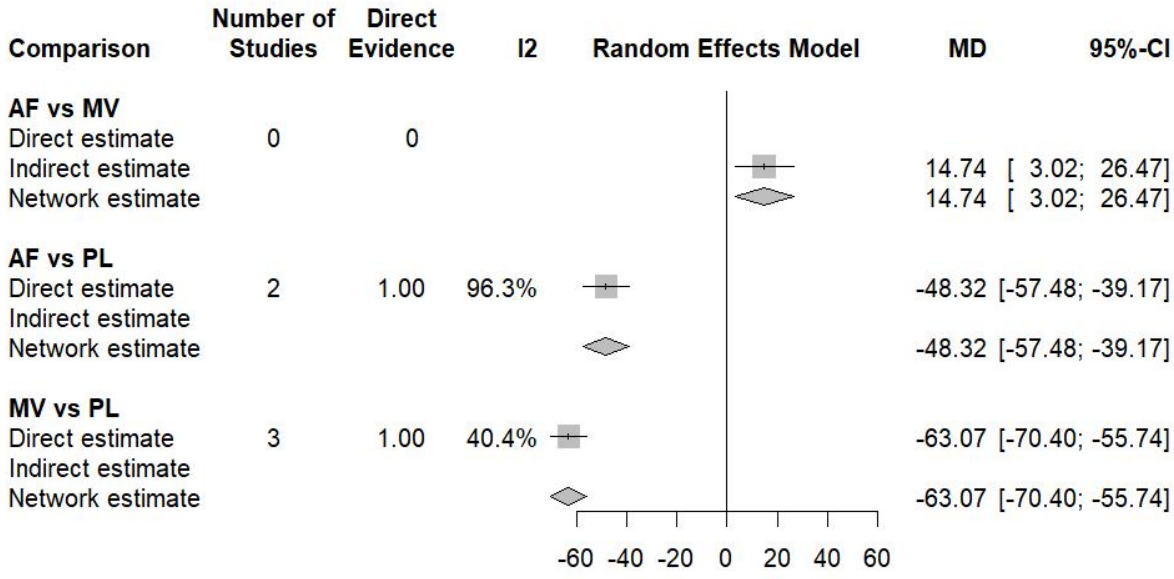

Figure S2. Split network graph of the change in resting LVOT gradient. LVOT: left ventricular outflow tract; MD: mean difference.

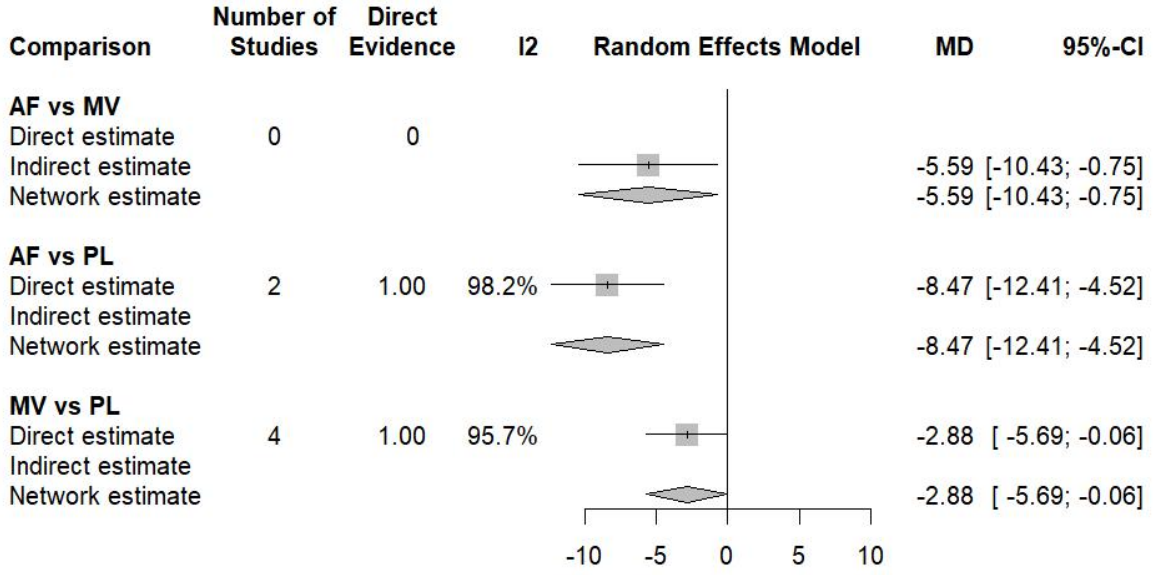

Figure S3. Split network graph of change in LVEF. LVEF: left ventricular ejection fraction; MD: mean difference.

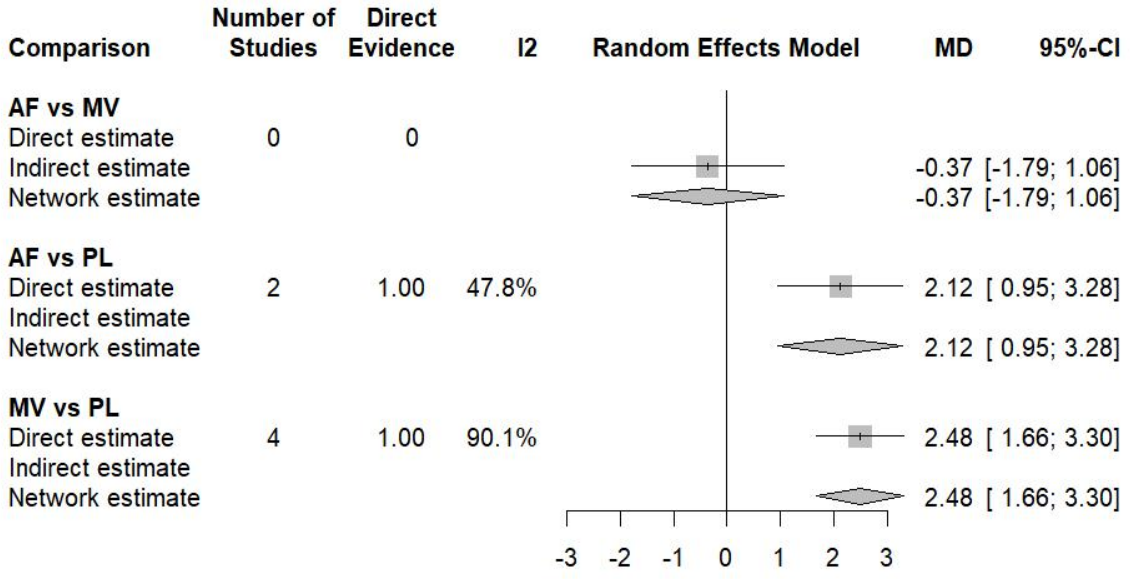

Figure S4. Split network graph of NYHA class improvement. NYHA: New York Heart Association; MD: mean difference.