

Table S1. RCTs on the use of mineralocorticoid receptor antagonists (MRAs) in HFpEF.

Trial	Design Study	Patients	Population Characteristics	LVEF	Groups of Treatment	Primary Endpoint (PE)	Results
<u>RANDOMIZED CLINICAL TRIALS</u>							Adj. Mean Diff; (95% CI)
Aldo-DHF [125]	Multicenter, randomized, placebo-controlled, double-blinded trial	422	• HF NYHA II-III ambulatory	≥50%	Spironolactone 25 mg (<i>n</i> = 213) vs. placebo (<i>n</i> = 209)	Changes at 12 months FU E/e' and VO2 peak	-1.5; -2.0-0.9; <i>p</i> < 0.001
							HR; (95% CI)
TOPCAT-trial [98]	Multicenter, international, randomized, double-blind, placebo-controlled trial	3445	• HF NYHA II-III	≥45%		Composite of CV mortality, aborted cardiac arrest, or HHF	0.89; 0.77-1.04; <i>p</i> = 0.14
<u>ONGOING CLINICAL TRIALS</u>							
FINEARTS-HF (NCT04435626)	Multicenter, randomized, double-blind, parallel-group, placebo-controlled trial	6000	<ul style="list-style-type: none"> • HF NYHA class II-IV Ambulatory or hospitalized • On diuretics • Structural heart abnormalities: <ul style="list-style-type: none"> ○ LAD ≥3.8 cm ○ LAA ≥ 20 cm² ○ LAVI >30 mL/m² ○ LVMI ≥115 g/m² (σ)/95 g/m² (♀) ○ Septal thickness or posterior wall thickness ≥1.1 cm • NT-proBNP ≥300 pg/mL or BNP ≥100 pg/mL in sinus rhythm • NT-proBNP ≥900 pg/mL or BNP ≥300 pg/mL in AF 	≥40%	Finerenone vs placebo	Rate of CV death and HF events (HHF or urgent HF visit)	Ongoing
MIRACLE (NCT04595370)	Phase-2b, randomized, double-blind, active-controlled, multicenter study		<ul style="list-style-type: none"> • HF NYHA II-III class • CKD with eGFR 20-60 mL/min/1.73 m² 	<60%	<ul style="list-style-type: none"> - Balcinrenone Dose A + dapagliflozin 10 mg - Balcinrenone Dose B + dapagliflozin 10 mg - Balcinrenone Dose C + dapagliflozin 10 mg - Dapagliflozin 10 m 	Percent change from baseline in UACR at 12 weeks	Ongoing
SPIRIT-HF (NCT04727073)	Double-blind, randomized, placebo-controlled, parallel-group, interventional, phase-III study		• Symptomatic HF NYHA II-IV class	Mid-range (40-49%) or preserved (≥50%)	Spironolactone (25-50 mg) vs. placebo	Composite of recurrent HHF and CV death	Ongoing

SPIRRIT-HFpEF (NCT02901184)	Registry-randomized clinical trial	<ul style="list-style-type: none">• Stable HF NYHA Class II-IV• NT-proBNP >300 ng/L (or BNP >100 pg/mL) in sinus rhythm	≥40%	Spironolactone vs. placebo	Primary outcome CV death or time to HHF	Ongoing
		<ul style="list-style-type: none">• NT-proBNP >750 ng/L (or BNP >250 pg/mL) in AF• NT-proBNP >1200 ng/L (or BNP >400 pg/mL) within the last 12 months, even if most recent value is lower.				
		<ul style="list-style-type: none">• Regular use of LD				

CV: cardiovascular; HHF heart failure hospitalizations; NYHA: New York Heart Association; HR: hazard ratio; CI: confidence interval; LAD: left atrial diameter; LAA: left atrial area; LAVI:left atrial volume index; LVMI: left ventricular mass index; NT-proBNP: n-terminal prohormone B-type natriuretic peptide; BNP: B-type natriuretic peptide;; AF: atrial fibrillation; CKD: chronic kidney disease; UACR: urine albumin-to-creatinine ratio; and LD: loop diuretics.

Table S2. RCTs on SGLT2i use in HFpEF.

	N° pt	DM	Follow-Up (Median)	Age	Sex (% Female)	LVEF*	Treatment	Primary Outcome	HR; (95% CI)
EMPEROR-PRESERVED [51] NCT03057951	5988	with or without DM	26.2 months	71.8	44.6%	54%	Empagliflozin	CV deaths HHF	0.79; (0.69–0.90) <i>p</i> <0.001
PRESERVED-HF [133] NCT03030235	324	with or without DM	3.0 years	70.0	57%	60%	Dapagliflozin	KCCQ-CS at 12 weeks after treatment initiation	68.6; (66.2, 71.0) <i>p</i> 0.001
DELIVER [52] NCT03619213.	6263		2.3 year	71.8	43.6%	54%	Dapagliflozin	Composite of worsening HF or CV death*	0.82; (0.73–0.92) <i>p</i> <0.001
SOLOIST-WHF [134] NCT03521934.	1222	with DM and recent HF worsening	9.0 months	70	32.6%	20% with LVEF >50%	Sotagliflozin	Total number of CV deaths HHF HF urgent visits	0.67 (0.52–0.85); <i>p</i> <0.001
EMPERIAL-PRESERVED NCT03448406 [137]	315	with or without DM	12 weeks	73.5	43.2	53.1	Empagliflozin	-6MWT change in week 12	<i>p</i> =0.37
CHIEF-HF NCT04252287 [138]	476	with or without DM	2 weeks	63.4 ± 13.3	45%	50%(60%)	Canagliflozin (100 mg)	Change in KCCQ TSS at 12 weeks	100 mg of canagliflozin or placebo
VERTIS CV NCT01986881 [139]	8246	with DM	3.5 years	64.4	30%	1007 patients with LVEF >45%)	Ertugliflozin	CV death, nonfatal MI, nonfatal stroke	0.97 (0.85–1.11) <i>p</i> <0.001
SCORED [134].	10,584	with DM, CKD**	16 months	72	40%	>45%	Sotagliflozin	risk of the composite of CV deaths, HHF	0.95 (0.86–1.05)
DECLARED-TIMI-58 [140]	17,160	with DM and CVD or multiple CVD risk factors	4.2 years	72	37%	1316 patients with 55%	dapagliflozin	Primary safety outcome Non-inferiority to placebo with respect to MACE	Primary safety outcome: <i>p</i> <0.001 for noninferiority Primary efficacy outcomes:

									<ul style="list-style-type: none"> Primary efficacy outcomes: <ul style="list-style-type: none"> MACE: CV death, MI, or ischemic stroke CV death or HHF Difference in change in BNP from baseline to 12 weeks between the patients receiving luseogliflozin and those receiving voglibose 	<ul style="list-style-type: none"> MACE 0.93; 0.84–1.03; $p=0.17$ CV death or HHF 0.83; 0.73–0.95; $p=0.005$
MUSCAT-HF NCT03315143 [141]	160	<ul style="list-style-type: none"> Luseogliflozin (82) Voglibose (83) 	DM and HF	12 weeks		>45%	Luseogliflozin or voglibose			
CANDLE NCT03315143 [142]	253		DM and stable HF	24 weeks	68	25%	≥50% (71%)	canagliflozin 100 mg or glimepiride	Percentage change (post/pre –1) from baseline in NT-proBNP at week 24.	0.48; –0.13–1.59, $p=0.226$

LVEF: left ventricle ejection fraction; DM: diabetes mellitus; CHD: chronic kidney disease; HHF: heart failure hospitalizations; MACE: major adverse cardiovascular events; BNP: brain natriuretic peptide; and KCCQ TSS: Kansas City Cardiomyopathy Questionnaire Total Symptom Score.