

Clinical trials of diuretics for heart failure in all type of patients

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1 adenosine A1 receptor antagonist

Trial	Treatments	Patients	Trials design and methods
rolofylline vs placebo			
PROTECT-1 [NCT00328692] n=NA	-	-	

References

PROTECT-1, :

2 aldosterone-receptor blockers

Trial	Treatments	Patients	Trials design and methods
spironolactone vs control			
Cicoira , 2002 n=54/52 follow-up: 12 months	spironolactone 12.5 to 50 mg/day versus control	patients with chronic heart failure	Parallel groups open
Cicoira , 2004 n=47/46 follow-up: 12 months	spironolactone versus control	chronic heart failure patients	open
Ramires , 2000 n=19/16 follow-up: 20 weeks	spironolactone versus standard medical treatment	patients with systolic dysfunction and NYHA class III CHF secondary to dilated or ischemic cardiomyopathy	Parallel groups open
eplerenone vs placebo			
EMPHASIS-HF , 2010 [NCT00232180] n=1364/1373 follow-up: 21 months	eplerenone versus placebo	patients with New York Heart Association class II heart failure and an ejection fraction of no more than 35%	Parallel groups double blind 29 countries
REMODEL <i>ongoing</i> [NCT00082589] n=NA follow-up:	Eplerenone versus placebo	Patients with left ventricular systolic dysfunction (EF Less Than or Equal to 35%) and mild to moderate heart failure	Parallel groups double blind

continued...

Trial	Treatments	Patients	Trials design and methods
<i>Weir ongoing</i> [NCT00132093] n=NA follow-up: 6 montsh	eplerenone versus placebo	patients with acute myocardial infarction	Parallel groups double blind
spironolactone vs placebo			
<i>Agostoni , 2005</i> n=14/15 follow-up: 6 months	spironolactone 25mg/d versus placebo	stable chronic heart failure patients with reduced influences lung diffusion (DLCO)	Parallel groups open Italy
<i>Barr , 1995</i> n=28/14 follow-up: 8 weeks	spironolactone 50 to 100 mg/day, titrated to blood pressure and plasma potassium (added to an angiotensin-converting enzyme inhibitor) versus placebo	patients with New York Heart Association II to III congestive heart failure	Parallel groups double blind
<i>Farquharson , 2000</i> n=10/10 follow-up: 4 weeks	spironolactone 50 mg/d versus placebo	patients with NYHA class II to III chronic heart failure on standard diuretic/ACE inhibitor therapy	double blind
<i>Macdonald , 2004</i> n=43/43 follow-up: 3 months	spironolactone 12.5-50 mg/d versus placebo	patients with New York Heart Association class I-II congestive heart failure taking optimal treatment (including beta blockers)	Cross over double blind
<i>MacFadyen , 1997</i> n=21/16 follow-up: 8 weeks	spironolactone (50-100 mg/day) versus placebo	patients with stable chronic heart failure	Parallel groups double blind
<i>Mottram , 2004</i> n=30 follow-up: 6 months	spironolactone 25 mg/d versus placebo	hypertensive patients with diastolic heart failure	double blind
<i>RALES , 1998</i> n=822/841 follow-up: 24 mo	spironolactone (25 to 50 mg daily) versus placebo	patients with severeheart failure	Parallel groups Open World
<i>Tsutamoto , 2001</i> n=20/17 follow-up: 12 weeks	spironolactone 25 mg daily versus placebo	patients with mild-to-moderate nonischemic congestive heart failure	Parallel groups double blind Japan
<i>Yee , 2001</i> n=28/28 follow-up: 4 weeks	spironolactone 50mg/d versus placebo	patients with New York Heart Association class II to IV congestive heart failure	double blind
<i>PIE II ongoing</i> [NCT00123955] n=NA follow-up: 9 months	Spironolactone 25mg tablet daily for 9 months versus placebo	elderly patients with isolated diastolic heart failure	Parallel groups double blind
spironolactone+captopril vs captopril			

continued...

Trial	Treatments	Patients	Trials design and methods
Han , 1994 n=19/16 follow-up: 4 weeks	captopril plus spironolactone versus captopril alone	patients with refractory CHF and New York Heart Association functional class IV without renal dysfunction, hypotension and hyperkalemia	open China
aldactone vs furosemide			
Bednarz , 2000 n=11/10 follow-up:	Aldactone 200 mg i.v versus furosemide 20 mg i.v	patients with NYHA class III to IV congestive heart failure	open
spironolactone+furosemide vs spironolactone+butizide			
Mauersberger , 1985 n=22 follow-up:	spironolactone 50mg + furosemide 20 mg versus spironolactone 50mg + butizide 5mg	patients with congestive heart failure	open

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3 device

Trial	Treatments	Patients	Trials design and methods
Ultrafiltration vs Diuretics			

continued...

Trial	Treatments	Patients	Trials design and methods
UNLOAD [NCT00124137] n=NA follow-up:	Ultrafiltration (Aquadex system) versus IV Diuretics	Patients Hospitalized for Acute Decompensated Heart Failure	Parallel groups open

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4 Diuretics

Trial	Treatments	Patients	Trials design and methods
amiloride vs placebo			
Cheitlin , 1991 n=12/12 follow-up: 12 weeks	amiloride versus placebo	men with a history of congestive heart failure	Cross over double blind
diuretic agents vs placebo			
Burr , 1977 n=52/54 follow-up: 12 weeks	diuretic agents versus placebo (withdrawals)	elderly patients taking long-term diuretics	Parallel groups double blind
furosemide vs placebo			
Mathur , 1984 n=5/5 follow-up:	furosemide hydrochlorotiazide versus placebo	patient with pulmonary heart disease due to severe chronic airflow obstruction and clinical features of congestive heart failure during respiratory failure	Cross over double blind
piretanide vs placebo			
Sherman , 1986 n=20/18 follow-up: 4 weeks	piretanide versus placebo	patients with mild to moderately severe congestive heart failure	Parallel groups double blind
spironolactone vs placebo			
Agostoni , 2005 n=14/15 follow-up: 6 months	spironolactone 25mg/d versus placebo	stable chronic heart failure patients with reduced influences lung diffusion (DLCO)	Parallel groups open Italy
Barr , 1995 n=28/14 follow-up: 8 weeks	spironolactone 50 to 100 mg/day, titrated to blood pressure and plasma potassium (added to an angiotensin-converting enzyme inhibitor) versus placebo	patients with New York Heart Association II to III congestive heart failure	Parallel groups double blind

continued...

Trial	Treatments	Patients	Trials design and methods
Farquharson , 2000 n=10/10 follow-up: 4 weeks	spironolactone 50 mg/d versus placebo	patients with NYHA class II to III chronic heart failure on standard diuretic/ACE inhibitor therapy	double blind
Macdonald , 2004 n=43/43 follow-up: 3 months	spironolactone 12.5-50 mg/d versus placebo	patients with New York Heart Association class I-II congestive heart failure taking optimal treatment (including beta blockers)	Cross over double blind
MacFadyen , 1997 n=21/16 follow-up: 8 weeks	spironolactone (50-100 mg/day) versus placebo	patients with stable chronic heart failure	Parallel groups double blind
Mottram , 2004 n=30 follow-up: 6 months	spironolactone 25 mg/d versus placebo	hypertensive patients with diastolic heart failure	double blind
RALES , 1998 n=822/841 follow-up: 24 mo	spironolactone (25 to 50 mg daily) versus placebo	patients with severe heart failure	Parallel groups Open World
Tsutamoto , 2001 n=20/17 follow-up: 12 weeks	spironolactone 25 mg daily versus placebo	patients with mild-to-moderate nonischemic congestive heart failure	Parallel groups double blind Japan
Yee , 2001 n=28/28 follow-up: 4 weeks	spironolactone 50mg/d versus placebo	patients with New York Heart Association class II to IV congestive heart failure	double blind
PIE II ongoing [NCT00123955] n=NA follow-up: 9 months	Spironolactone 25mg tablet daily for 9 months versus placebo	elderly patients with isolated diastolic heart failure	Parallel groups double blind
various diuretics vs placebo			
De jong , 1994 n=29/34 follow-up: 8 weeks	diuretics versus placebo (diuretics withdrawal)	patients aged 65 years or older and taking diuretic drugs	Parallel groups double blind the Netherlands
Myers , 1982 n=77 follow-up: 52 weeks	various diuretics versus placebo (withdrawals)	elderly not receiving concurrent digoxin therapy	Parallel groups double blind
Walma , 1997 n=100/102 follow-up: 14 weeks	various diuretics versus placebo (withdrawals)	elderly patients taking long-term diuretics without manifest heart failure or hypertension	Parallel groups double blind
hydrochlorothiazide vs benazepril			
Nordrehaug , 1992 n=29/29 follow-up: 8 weeks	hydrochlorothiazide 50 mg daily versus benazepril 20 mg daily	patients with symptomatic (NYHA functional class 2) mild heart failure	Cross over double blind
frusemide plus amiloride vs captopril			

continued...

Trial	Treatments	Patients	Trials design and methods
Richardson , 1987 n=14/14 follow-up: 8 weeks	frusemide plus amiloride versus captopril	patients who had previously been treated with diuretics	Cross over double blind
furosemide vs captopril			
Boccanelli , 1986 n=8/7 follow-up: 13 weeks	furosemide 25 to 100 mg od versus captopril 12.5 to 50 mg bid +furosemide 25mg od	patients with moderate congestive heart failure not completely controlled on digoxin (0.25 mg o.d.) and frusemide (25 mg o.d.),	Parallel groups double blind
Cowley , 1986 n=10/10 follow-up:	furosemide (increased doses of frusemide) versus captopril (addition)	patients with moderate heart failure who still had symptoms despite 40 mg frusemide daily	Cross over double blind
hydrochlorothiazide+triamterene vs digoxin			
Sievert , 1989 n=16/16 follow-up: 5 weeks	hydrochlorothiazide+triamterene versus digoxin	patients in heart failure and sinus rhythm	Cross over double blind
piretanide vs digoxin			
Haerer , 1989 n=14/14 follow-up:	piretanide versus digoxin	-	Parallel groups double blind
furosemide + spironolactone vs prenalterol			
Dalhstrom , 1986 n=10/10 follow-up: 12 weeks	intensified treatment with diuretics (furosemide- spironolactone) versus prenalterol 100-200 mg daily in addition to their basal treatment	patients with severe chronic congestive heart failure (CHF) due to ischaemic heart disease treated with digitalis and diuretics	Cross over double blind

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5 About TrialResults-center.org

TrialResults-center is an innovative knowledge database that collects the results of RCTs and provides dynamic interactive systematic reviews and meta-analysis in the field of all major heart and vessels diseases.

The TrialResults-center database provides a unique view of the treatment efficacy based on all data provided directly from clinical trial results, offering a valuable alternative to personal bibliographic search, published meta-analysis, etc. Furthermore, it would allow comparing easily the various concurrent therapeutic for the same clinical condition.

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