

ACC 13 San Francisco

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The St Vincent's Screening To Prevent Heart Failure Study (STOP): Impact of Natriuretic Peptide Guided Screening and Treatment on Long-Term Prevalence of Left Ventricular Dysfunction, Heart Failure and Cardiovascular Events



History: Natriuretic peptides may be a reliable marker to diagnose the status of heart failure.

Questions to answer: Does natriuretic peptide (NP) guided screening and shared care treatment impact the long-term prevalence of left ventricular dysfunction, heart failure and CV events?

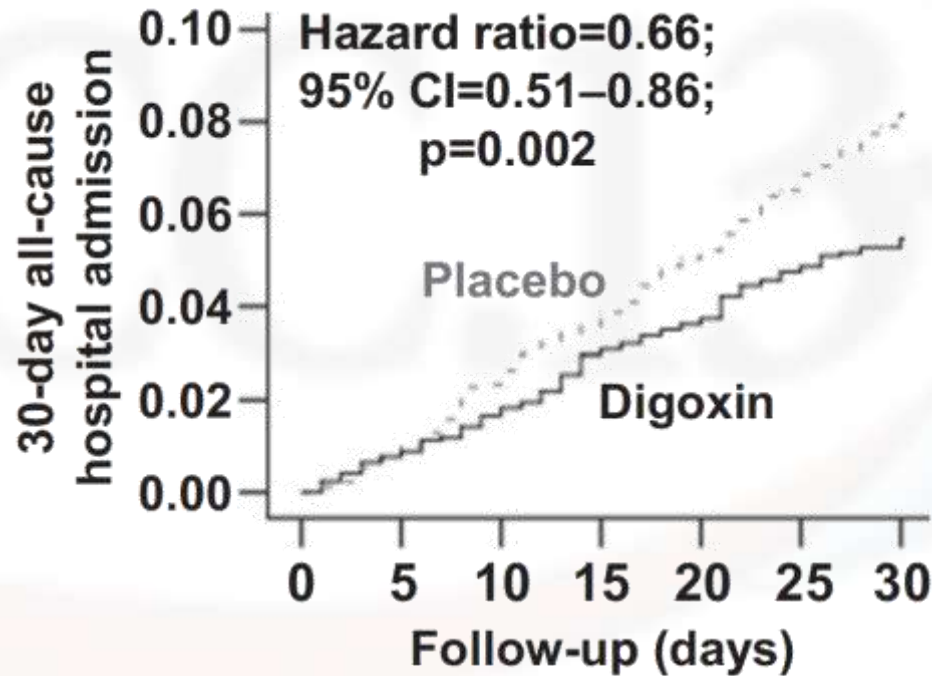
Trial Design	Prospective, randomized N= 1374; average age 64.7 yrs. Control group: over 40 years; risk factors for HF ;screened yrly. for CV risk/ plasma natriuretic peptide (NP); treated by family physician Intervention group : B-Type NP levels over 50 pg/mL ;echocardiography and care shared between the family physician and specialist F/U: average of 4.3 yrs.	
Primary Endpoint	Prevalence of LVD and HF	
Trial Results	Control Group: LV/HF: 8.7% Hospitalization from CV events: 40.4%	Intervention Group: LV/HF: 5.3% Hospitalization from CV events: 22.3%
Take Away: Patients at risk of HF receiving shared care treatment and NP guided screening had a reduction in the long term prevalence of LVD and HF as well as the incidence rate of major CV events.		

Digoxin Reduces 30-day All-cause Hospital Admission in Older Patients with Chronic Systolic Heart Failure



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Análisis post hoc de pacientes con IC crónica y FEVI deprimida, en USA y Canadá, tratados con IECAs y diuréticos (cohorte de 1991-1993).



Number at risk

	0	5	10	15	20	25	30
Placebo	1712	1666	1618	1566			
Digoxin	1693	1659	1623	1592			

DIGOXIN AND RISK OF DEATH IN ADULTS WITH ATRIAL FIBRILLATION: THE ATRIA-CVRN STUDY

Moderated Poster Contributions

Poster Sessions, Expo North

Saturday, March 09, 2013, 10:00 a.m.-10:45 a.m.

Session Title: Arrhythmias: Atrial Fibrillation Clinical Mechanisms

Abstract Category: 4. Arrhythmias: AF/SVT

Presentation Number: 1105M-38

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Background: Clinical guidelines endorse digoxin use for heart rate control in patients with atrial fibrillation, but this recommendation is based on limited, older clinical data. We sought to evaluate outcomes associated with digoxin in a contemporary cohort of incident atrial fibrillation patients.

Methods: We identified all adults diagnosed with incident atrial fibrillation between January 2006 and June 2009 within Kaiser Permanente Northern California and Southern California and without a history of heart failure or digoxin use. We used multivariable extended Cox regression to examine the association between newly initiated digoxin use and risk of death and hospitalization, after adjustment for demographic characteristics, comorbidity, selected laboratory results, medications, and the propensity to receive digoxin. We also conducted analyses stratified by age and gender.

Results: Among 23,272 newly diagnosed atrial fibrillation patients, 2997 (12.9%) received digoxin during follow-up. During a median 0.8 (interquartile range 0.38-1.47) years of follow-up, incident digoxin use was associated with a higher rate of death (9.49 vs. 4.27 per 100 person years) but no difference in the rate of hospitalization (3.18 vs. 3.25 per 100 person years). After adjustment for potential confounders, incident digoxin use was associated with more than twofold increased risk of death (adjusted hazard ratio [HR] 2.06, 95% CI: 1.73-2.45), and no significant difference in the risk of hospitalization (HR 1.05, 95% CI: 0.98-1.13). Results were consistent in analyses stratified by gender and age.

Conclusions: In patients with incident atrial fibrillation, digoxin use was independently associated with a higher risk of death but no significant difference in the risk of hospitalization. Given other available options for heart rate control, the role of digoxin in the management of atrial fibrillation should be reconsidered.

Effect of Phosphodiesterase-5 Inhibition on Exercise Capacity and Clinical Status in Heart Failure With Preserved Ejection Fraction

A Randomized Clinical Trial Margaret M. Redfield, MD



RELAX trial: IC (seguro), con FEVI \geq 50% se aleatorizaron 1:1 a sildenafil 20 mg (12 s) - 60 mg (12 s), 3 veces al día versus placebo.

	Placebo		Sildenafil		P Value
	No. of Patients	Variable	No. of Patients	Variable	
Primary end point					
Change in peak oxygen consumption at 24 wk, median (IQR), mL/kg/min	94	-0.20 (-0.70 to 1.00)	91	-0.2 (-1.70 to 1.11)	.90
Secondary end points					
Clinical rank score, mean ^a	94	95.8	95	94.2	.85
Change in 6-minute walk distance at 24 wk, median (IQR), m	95	15.0 (-26.0 to 45.0)	90	5.0 (-37.0 to 55.0)	.92
Change in peak oxygen consumption at 12 wk, median (IQR), mL/kg/min	96	0.03 (-1.10 to 0.67)	97	0.01 (-1.35 to 1.25)	.98
Change in 6-minute walk distance at 12 wk, median (IQR), m	96	18.0 (-14.5 to 48.0)	99	10.0 (-25.0 to 36.0)	.13
Components of clinical rank score at 24 wk					
Death, No. (%) ^b	103	0	113	3 (3)	.25
Hospitalization for cardiovascular or renal cause, No. (%)	103	13 (13)	113	15 (13)	.89
Change in MLHFQ, median (IQR)	91	-8 (-21 to 5)	91	-8 (-19 to 0)	.44
Safety end points, No. (%)					
Adverse events	103	78 (76)	113	90 (80)	.49
Serious adverse events	103	16 (16)	113	25 (22)	.22

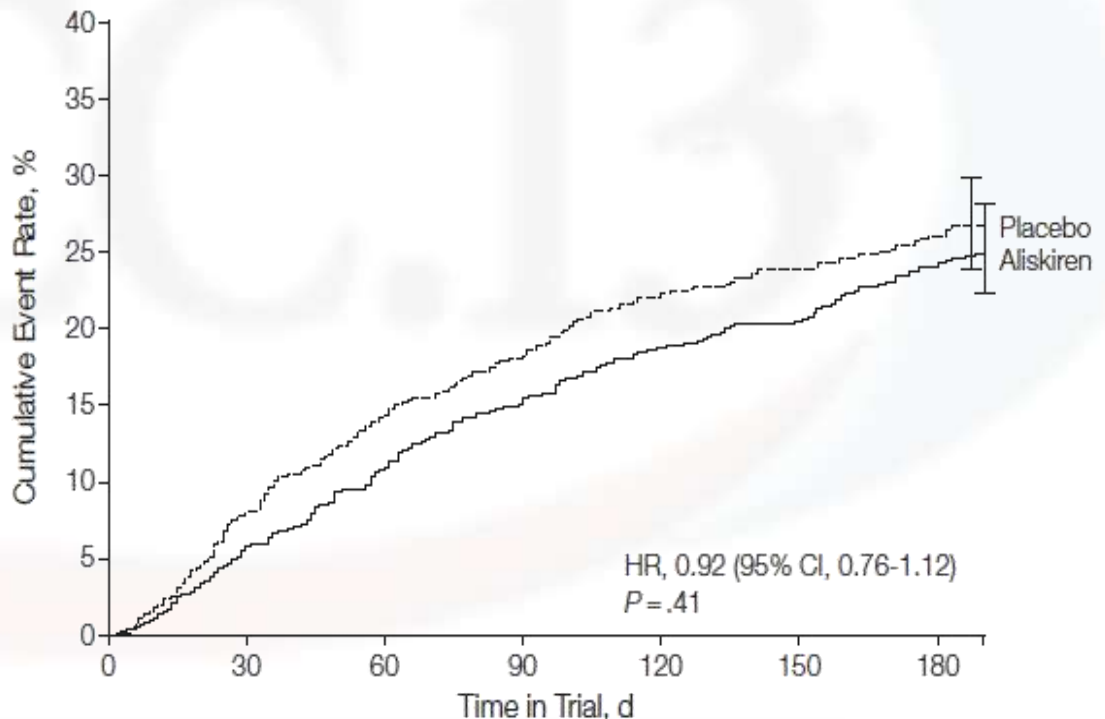
Effect of Aliskiren on Postdischarge Mortality and Heart Failure Readmissions Among Patients Hospitalized for Heart Failure

The ASTRONAUT Randomized Trial

Mihai Gheorghiade, MD



- ✓ 1615 pacientes, con IC y FEVI deprimida, se aleatorizaron 1:1 a Aliskirén (150-300 mg/día) o placebo.
- ✓ 39% en ambos grupos eran diabéticos.
- ✓ El objetivo primario era muerte cardiovascular y hospitalización por IC.



No. at risk	0	30	60	90	120	150	180
Aliskiren	808	762	716	679			597
Placebo	807	743	690	655			578

Pulmonary Embolism Thrombolysis trial (PEITHO)



Background: In the setting of acute pulmonary embolism (PE), a risk for worse outcomes is seen when patients have a normal blood pressure associated with acute right ventricular (RV) dysfunction and myocardial injury.

Questions for PEITHO: Will the prognosis for acute submassive PE be better with thrombolysis using tenecteplase vs. placebo in these patients?

Trial Design	Investigator-initiated, prospective, multicenter, international, randomized double-blind ; N= 1006; patients Randomization: Tenecteplase vs. placebo (heparin given in both treatment arms)
Primary Endpoint	All-cause mortality or hemodynamic collapse -by day-7 after randomization
Outcomes	All-cause mortality or hemodynamic collapse, Tenecteplase 2.6% vs. placebo 5.6% (p=0.015) Hemorrhagic stroke occurrence was increased, Tenecteplase 2.4% vs. placebo 0.2% (p=003) Primary endpoint odds ratio greater for those > 75 years of age
Take Away	Significant risk reduction for death and hemodynamic collapse with tenecteplase bolus. Risk stratification and early treatment are concepts and approaches supported by these findings.



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