SAC 27 y 28 mayo 2022

Mesa manejo contemporáneo de la insuficiencia cardíaca

Tratamiento Clásico

José Luis Lambert Rodríguez

SOCIEDAD ASTURIANA DE CARDIOLOGÍA

MORTALIDAD MIOCARDIOPATIA DILATADA

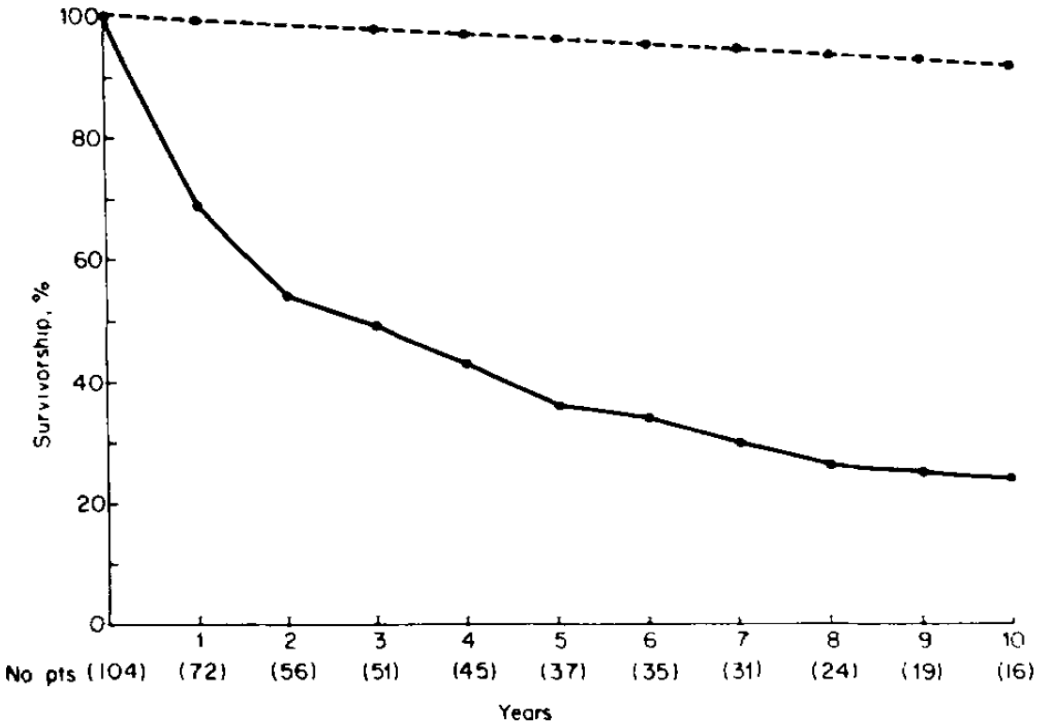
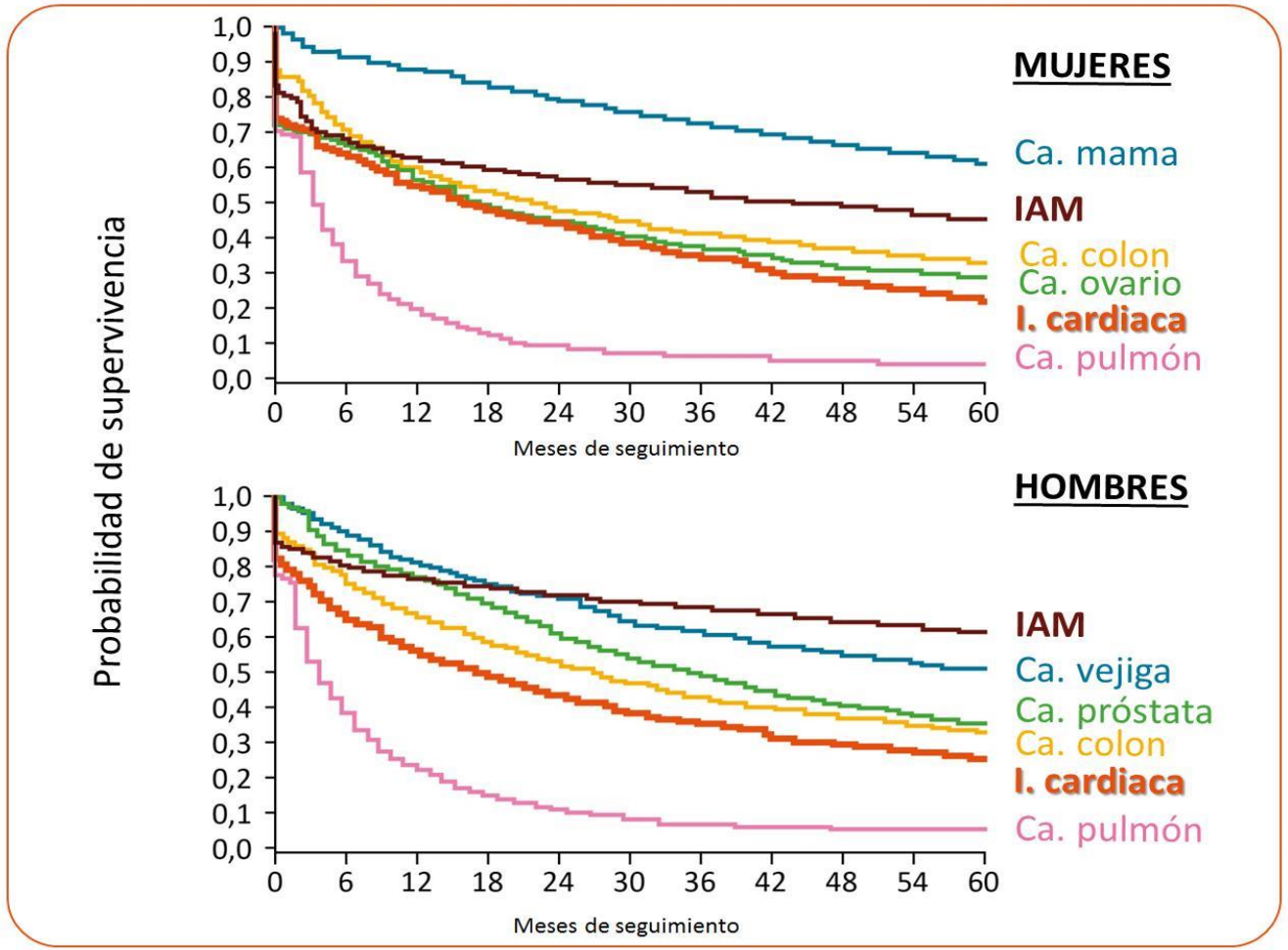


FIGURE 1. Observed survival plotted against time in years in 104 patients (pts.) with the diagnosis of idiopathic dilated cardiomyopathy (**solid line**). The **dashed line** represents the control expected survival, on the basis of age and sex distribution, according to the death rates of the Minnesota 1970 White Population Life Table. The number of alive patients under observation at each follow-up interval is indicated in parentheses.

Fuster V et al. AJM 1981; 47: 525-531

Magnitud del problema: mortalidad (mayor que el cáncer)

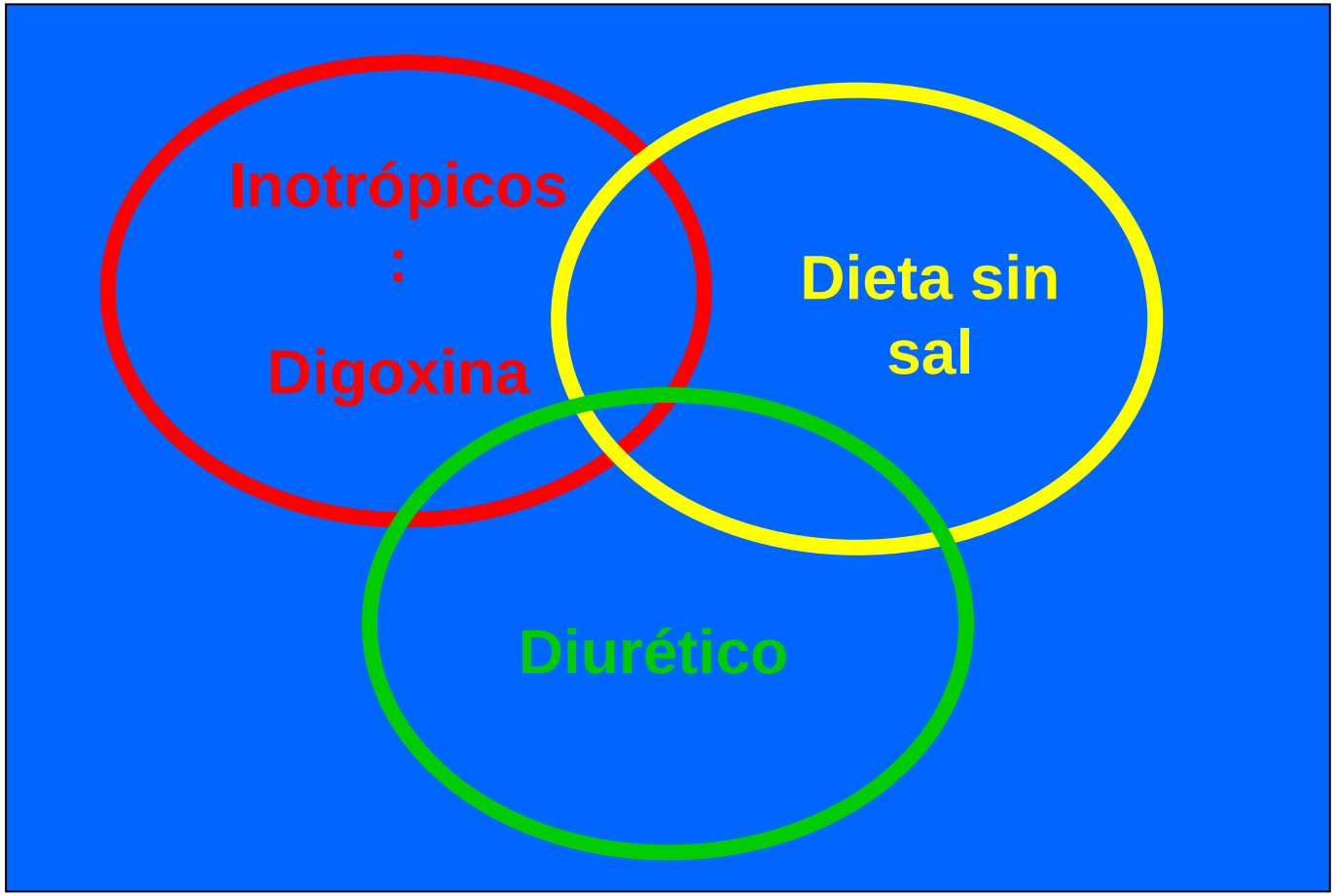


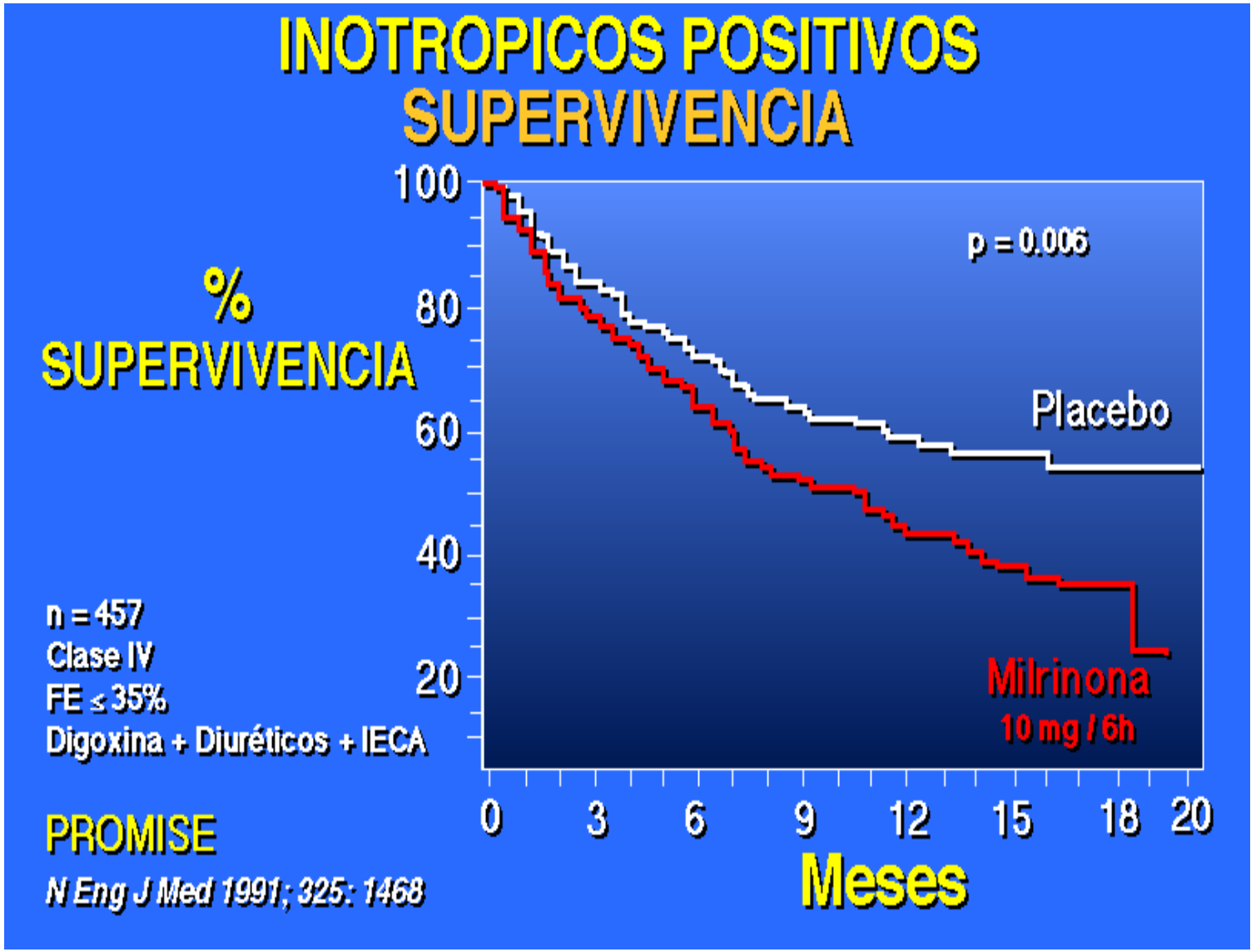
Ca.: cáncer;
IAM: infarto agudo de miocardio.

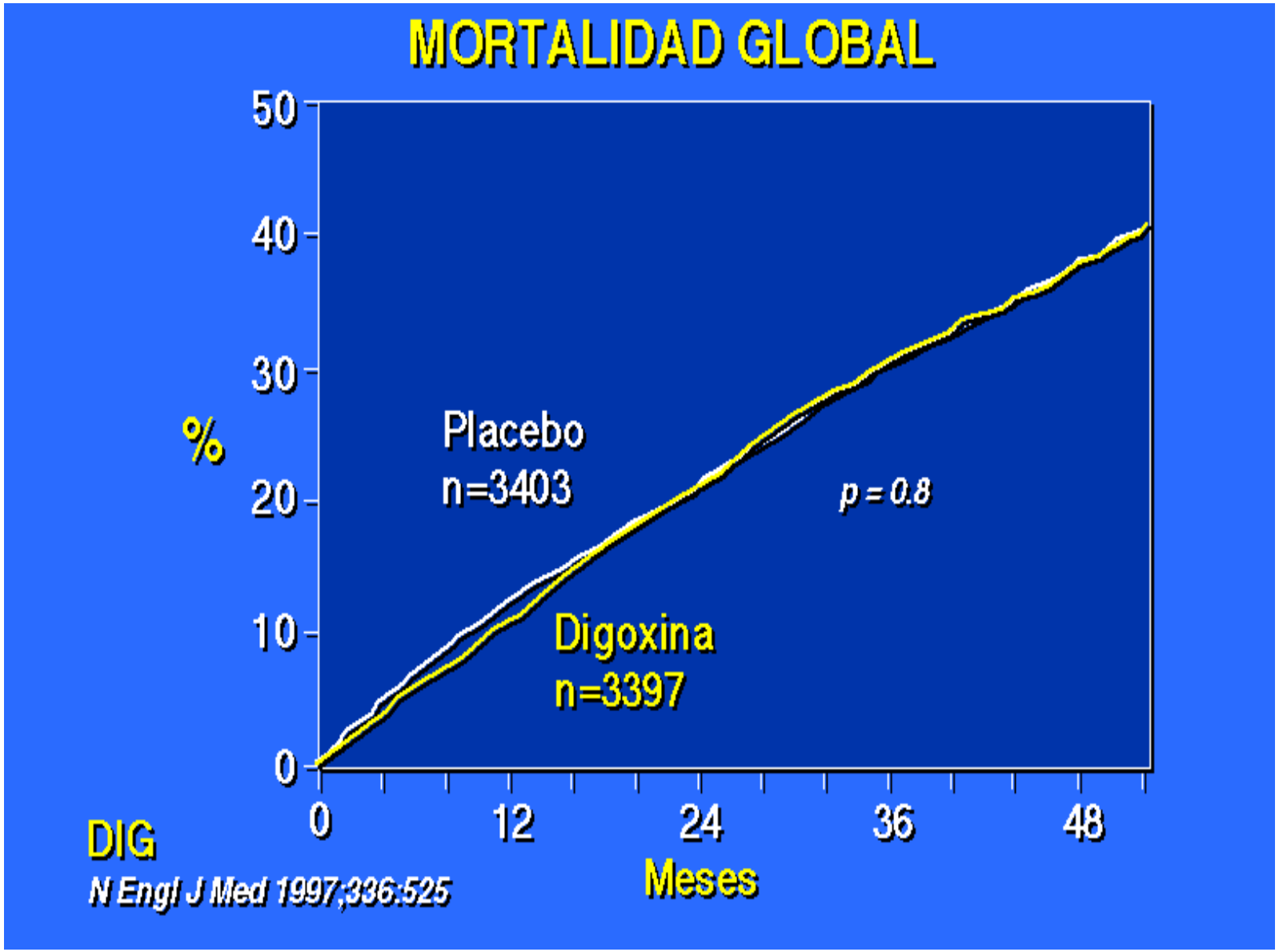
Stewart S, et al. Eur J Heart Fail. 2001; 3: 315-322.

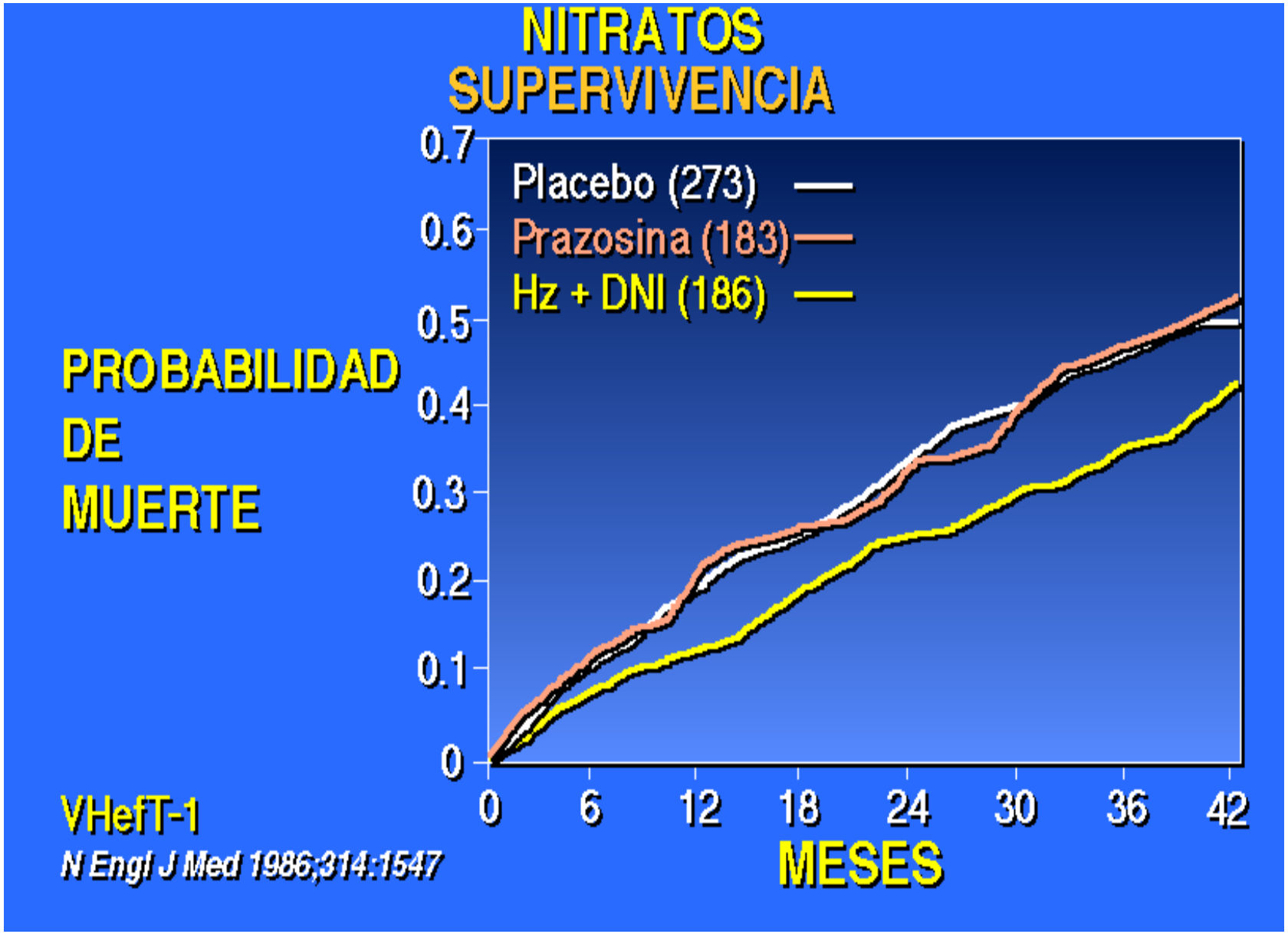
INSUFICIENCIA CARDIACA

TRATAMIENTO CLÁSICO

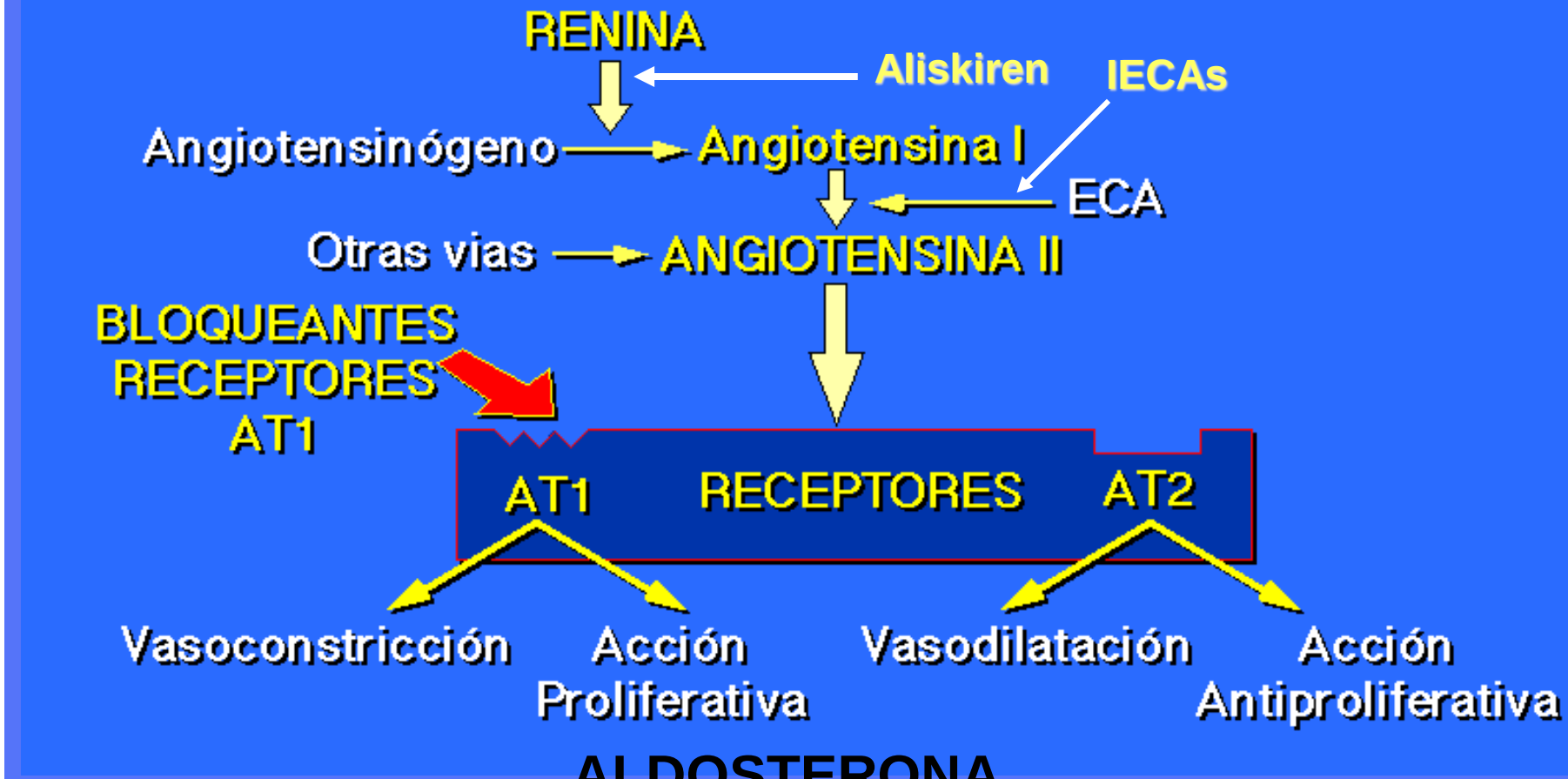


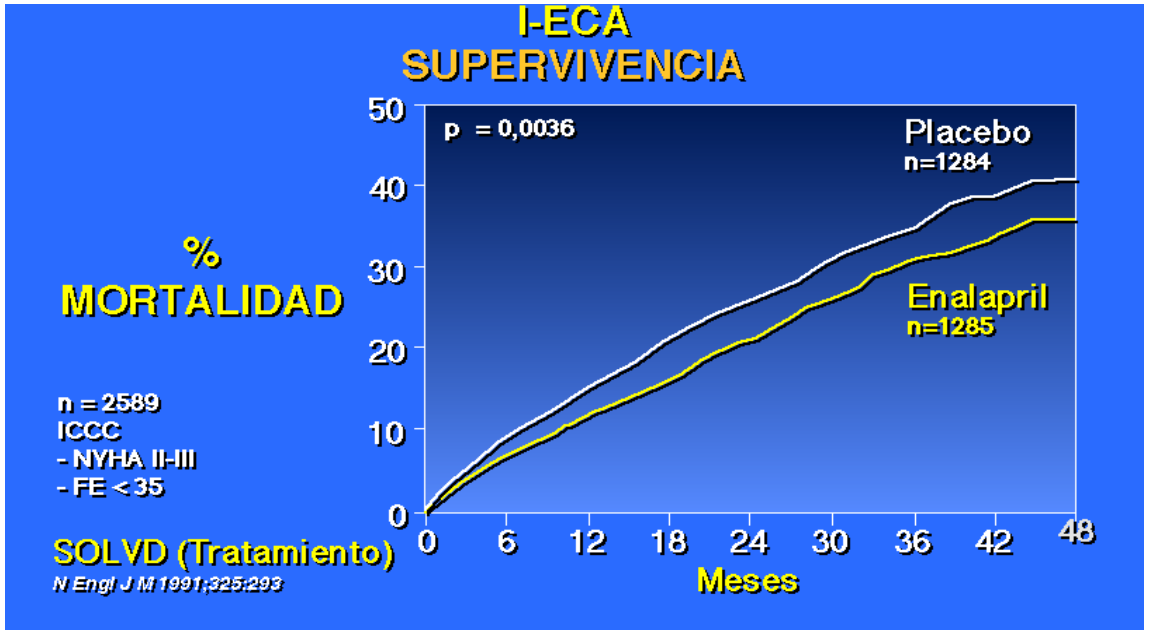

INOTROPICOS POSITIVOS
SUPERVIVENCIA
% SUPERVIVENCIA
100
80
60
40
20
p = 0.006
Placebo
Milrinona
10 mg / 6h
n = 457
Clase IV
FE ≤ 35%
Digoxina + Diuréticos + IECA
0
3
6
9
12
15
18
20
Meses
PROMISE
N Eng J Med 1991; 325: 1468

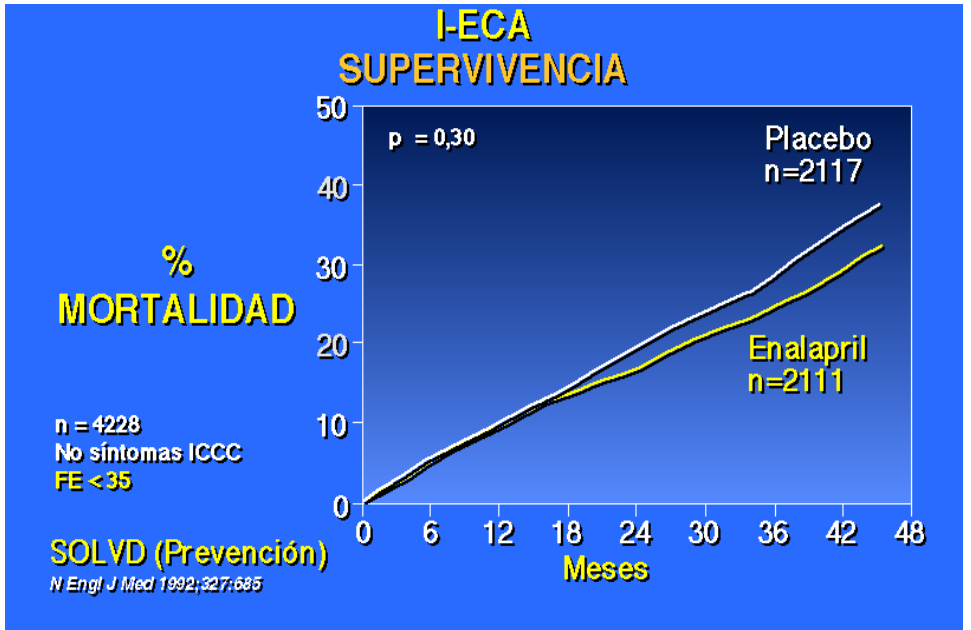

MORTALIDAD GLOBAL
50
40
30
20
10
0
%
Placebo
n=3403
p = 0.8
Digoxina
n=3397
0
12
24
36
48
Meses
DIG
N Engl J Med 1997;336:525


NITRATOS
SUPERVIVENCIA
Placebo (273)
Prazosina (183)
Hz + DNI (186)
PROBABILIDAD DE MUERTE
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
6
12
18
24
30
36
42
MESES
VHefT-1
N Engl J Med 1986;314:1547

SISTEMA RENINA-ANGIOTENSINA: INHIBIDORES




I-ECA
SUPERVIVENCIA
p = 0,0036
Placebo
n=1284
Enalapril
n=1285
%
MORTALIDAD
n = 2589
ICCC
- NYHA II-III
- FE < 35
SOLVD (Tratamiento)
N Engl J M 1991;325:293
50
40
30
20
10
0
0
6
12
18
24
30
36
42
48
Meses

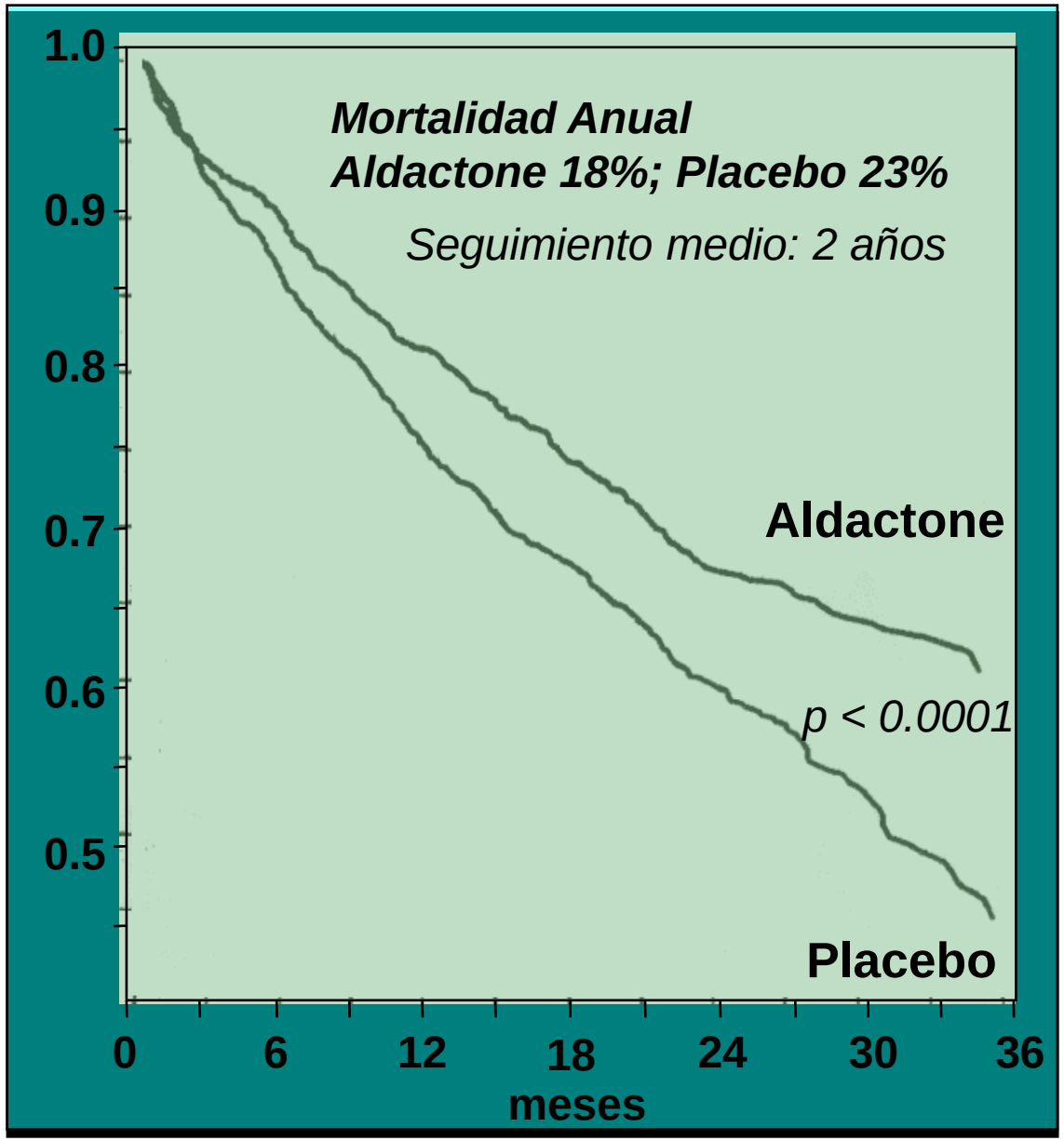

I-ECA
SUPERVIVENCIA
p = 0,30
Placebo
n=2117
Enalapril
n=2111
%
MORTALIDAD
n = 4228
No síntomas ICCC
FE < 35
SOLVD (Prevención)
N Engl J Med 1992;327:685
50
40
30
20
10
0
0
6
12
18
24
30
36
42
48
Meses

ESTUDIO RALES

SUPERVIVENCIA

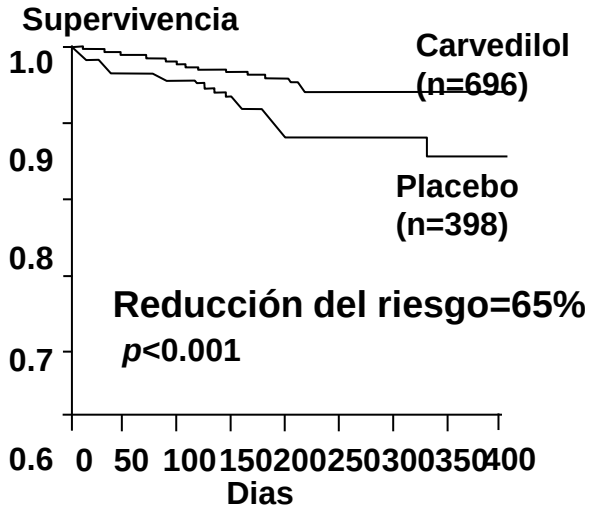
n=1663

Mortalidad Total
Aldactone 35.5%
Placebo 46%
RR 29%
95% IC (19-39%)
P< 0.0001



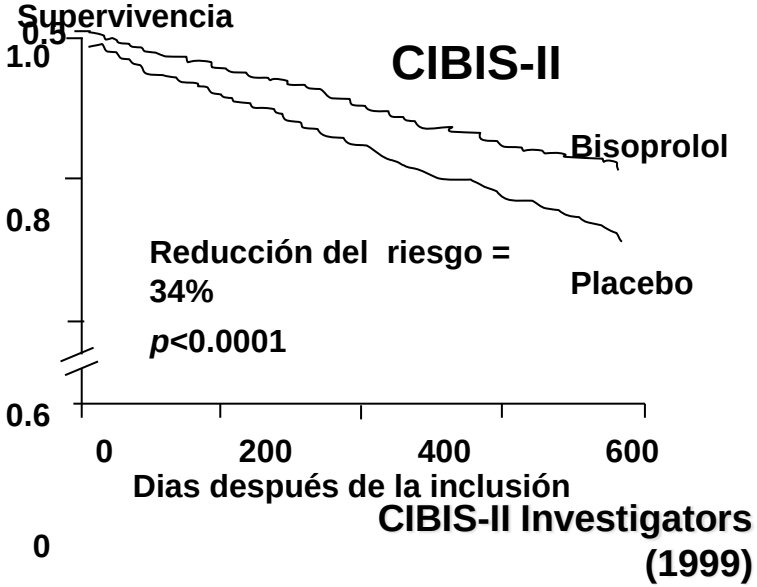
N Engl J Med 1999;341:709-17

β bloqueantes en ICC Mortalidad por cualquier causa

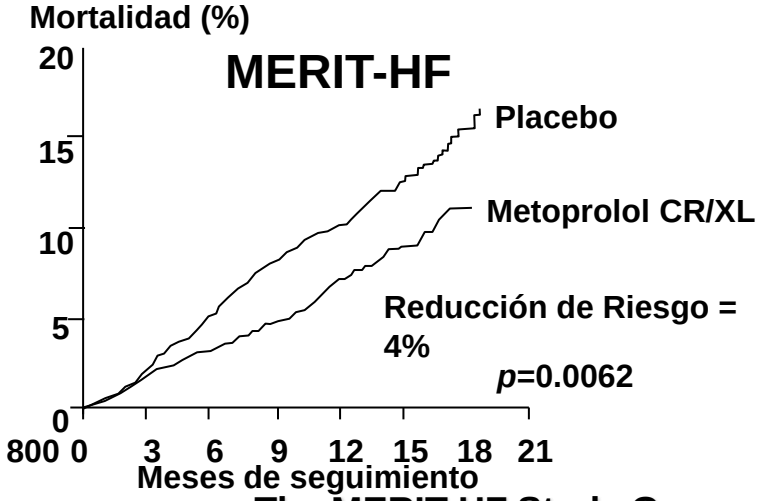


US Carvedilol Program

Packer et al (1996)



CIBIS-II Investigators (1999)

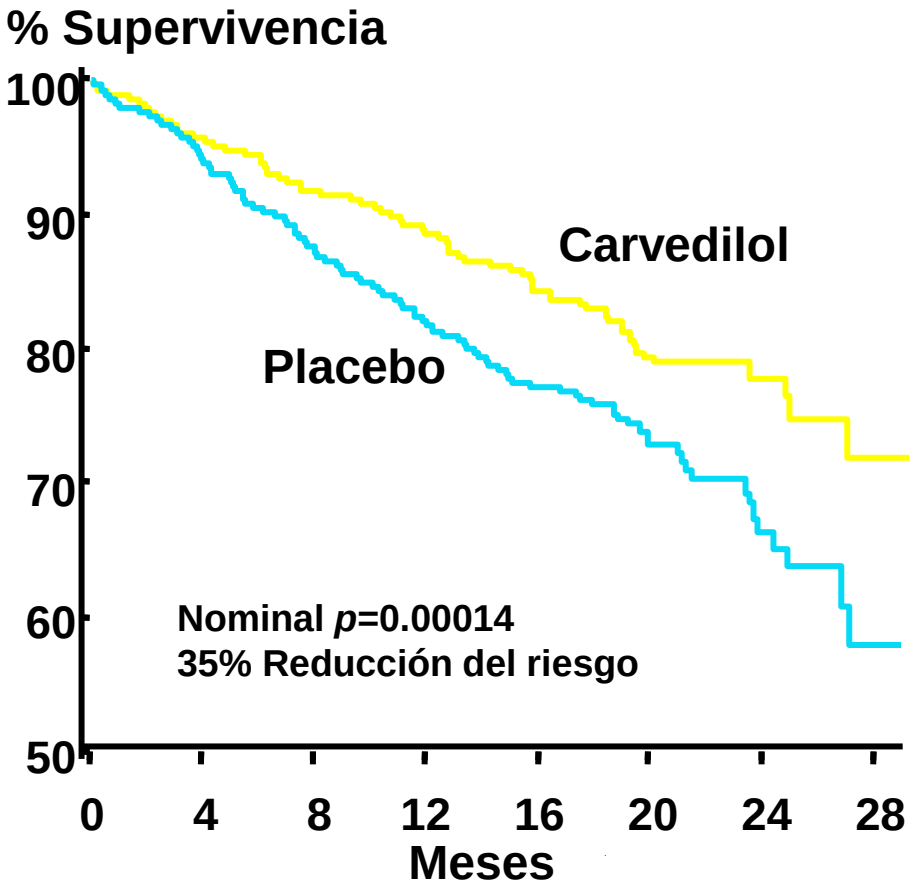


The MERIT-HF Study Group (1999)

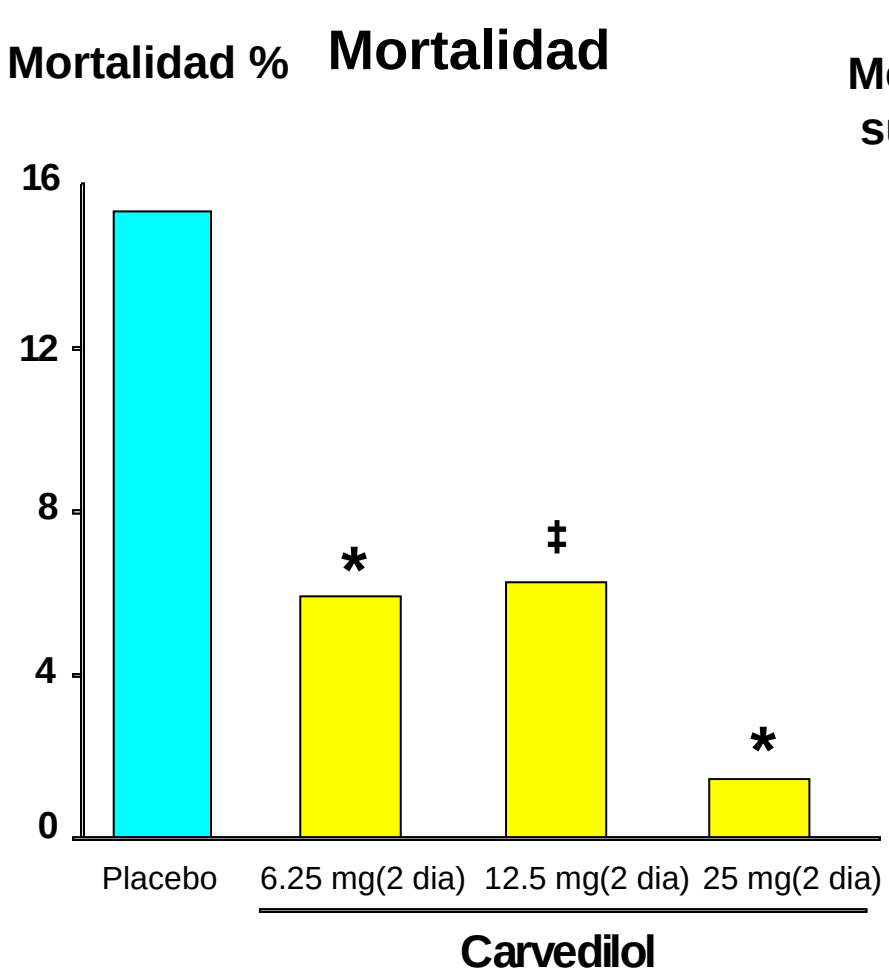
COPERNICUS

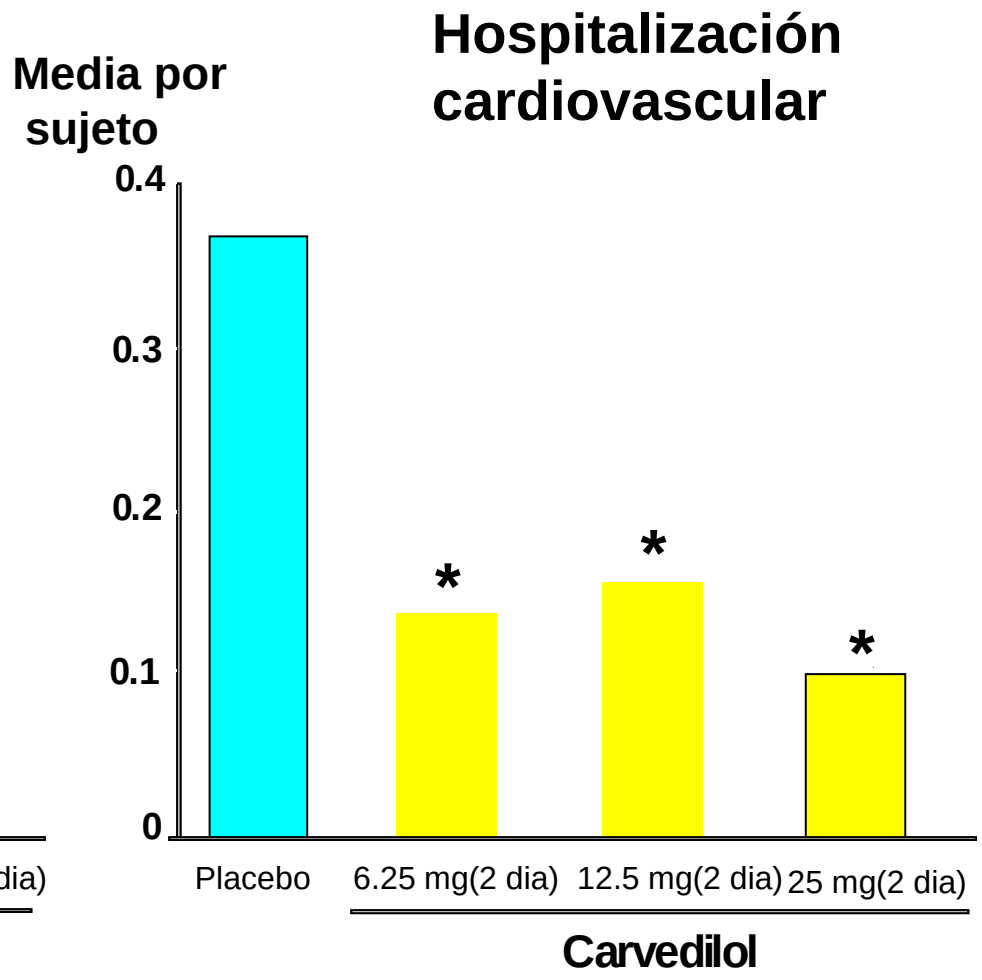
IC GRADO III-IV/IV

Mortalidad por cualquier causa



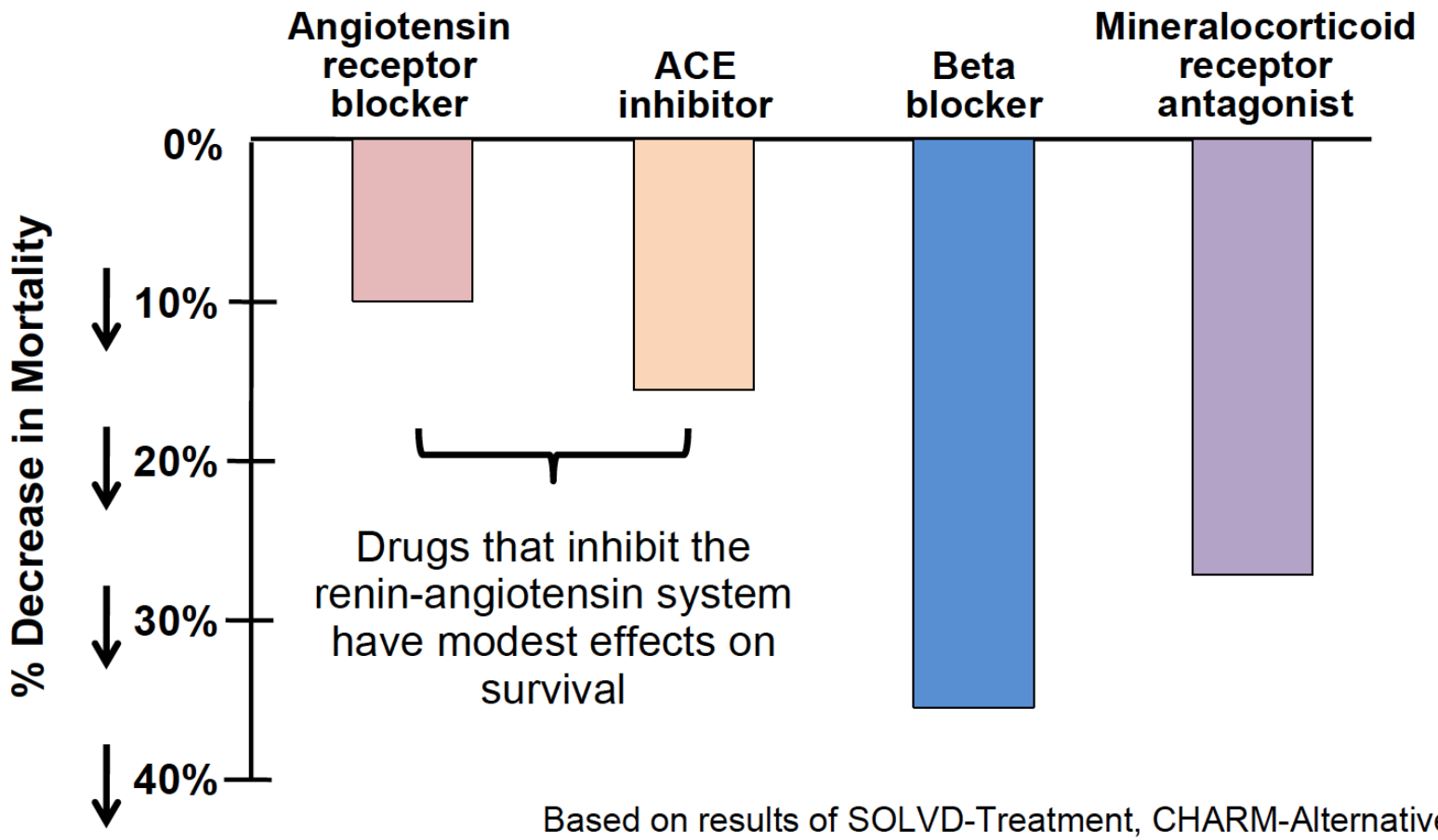
Relación Dosis/Efectividad






COLLECTION DE
S.A.S. LE PRINCE
DE MONACO

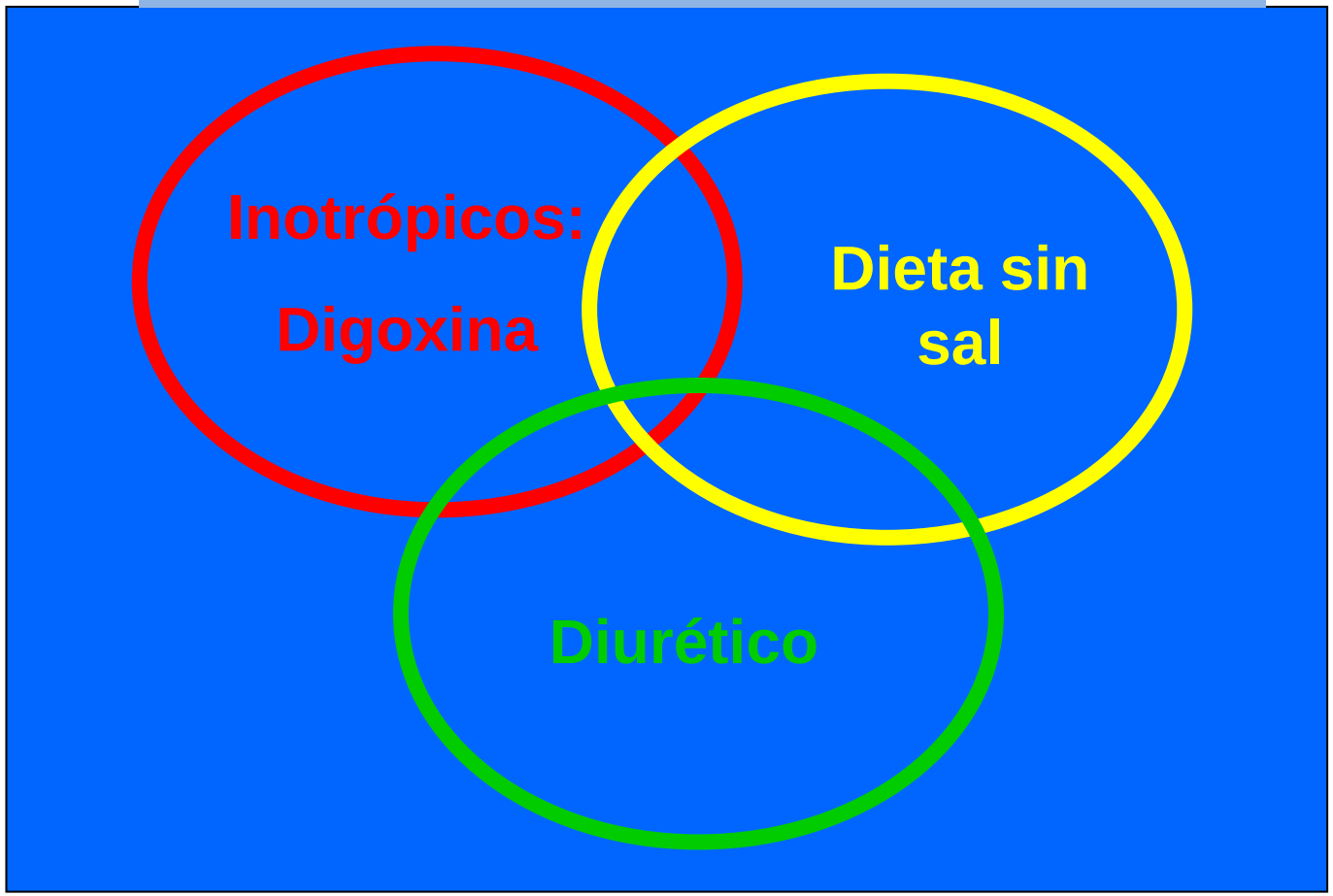
Drugs That Reduce Mortality in Heart Failure With Reduced Ejection Fraction



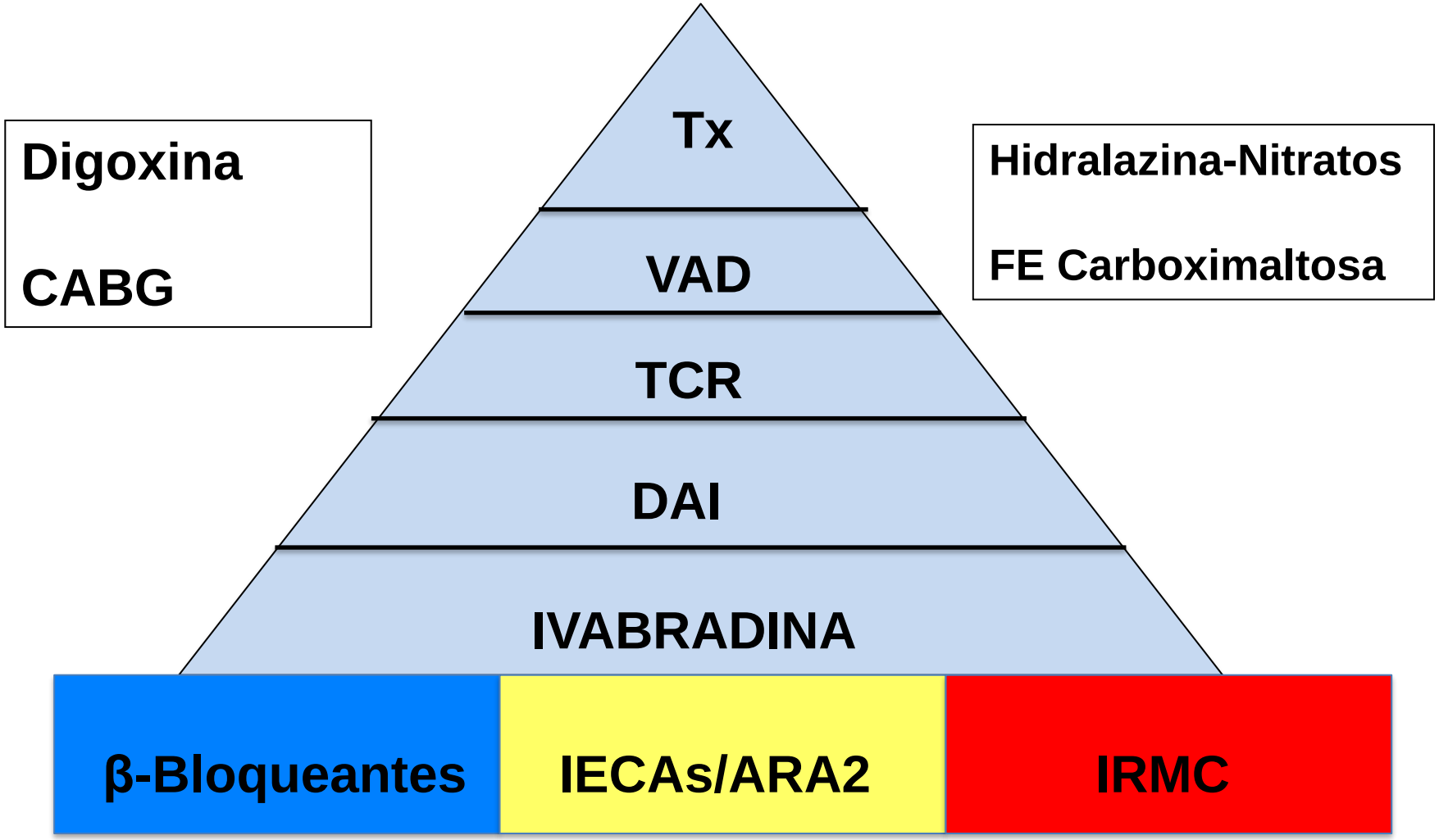
Based on results of SOLVD-Treatment, CHARM-Alternative, COPERNICUS, MERIT-HF, CIBIS II, RALES and EMPHASIS-HF

INSUFICIENCIA CARDIACA

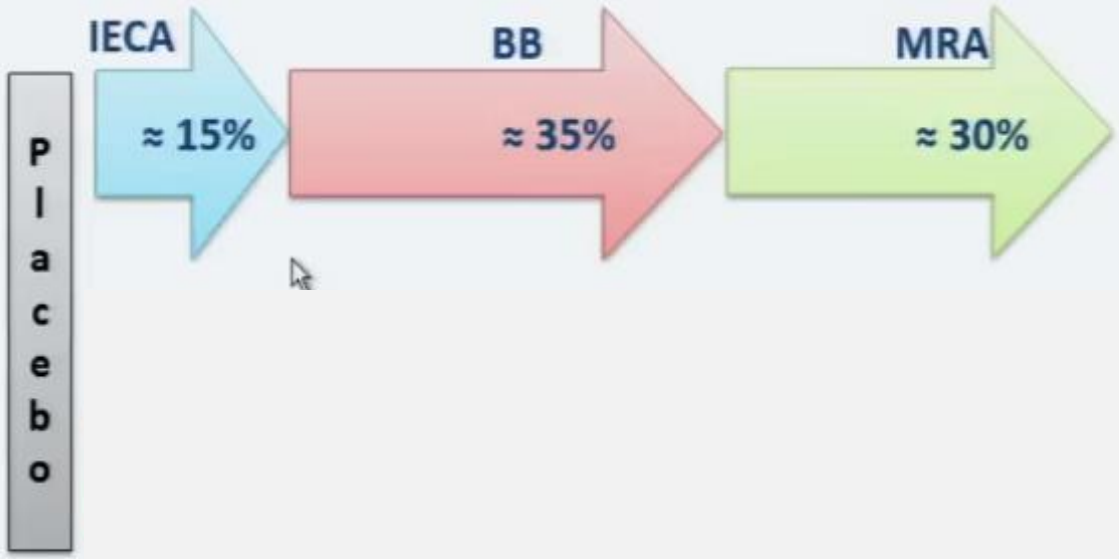
TRATAMIENTO FALLIDO



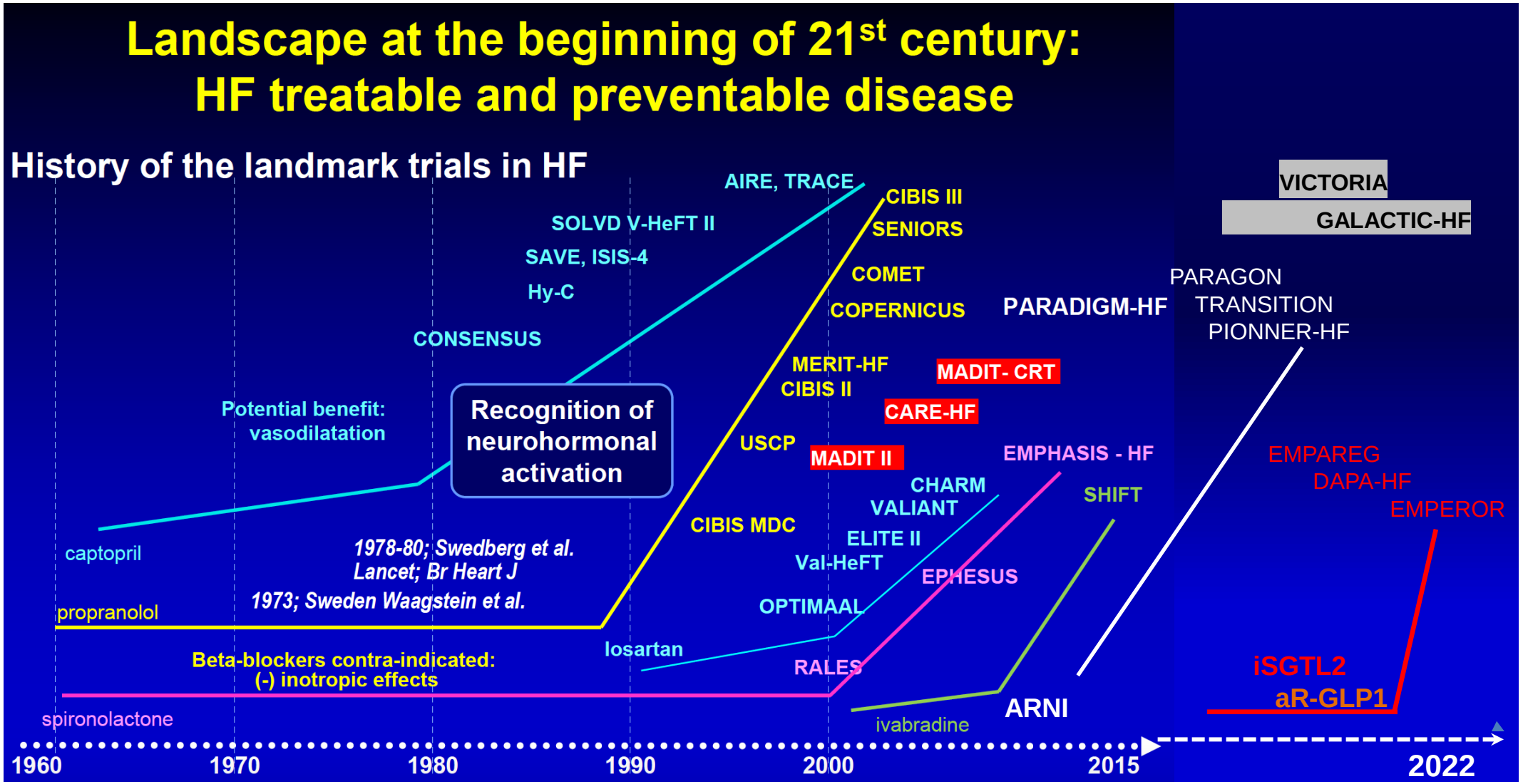
Pirámide Tratamiento Clásico de la IC-FEd



FE deprimida



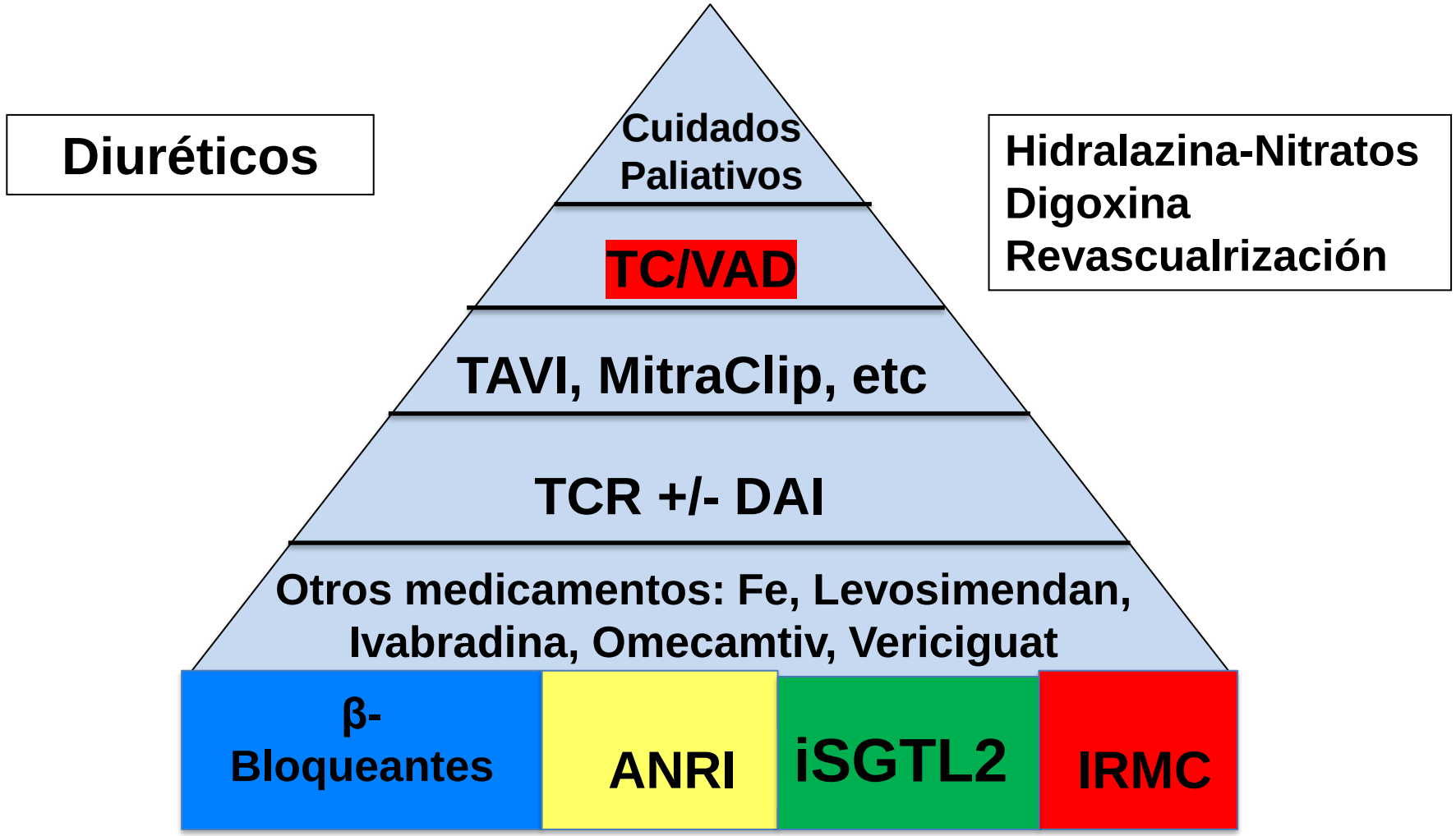
Asistimos a una mejora del tratamiento


Landscape at the beginning of 21st century:
HF treatable and preventable disease
History of the landmark trials in HF
AIRE, TRACE
CIBIS III
SENIORS
SOLVD V-HeFT II
SAVE, ISIS-4
Hy-C
COMET
COPERNICUS
PARADIGM-HF
VICTORIA
GALACTIC-HF
PARAGON
TRANSITION
PIONNER-HF
CONSENSUS
MERIT-HF
CIBIS II
MADIT- CRT
CARE-HF
Potential benefit:
vasodilatation
Recognition of
neurohormonal
activation
USCP
MADIT II
EMPHASIS - HF
EMPAREG
DAPA-HF
EMPEROR
CHARM
VALIANT
SHIFT
CIBIS MDC
ELITE II
Val-HeFT
captopril
1978-80; Swedberg et al.
Lancet; Br Heart J
EPHESUS
1973; Sweden Waagstein et al.
propranolol
OPTIMAAL
losartan
Beta-blockers contra-indicated:
(-) inotropic effects
RALES
iSGTL2
aR-GLP1
spironolactone
ivabradine
ARNI
1960
1970
1980
1990
2000
2015
2022

FE deprimida

Asistimos a una mejora del tratamiento

Pirámide del Tratamiento de la IC-FE reducida



The NEW ENGLAND JOURNAL of MEDICINE
ESTABLISHED IN 1812 SEPTEMBER 11, 2014 VOL. 371 NO. 11

Angiotensin–Neprilysin Inhibition versus Enalapril in Heart Failure

John J.V. McMurray, M.D., Milton Packer, M.D., Akshay S. Desai, M.D., M.P.H., Jianjian Gong, Ph.D., Martin P. Lefkowitz, M.D., Adel R. Rizkala, Pharm.D., Jean L. Rouleau, M.D., Victor C. Shi, M.D., Scott D. Solomon, M.D., Karl Swedberg, M.D., Ph.D., and Michael R. Zile, M.D., for the PARADIGM-HF Investigators and Committees*

Table 1. (Continued.)

Characteristic	LCZ696 (N=4187)	Enalapril (N=4212)
Treatments at randomization — no. (%)		
Diuretic	3363 (80.3)	3375 (80.1)
Digitalis	1223 (29.2)	1316 (31.2)
Beta-blocker	3899 (93.1)	3912 (92.9)
Mineralocorticoid antagonist	2271 (54.2)	2400 (57.0)
Implantable cardioverter–defibrillator	623 (14.9)	620 (14.7)
Cardiac resynchronization therapy	292 (7.0)	282 (6.7)

The NEW ENGLAND JOURNAL of MEDICINE
ESTABLISHED IN 1812 NOVEMBER 21, 2019 VOL. 381 NO. 21

Dapagliflozin in Patients with Heart Failure and Reduced Ejection Fraction

J.J.V. McMurray, S.D. Solomon, S.E. Inzucchi, L. Køber, M.N. Kosiborod, F.A. Martinez, P. Ponikowski, M.S. Sabatine, I.S. Anand, J. Bělohlávek, M. Böhm, C.-E. Chiang, V.K. Chopra, R.A. de Boer, A.S. Desai, M. Diez, J. Drozdz, A. Dukát, J. Ge, J.G. Howlett, T. Katova, M. Kitakaze, C.E.A. Ljungman, B. Merkely, J.C. Nicolau, E. O'Meara, M.C. Petrie, P.N. Vinh, M. Schou, S. Tereshchenko, S. Verma, C. Held, D.L. DeMets, K.F. Docherty, P.S. Jhund, O. Bengtsson, M. Sjöstrand, and A.-M. Langkilde, for the DAPA-HF Trial Committees and Investigators*

Table 1. (Continued.)

Characteristic	Dapagliflozin (N=2373)	Placebo (N=2371)
Heart failure medication — no. (%)		
Diuretic	2216 (93.4)	2217 (93.5)
ACE inhibitor	1332 (56.1)	1329 (56.1)
ARB	675 (28.4)	632 (26.7)
Sacubitril–valsartan	250 (10.5)	258 (10.9)
Beta-blocker	2278 (96.0)	2280 (96.2)
Mineralocorticoid receptor antagonist	1696 (71.5)	1674 (70.6)
Digitalis	445 (18.8)	442 (18.6)
Glucose-lowering medication — no./total no. (%)**		
Biguanide	504/993 (50.8)	512/990 (51.7)
Sulfonylurea	228/993 (23.0)	210/990 (21.2)
DPP-4 inhibitor	161/993 (16.2)	149/990 (15.1)
GLP-1 receptor agonist	11/993 (1.1)	10/990 (1.0)
Insulin	274/993 (27.6)	266/990 (26.9)

Characteristics	Percutaneous Repair Group	Optimal Medical Treatment Group	P value
NTproBNP - ng/L median [IQR]	3407 [1948; 6790]	3292 [1937; 6343]	0.97
Implantable cardioverter-defibrillator	90 (59.2%)	82 (53.9%)	0.42
Diuretics	151 (99.3%)	149 (98.0%)	0.62
Beta-blockers	134 (88.2%)	138 (90.8%)	0.57
ACE- inhibitor / ARB	111 (73.0%)	113 (74.3%)	0.55
Mineralocorticoid Receptor Antagonist	86 (56.6%)	80 (53.0%)	0.56
ARB and Neprilysin Inhibitor	14 (10.0%)	17 (12.1%)	0.70
Systolic Blood Pressure mmHg mean (±SD)	109 ± 16	108 ± 18	0.78

MITRA-FR

Eur J Heart Fail. doi: 10.1002/ejhf.1616.

Transcatheter Mitral-Valve Repair in Patients with Heart Failure

G.W. Stone, J.A. Lindenfeld, W.T. Abraham, S. Kar, D.S. Lim, J.M. Mishell, B. Whisenant, P.A. Grayburn, M. Rinaldi, S.R. Kapadia, V. Rajagopal, I.J. Sarembock, A. Brieke, S.O. Marx, D.J. Cohen, N.J. Weissman, and M.J. Mack, for the COAPT Investigators*

Table S6. Medication use at baseline and during follow-up

	Device group	Control group	P-value
Medications at baseline	N=302	N=312	
Beta-blocker	91.1% (275/302)	89.7% (280/312)	0.58
ACEI, ARB or ARNI	71.5% (216/302)	62.8% (196/312)	0.02
- ACEI	45.7% (138/302)	36.9% (115/312)	0.03
- ARB	21.9% (66/302)	23.1% (72/312)	0.72
- ARNI	4.3% (13/302)	2.9% (9/312)	0.34
Mineralocorticoid receptor antagonist	50.7% (153/302)	49.7% (155/312)	0.81
Nitrate	6.3% (19/302)	8.0% (25/312)	0.41
Hydralazine	16.6% (50/302)	17.6% (55/312)	0.72
Nitrate plus hydralazine	5.0% (15/302)	5.8% (18/312)	0.66
Diuretic	89.4% (270/302)	88.8% (277/312)	0.80
Chronic oral anticoagulant, any	46.4% (140/302)	40.1% (125/312)	0.12
- Warfarin	31.1% (94/302)	28.2% (88/312)	0.43
- Direct acting oral anticoagulant	15.2% (46/302)	12.2% (38/312)	0.27
Aspirin	57.6% (174/302)	64.7% (202/312)	0.07
P2Y12 receptor inhibitor, any	25.2% (76/302)	22.8% (71/312)	0.48
- Clopidogrel	21.5% (65/302)	20.5% (64/312)	0.76
- Prasugrel	2.6% (8/302)	0.6% (2/312)	0.06
- Ticagrelor	1.0% (3/302)	1.9% (6/312)	0.51
- Prasugrel or ticagrelor	3.6% (11/302)	2.6% (8/312)	0.44
Statin	62.6% (189/302)	60.6% (189/312)	0.61

N Engl J Med 2018;379:2307-18.
DOI: 10.1056/NEJMoa1806640

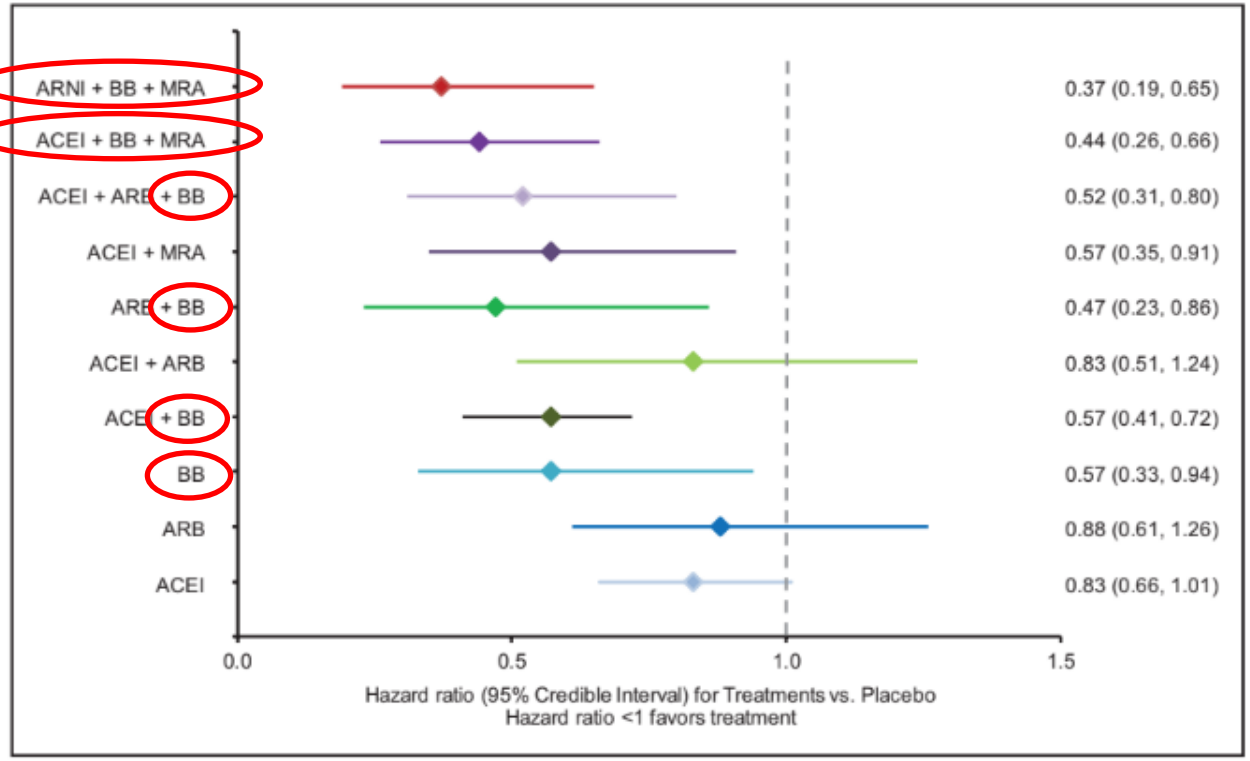


Figure 5. Results of random effect network meta-analysis for all-cause mortality: hazard ratios for intervention versus placebo for all-cause mortality and 95% credible intervals. ACEI indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin-II receptor blocker; ARNI, angiotensin receptor-neprilysin inhibitor; BB, beta blocker; and MRA, mineralocorticoid receptor antagonist.

(Circ Heart Fail. 2017;10:e003529. DOI: 10.1161/CIRCHEARTFAILURE.116.003529.)

NNT (Number Needed to Treat for all-cause mortality)

Evidence-Based Therapy	Clinical Trial	Relative Treatment Effect (Hazard Ratio)	Estimated 5-y Risk, %			Estimated 5-y NNT for All-Cause Mortality
			Control Group	Intervention Group	Difference	
ACEI	SOLVD[3]	0.84	43.8	38.3	5.5	18
ARB	CHARM-Alternative[8]	0.87	40.5	36.3	4.2	24
β-Blocker	MERIT-HF[4]	0.66	42.3	30.4	11.9	8
MRA	EMPHASIS-HF[5]	0.78	35.8	29.3	6.5	15
ICD	SCD-HeFT[6]	0.77	36.1	28.9	7.2	14
CRT	RAFT[7]	0.75	32.4	25.4	7.0	14
ARNI	PARADIGM-HF (vs enalapril)[1]	0.84	36.7	31.9	4.8	21
ARNI	PARADIGM-HF (vs imputed placebo)[2]	0.72	41.3	31.9	9.4	11

Optimal dose of BB is limited unless.....you implant a device

Heart Failure 2022

P.K. Srivastava et al. JAMA Cardiol 2018


La Rioja Alta S.A.
GRAN RESERVA 904


HUCA


Investigación

¡Muchas Gracias!

¡Hasta siempre!