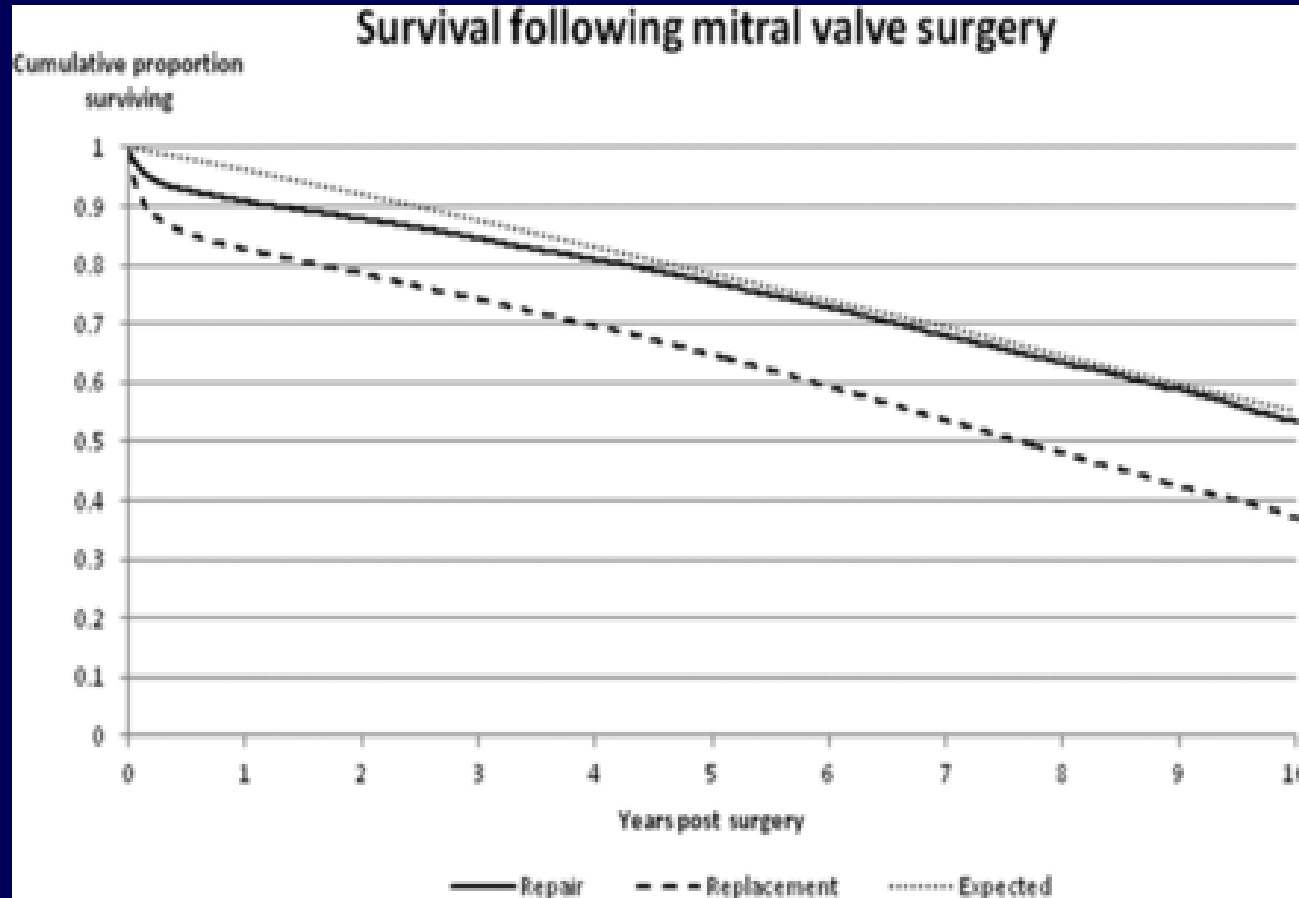


SEVERE PRIMARY MR

- REPAIR
- REPAIR
- REPAIR

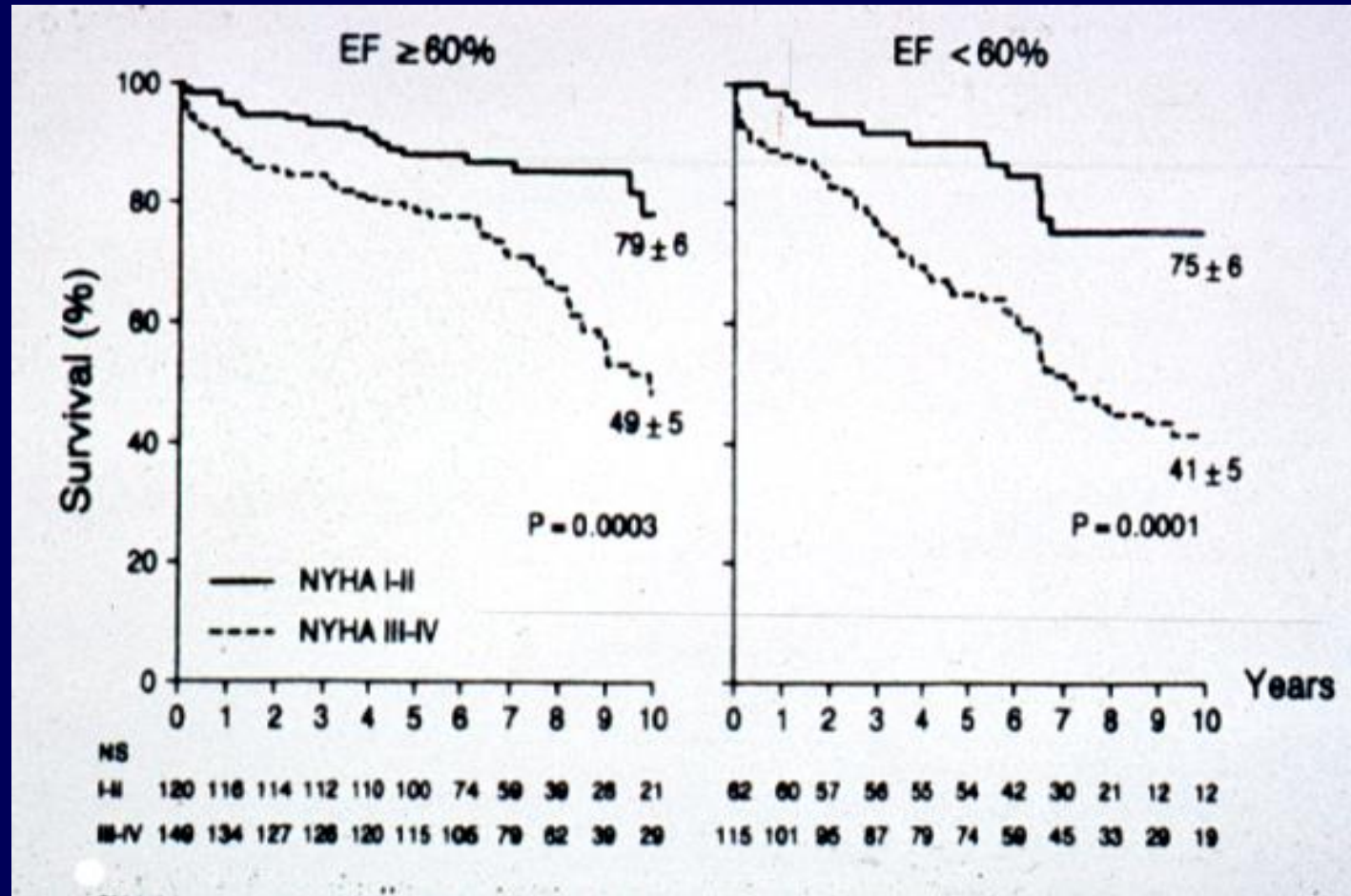


VASSILEVA et al CIRC: 2013

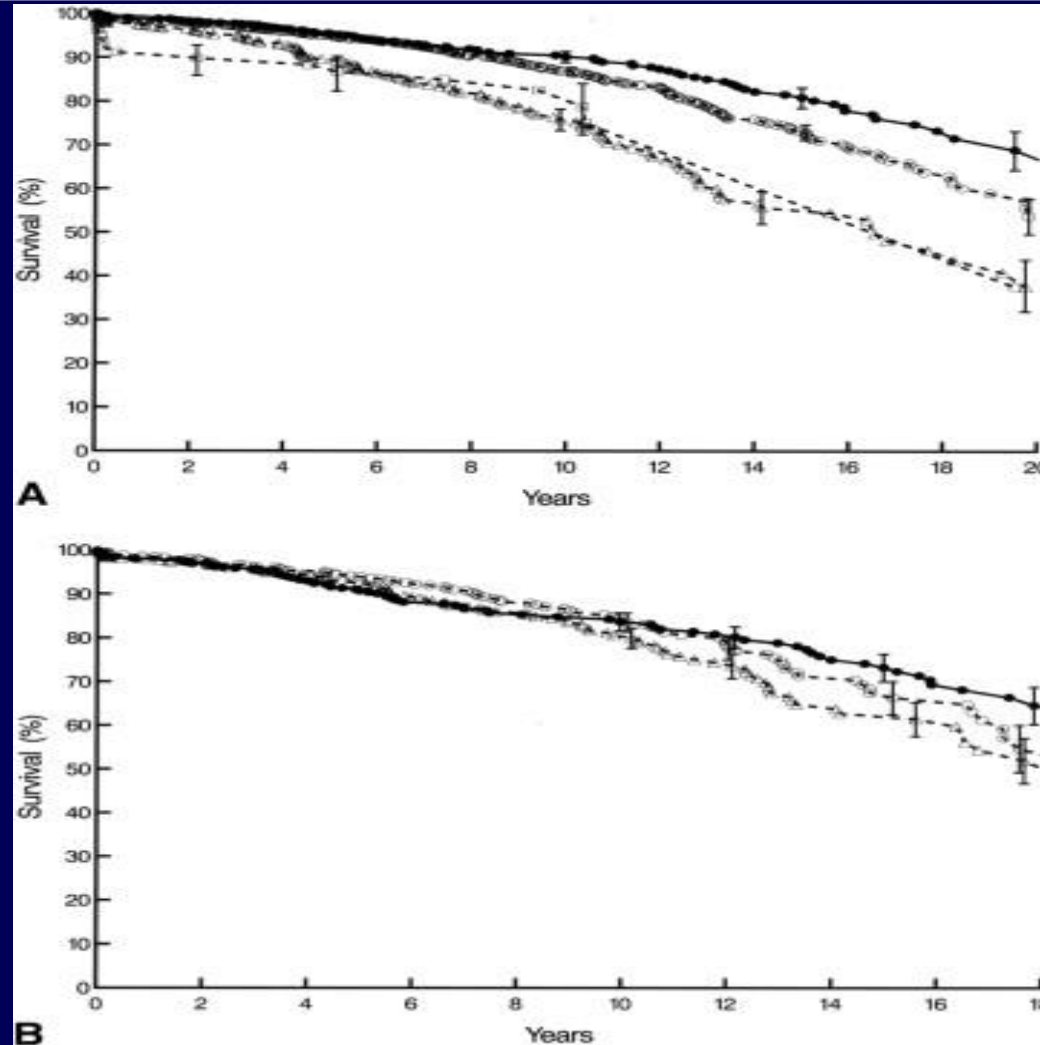
Annual Hospital Volume	Hospitals	Cases	Mortality	Morbidity/ Mortality	Converted to Replacement
≥50	29	14,696	82 (0.56)	942 (6.41)	304 (2.07)
25-49	58	11,194	86 (0.77)	894 (7.99)	536 (4.79)
10-24	166	14,085	176 (1.25)	1,287 (9.14)	983 (6.99)
<10	628	13,487	275 (2.04)	1,623 (12.00)	1,576 (11.70)
Overall	881	53,462	619 (1.60)	4,671 (8.74)	3,399 (6.36)

BADWHAR JACC 2023

ecommendation	American	European
Primary MR		
Symptoms	I-B	I-B
No symptoms and		
LVEF ≤60% and/or LVESD ≥40 mm	I-B	I-B
AF secondary to MR		IIa-B
SPAP at rest >50 mm Hg		IIa-B
LA dilatation (LAVi ≥60 mL/m ² or LAD ≥55 mm)		IIa-B
High likelihood of durable repair (>95%) and expected mortality rate <1%	IIa-B	
MV surgery if progressive increase in LV size or decrease in EF on >3 serial imaging studies	IIb-B	
TEER if favorable MV anatomy, severe symptoms (NYHA functional class III or IV), high or prohibitive surgical risk, and no fertility	IIa-B	IIb-B



TRIBOUILLOY et al, CIRC 99:400,1999



CLASS II

GILLINOV et al ANN THOR SURG 90 :481 ,

2010

834 Circulation Vol 90, No 2 August 1994

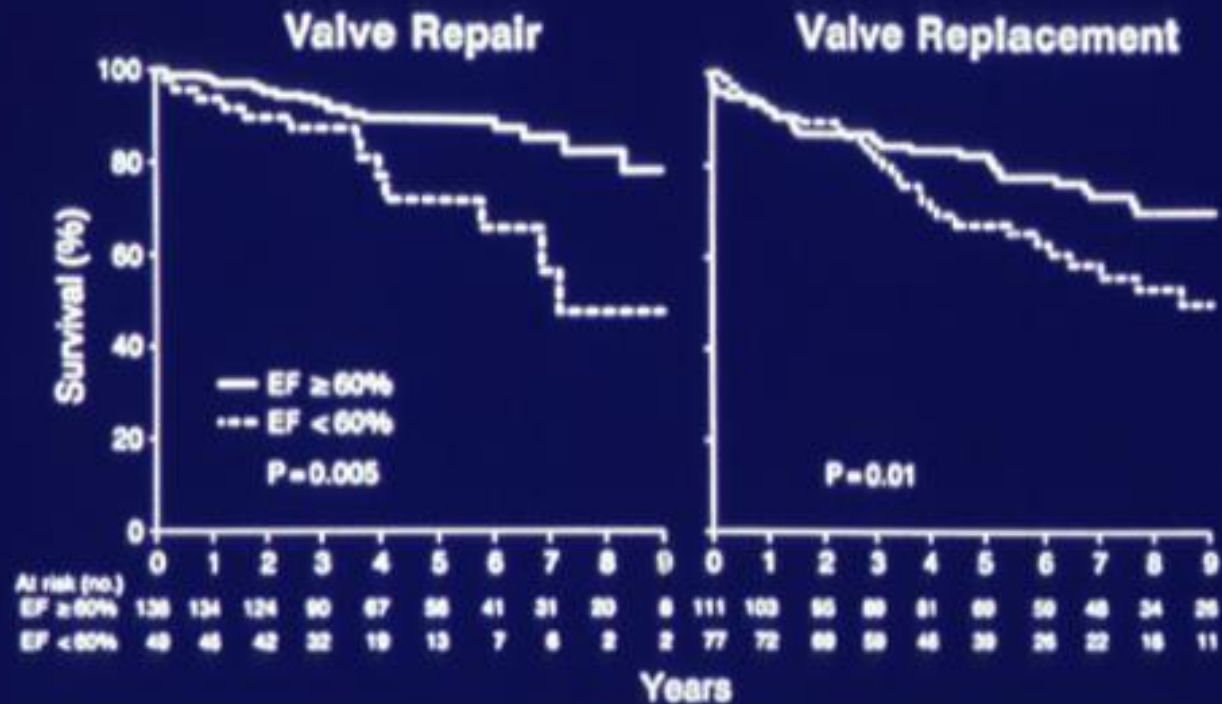
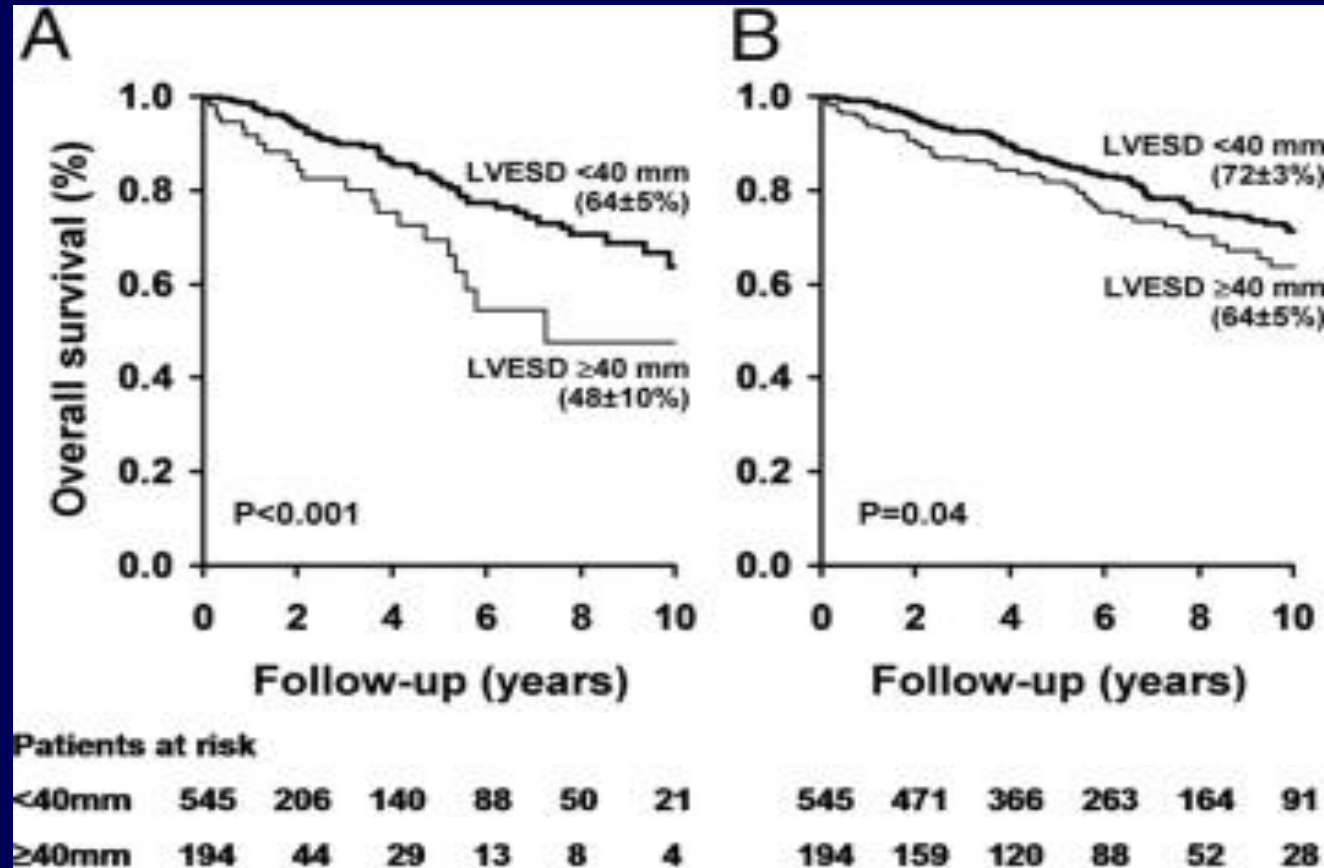


FIG 3. Graphs of late survival according to preoperative echocardiographic ejection fraction (EF) after valve repair (left) and valve replacement (right).

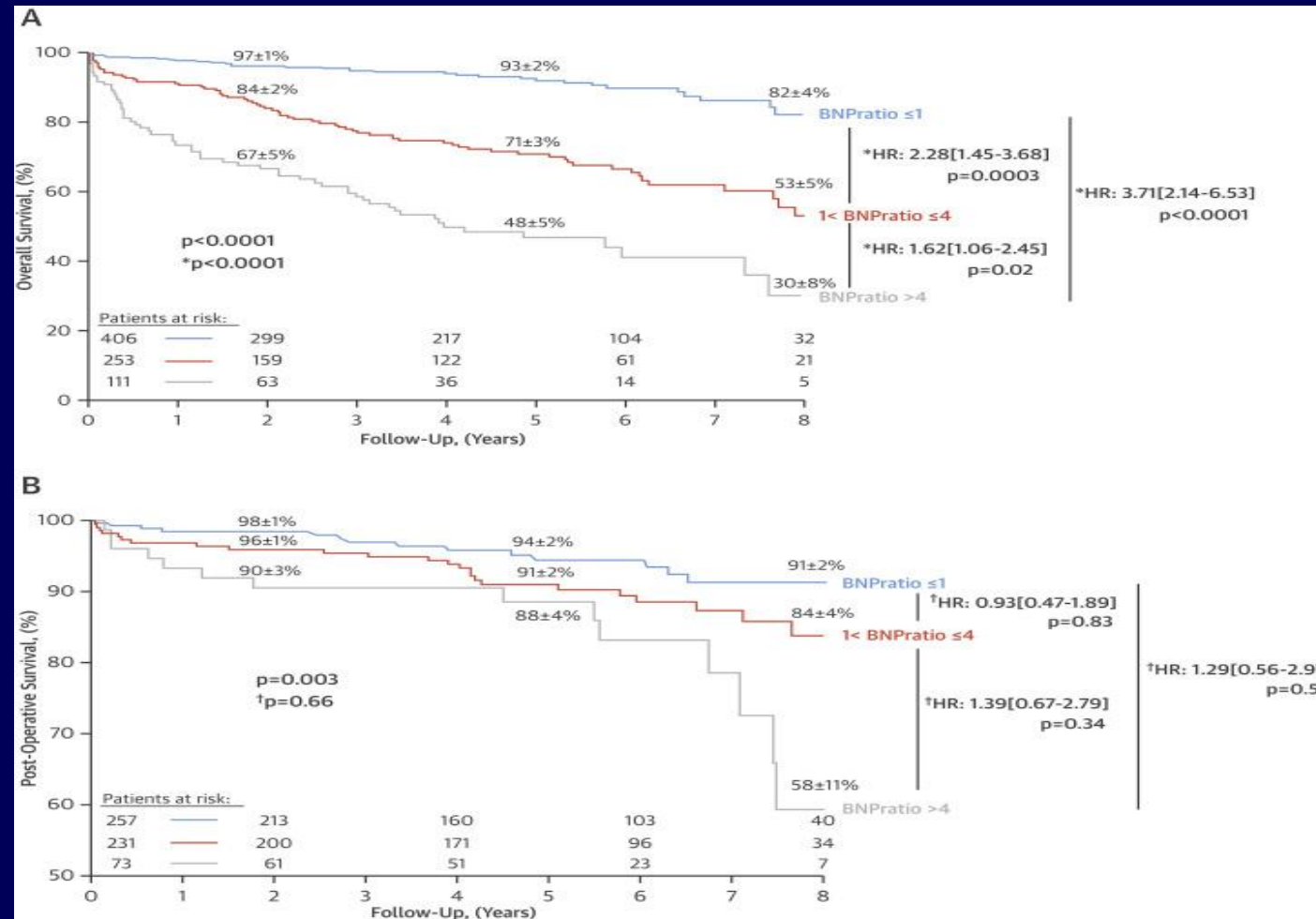
ENRIQUEZ-SARANO et al CIRC, 90:830, 1994



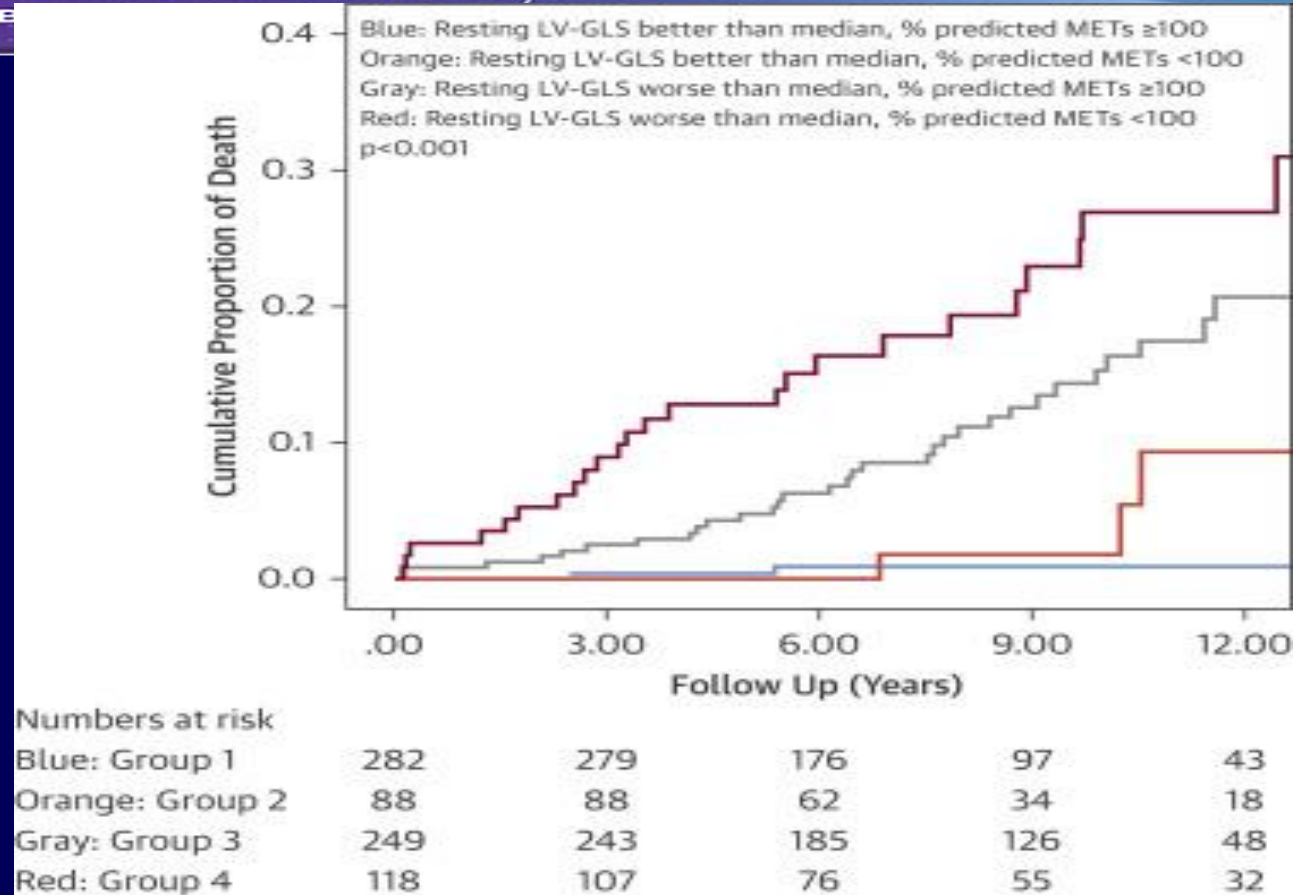
TRIBOUILLOY et al JACC 2009

AMERICAN GUIDELINES

- USE OF BNP AND LV STRAIN MAY BE USED IN DECISION MAKING



CLAVEL et al JACC 20166



Amgad Mentias, Peyman Najj, A. Marc Gillinov, L. Leonardo Rodriguez, Grant Reed, Tomislav Mihaljevic, Rakesh M. Suri, Joseph F. Sabik, Lars G. Svensson, Richard A. Grimm, Brian P. Griffin, Milind Y. Desai

Journal of the American College of Cardiology, Volume 68, Issue 18, 2016, 1974–1986

<http://dx.doi.org/10.1016/j.jacc.2016.08.030>

AHA/ACC ESC RECOGNIZE ATRIAL MR

Secondary MR

GDMT and management by a collaborative heart team first

I-C

I-B

MV surgery in patient undergoing CABG

In patient undergoing CABG

IIa-B

I-B (and other cardiac surgery)

For ventricular SMR if symptoms despite GDMT

IIb-B

IIb-C (and appropriate for surgery)

For atrial SMR and preserved LVEF if symptoms despite GDMT

IIb-B

TEER

Symptoms despite optimal GDMT and not eligible for surgery and criteria suggesting an increased chance of responding to TEER

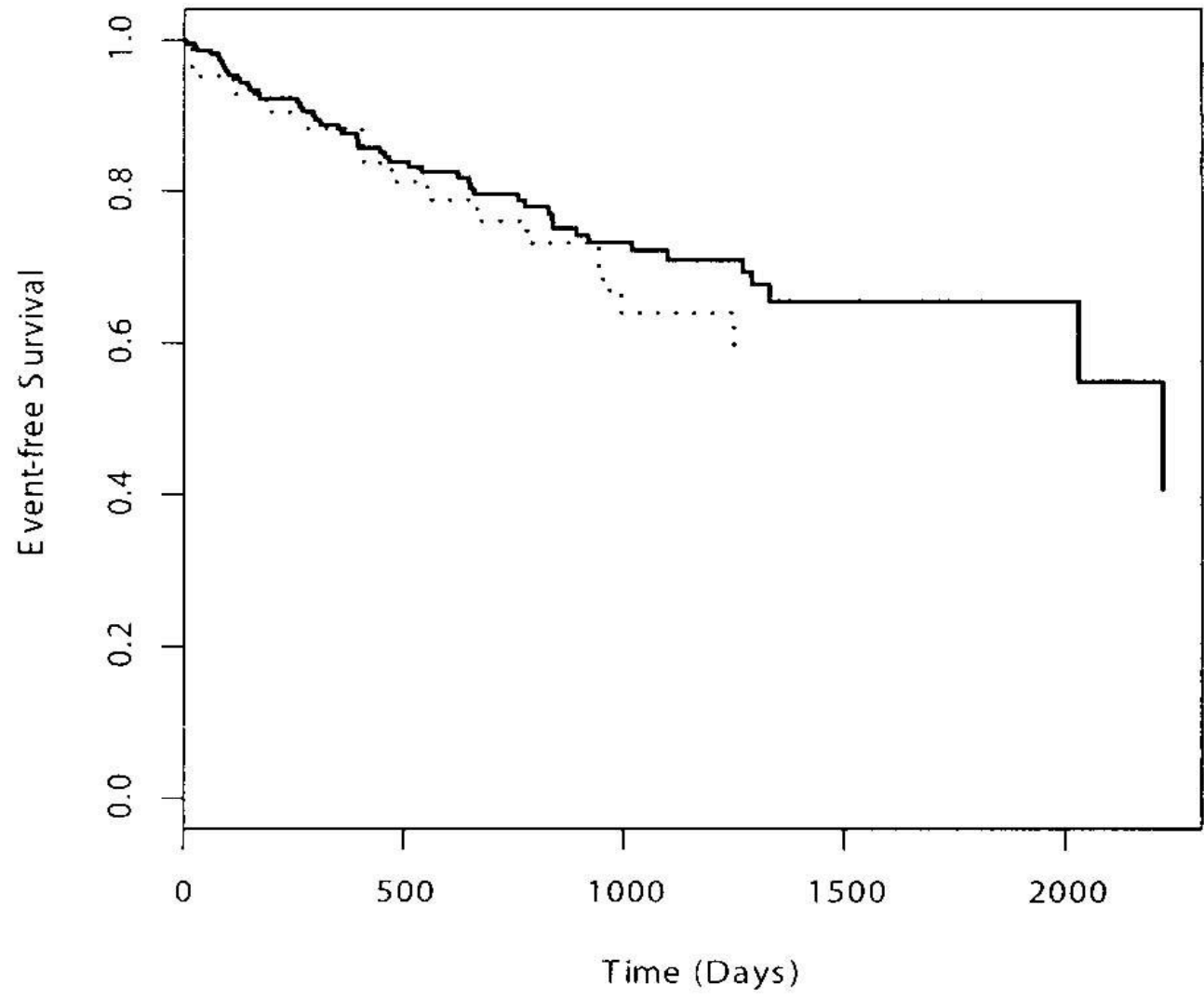
IIa-B

Symptoms despite optimal GDMT and LVEF 20%-50%, LVESD \leq 70 mm, SPAP \leq 70 mm Hg and appropriate anatomy

IIa-B

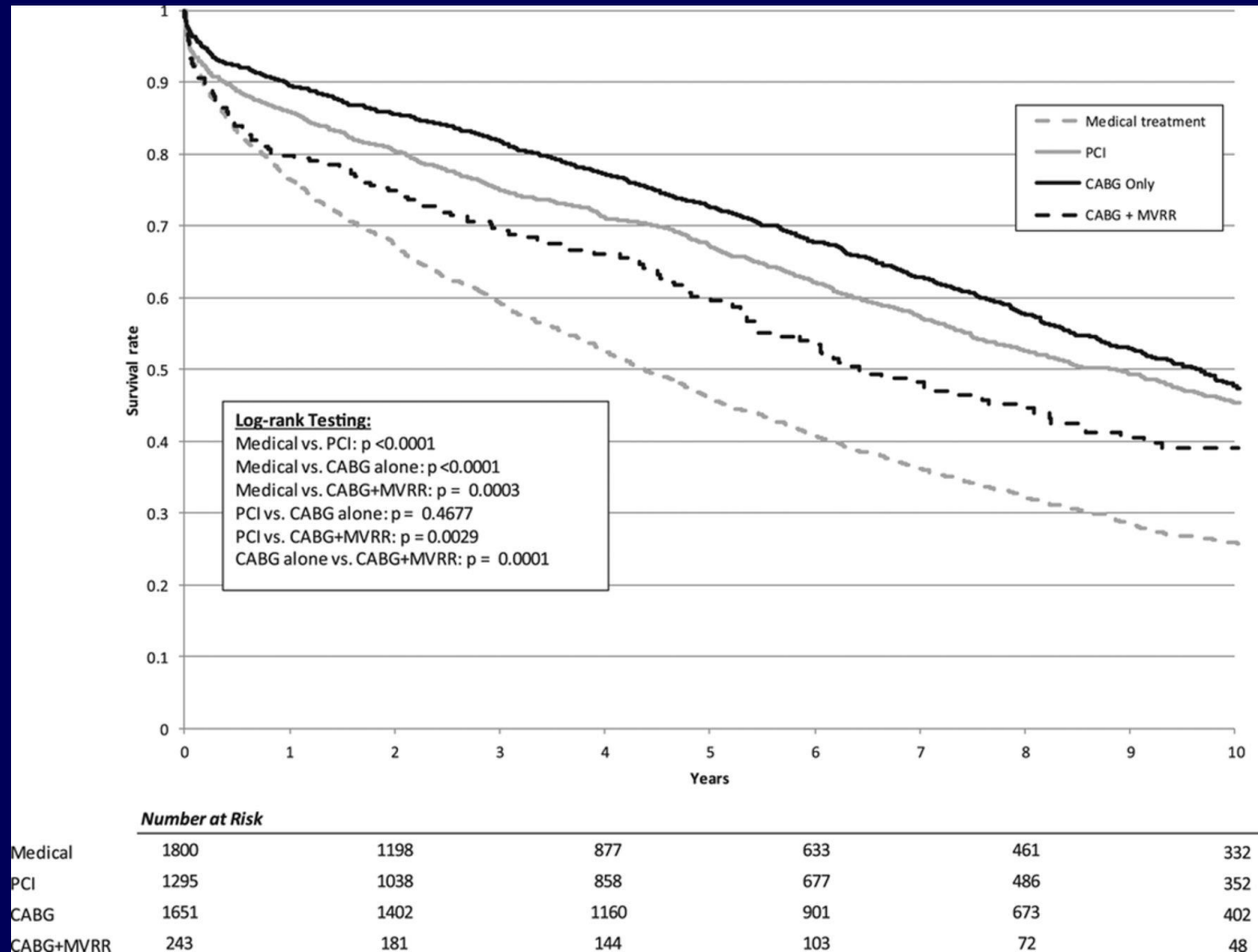
TEER or other transcatheter therapy in high-risk symptomatic patients not eligible for surgery and no criteria suggesting an increased chance of responding to TEER, after careful evaluation for ventricular assist device or heart transplant.

IIb-C

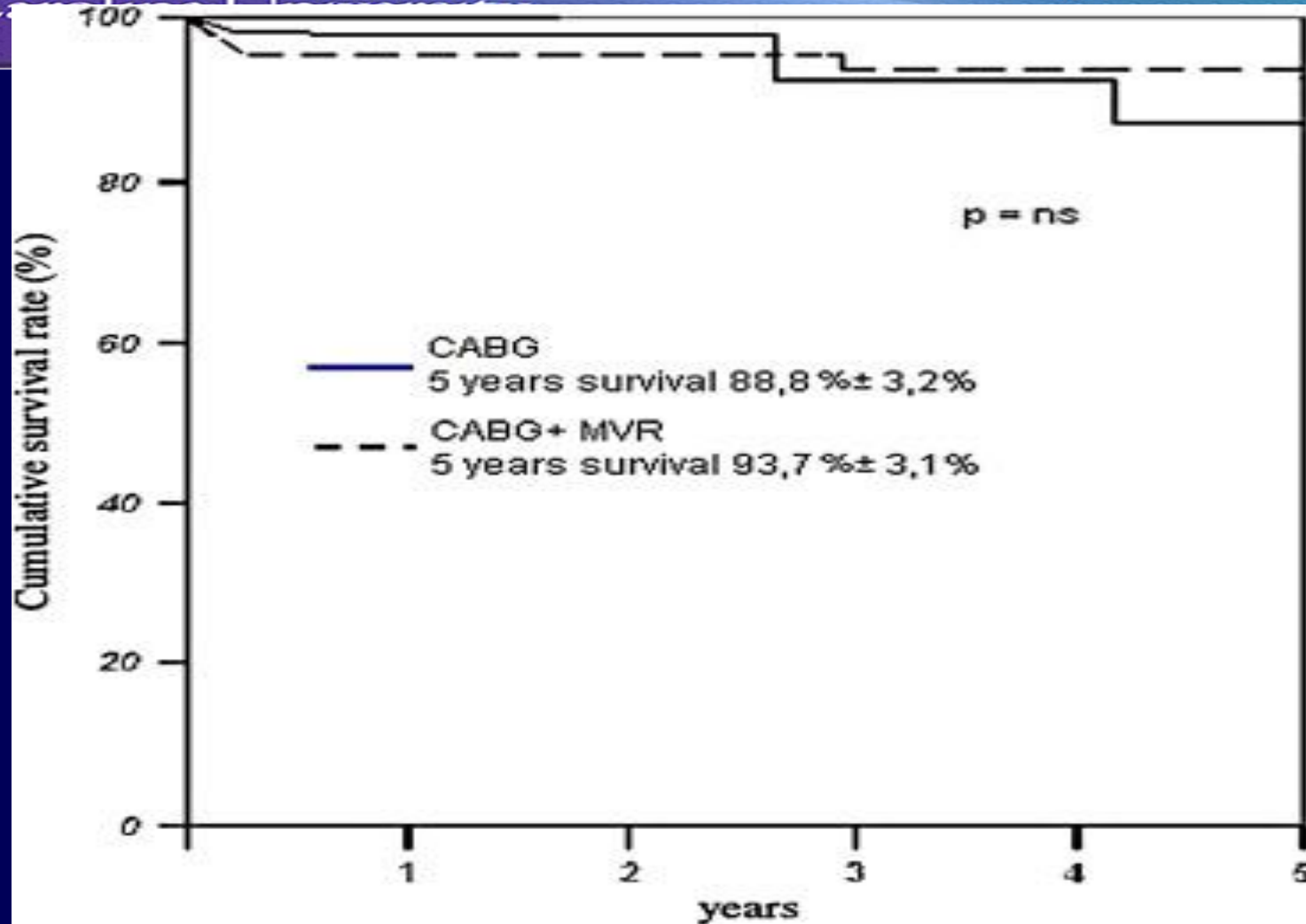


WU et al JACC 2005

Unadjusted Kaplan-Meier survival curves by treatment category.



Castleberry A W et al. Circulation. 2014;129:2547-2556

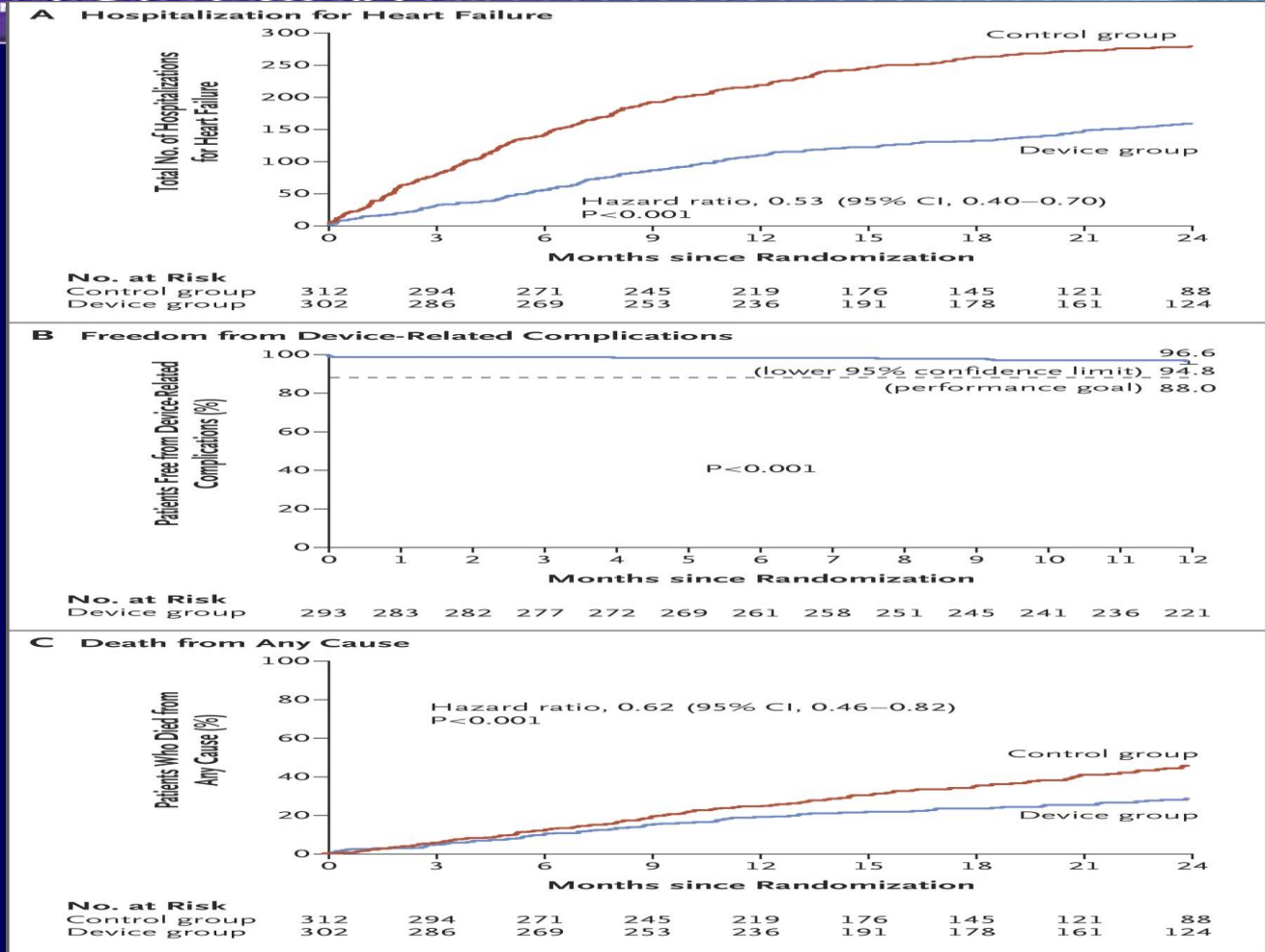


FATTOUCH et al ;JTCVS 2009

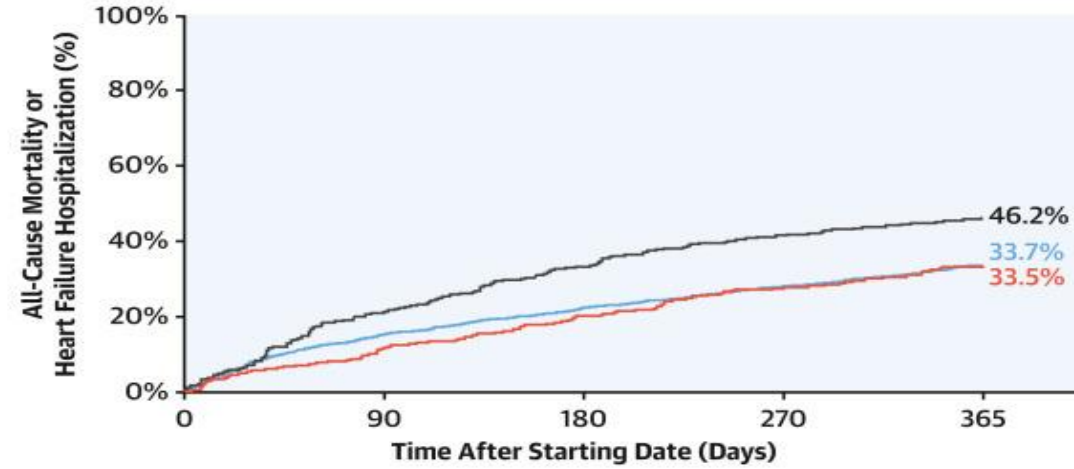


BENEDETTO et al

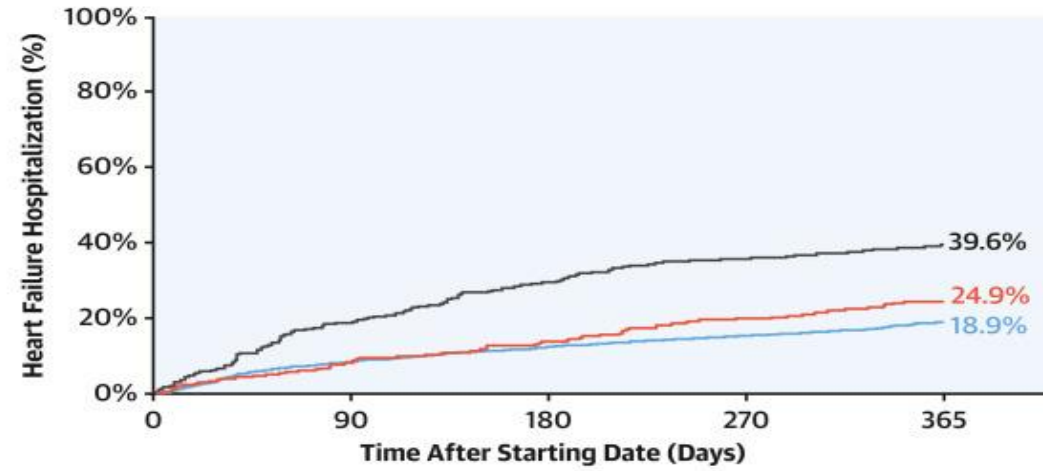
- META ANALYSIS 2749 Pts
- NO IMPROVEMENT IN SURVIVAL
- NO IMPROVEMENT IN NYHA CLASS
- LESS MR



STONE et al NEJM 2019

A**# At Risk**

	0	90	180	270	365
— COAPT-PAS	5,000	3,217	2,923	2,700	1,834
— COAPT-RCT: MitraClip	302	265	238	216	196
— COAPT-RCT: GDMT	312	245	206	176	156

B**# At Risk**

	0	90	180	270	365
— COAPT-PAS	5,000	3,217	2,923	2,700	1,834
— COAPT-RCT: MitraClip	302	265	238	216	196
— COAPT-RCT: GDMT	312	245	206	176	156

BOTTOM LINE

- PRIMARY MR: REPAIR
- TRIGGERS: SXS AND LV DYSFUNCTION
- BOTH LEAVE ROOM FOR EARLY REPAIR

- SECONDARY MR: GDMT. US FAVORS CLIP OVER SURGERY
- ATRIAL MR RECOGNIZED AS A THRID WAY