

Great Debate on MVD 2023

Medical Therapy is Enough

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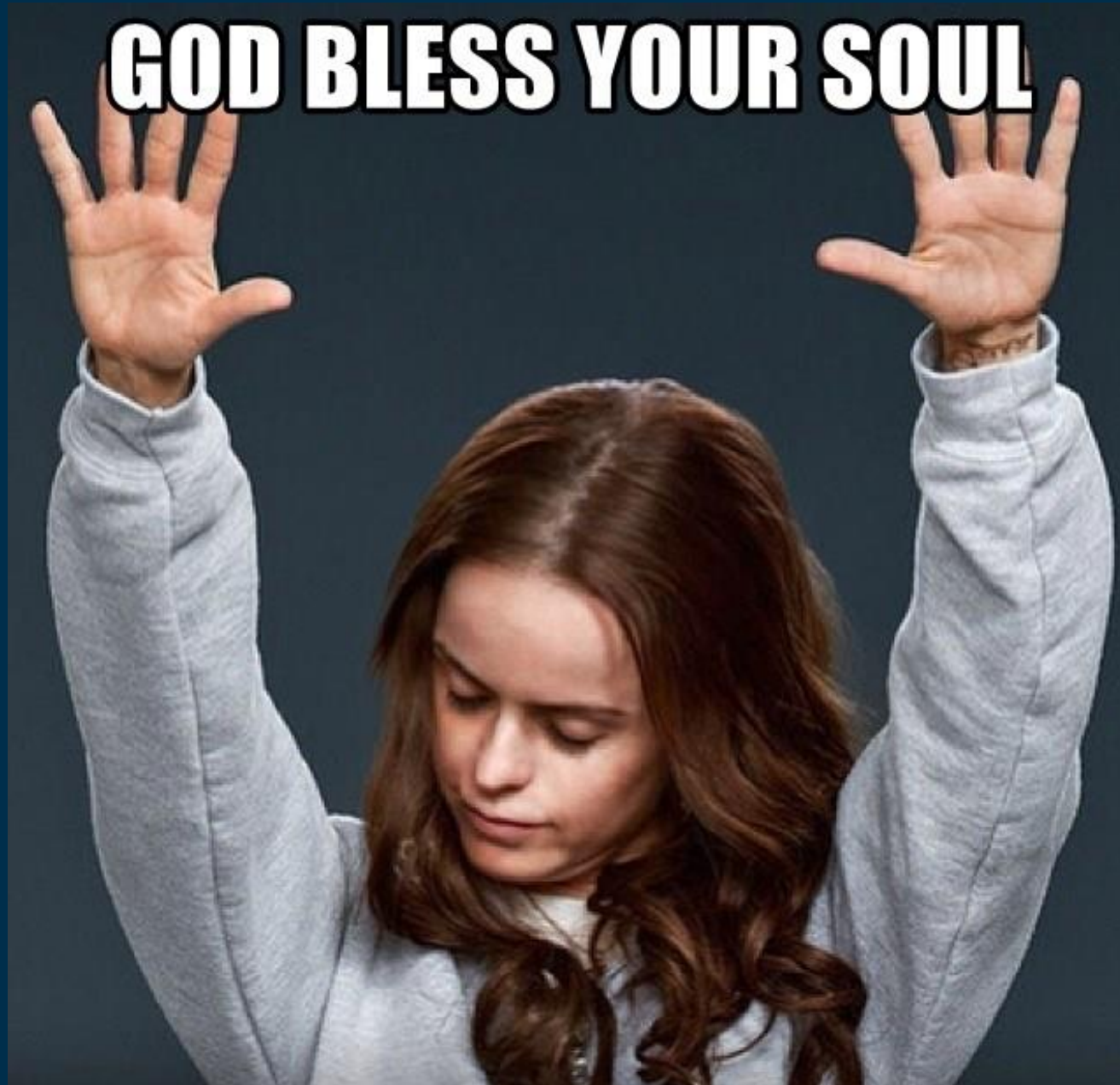
Disclosure Statement of Financial Interest

No relevant disclosures

I did ask people who know David Taggart some advice on how to debate him.....

Their Advice.....

GOD BLESS YOUR SOUL




How I really feel about this debate.....

Taggart

vs.

Bangalore



A man with short dark hair, wearing a dark suit, white shirt, and a striped tie, is shown from the chest up. He is looking slightly to his right with a conceding or thoughtful expression. The background is a blurred office setting with bookshelves.

Alright, I concede.

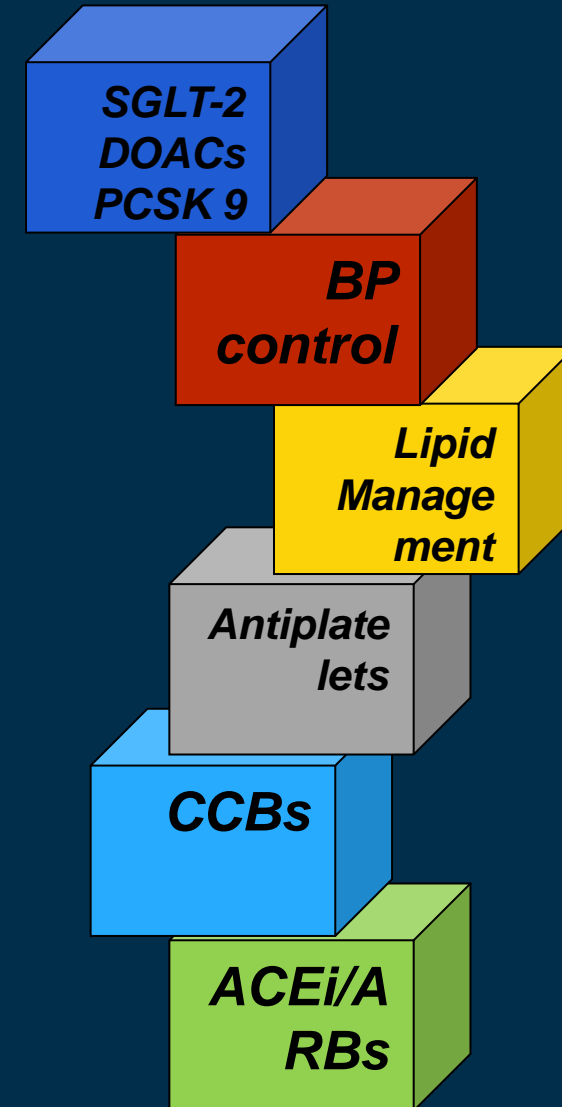
Surgery has to be the standard for all MVD....

- CABG improve survival
- ISCHEMIA results doesn't apply to CABG
- Medical therapy or PCI doesn't reduce MI

Management of Stable CAD: OMT



Targets significant + non-significant lesions



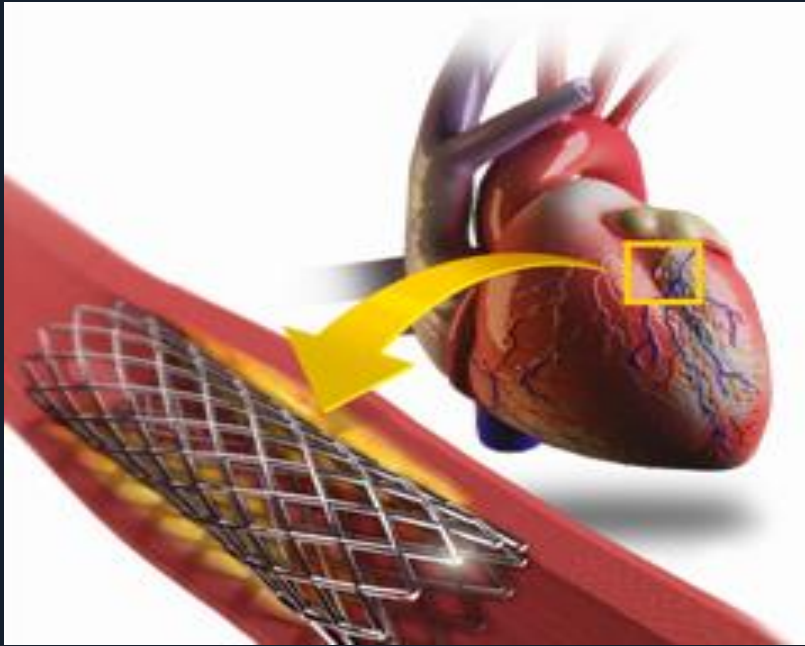


LIMA out survives the patient



PCI

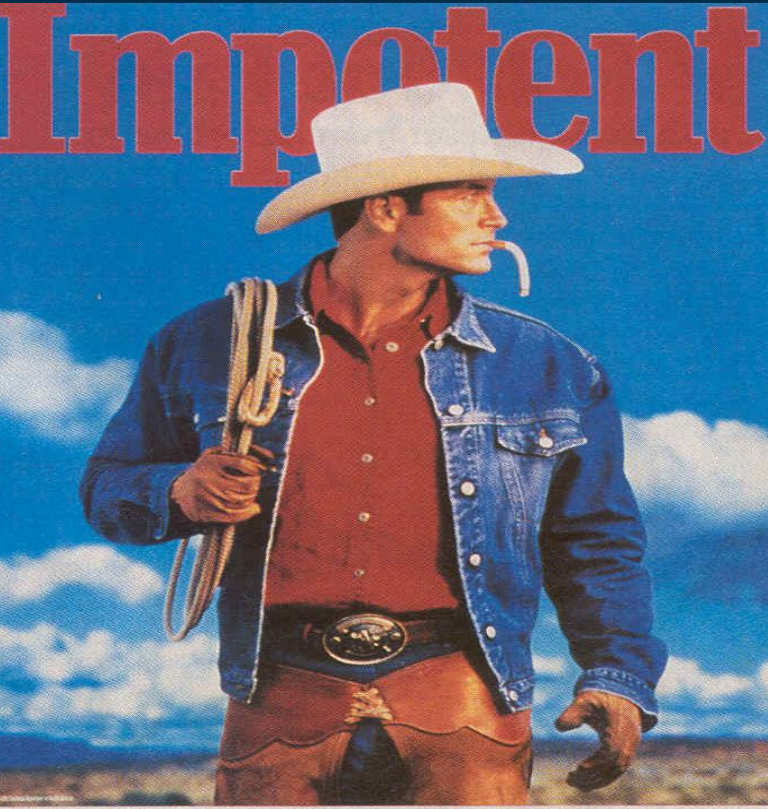
PCI without OMT is like.....



**Targets significant
lesion/s**



OMT vs. CABG vs. PCI: Tradeoffs



Surgery has to be the standard for all MVD....

- CABG improves survival
- ISCHEMIA results doesn't apply to CABG
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**ENOUGH!
LET'S MOVE ON**



The question we are **NOT** debating is....

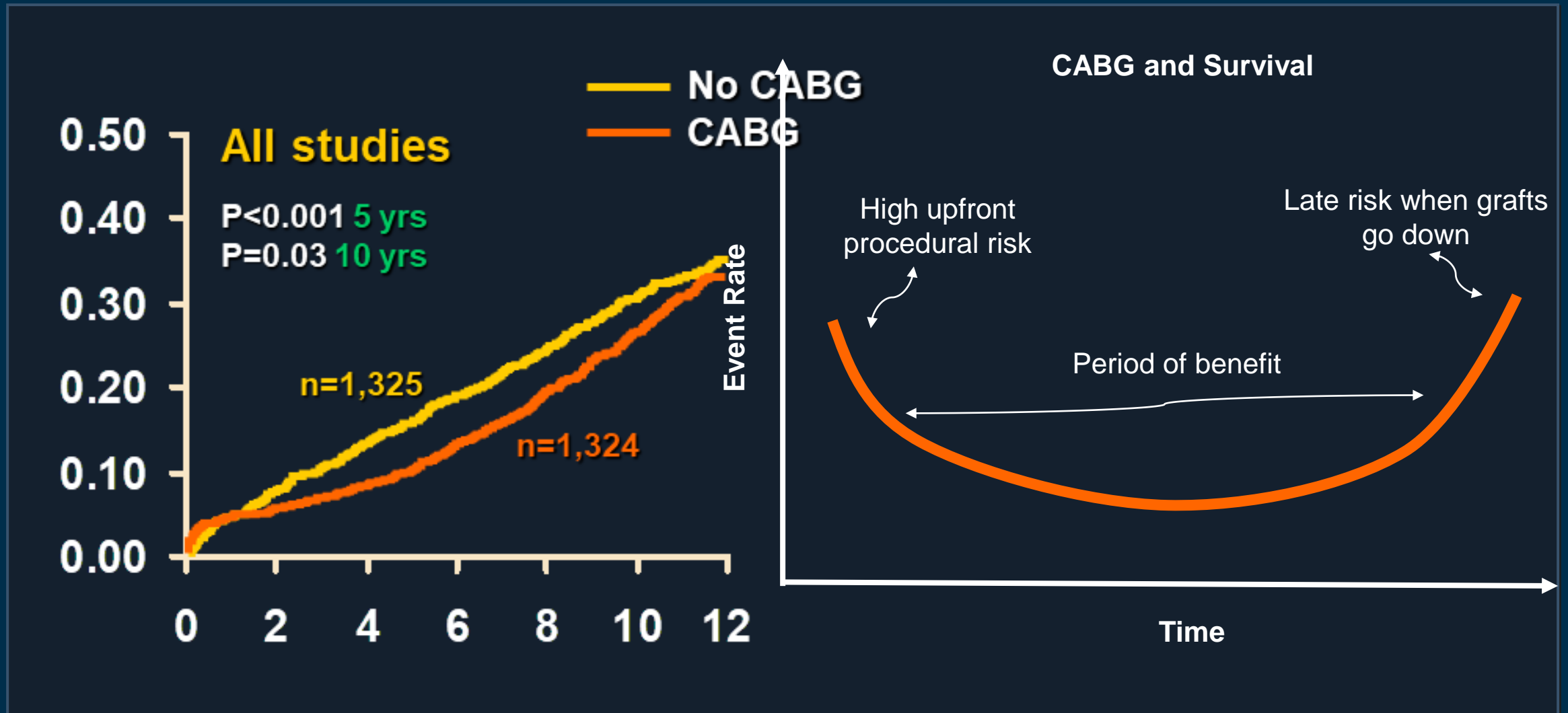
- Does CABG improve survival in patients with MVD and reduced LV systolic function? **STICHES** proved CABG does
- Does CABG improve CV death **ISCHEMIA** shows Invasive strategy (PCI or CABG) has a small (0.3%/year) reduction in CV death

The question we are debating is....

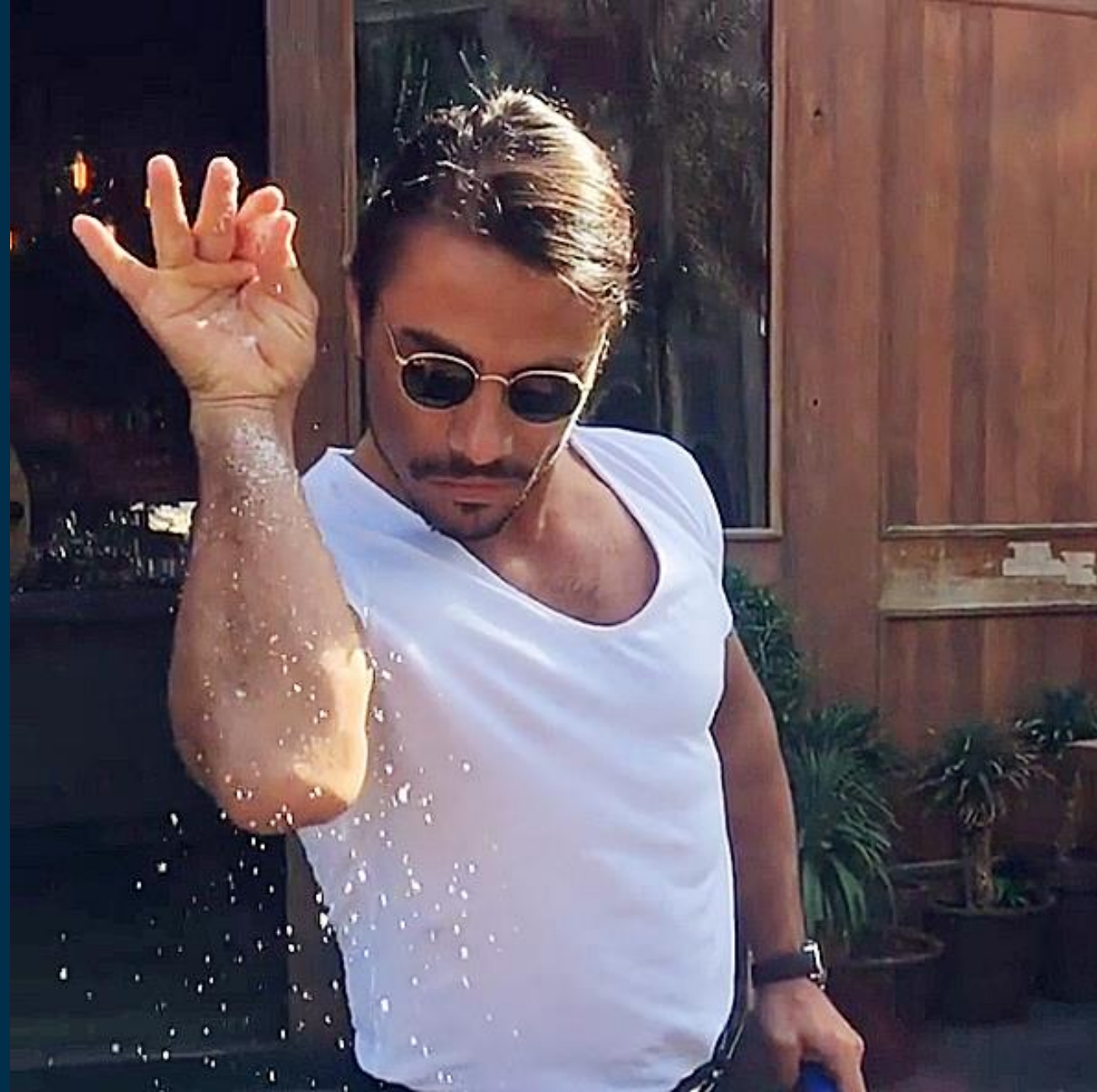
- Does CABG improve overall survival in patients with MVD and **preserved LV systolic function**?

RCTs in the Pre-OMT Era

CABG Surgery Trialists Collaboration; 10-year outcome



Lets sprinkle in a touch of medical therapy....



Contemporary Revascularization vs. Medicine SIHD Trials

No difference in mortality

2007



No difference in death

2009



No difference in death

2012

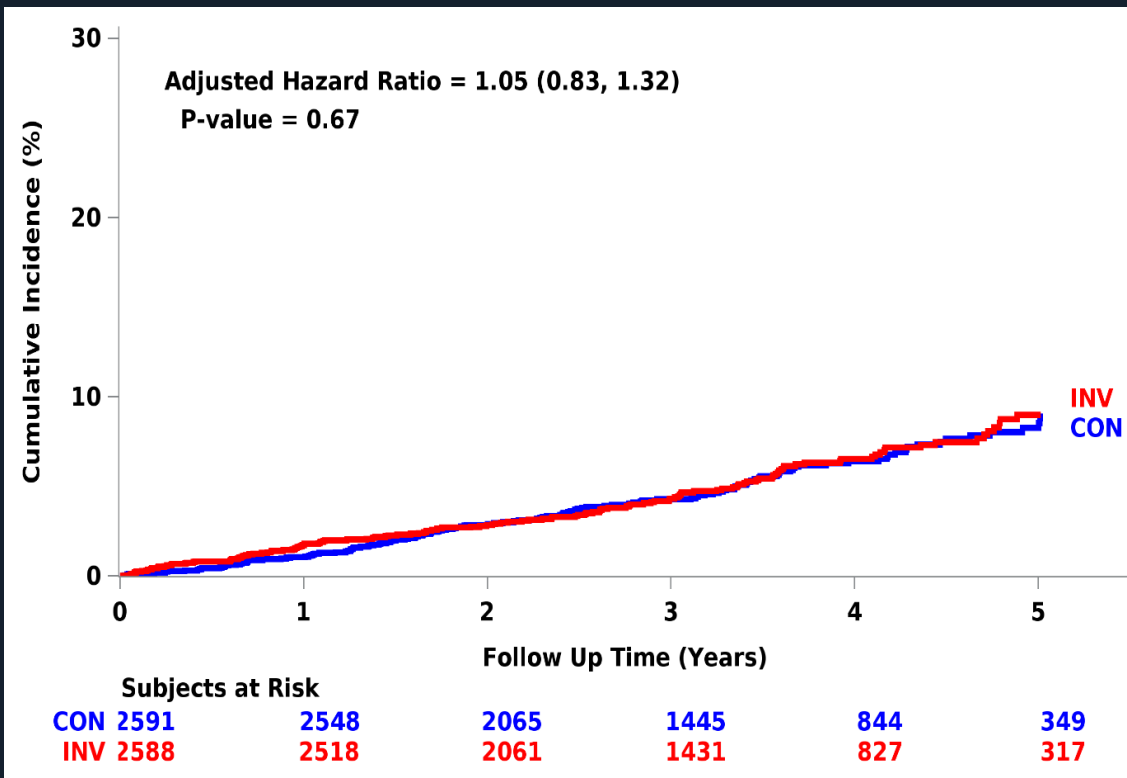
**FAME 2
Trial**

No difference in death

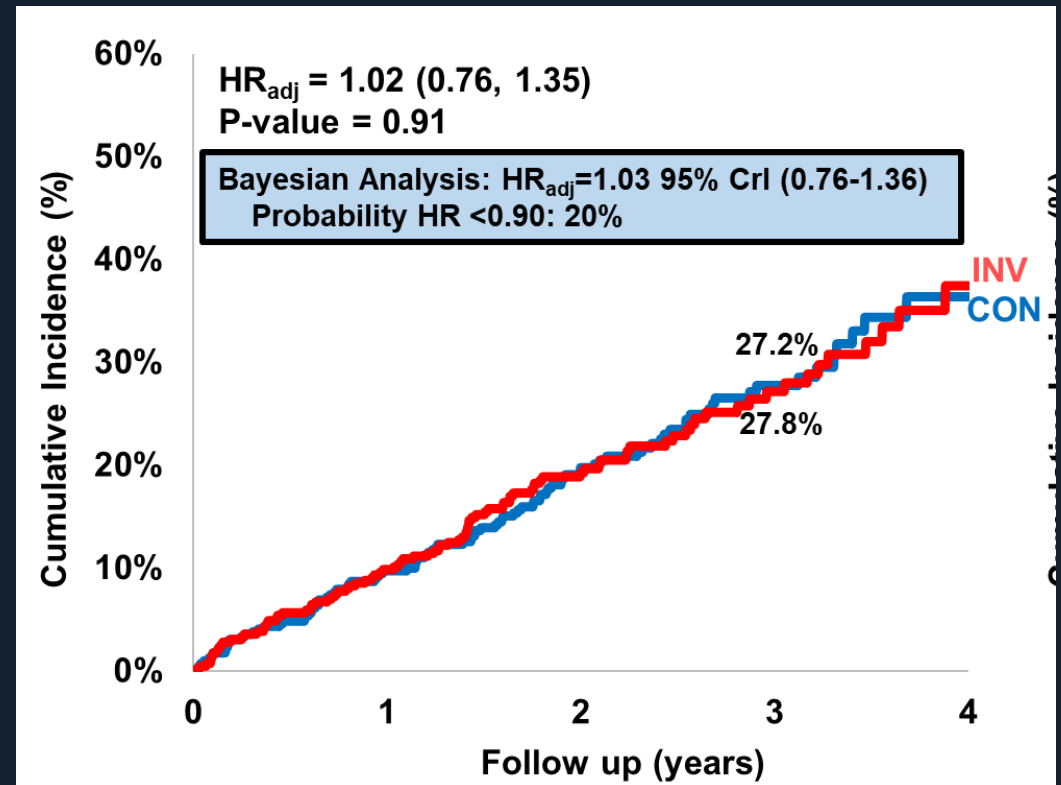
ISCHEMIA and ISCHEMIA-CKD trials

No difference in mortality

ISCHEMIA



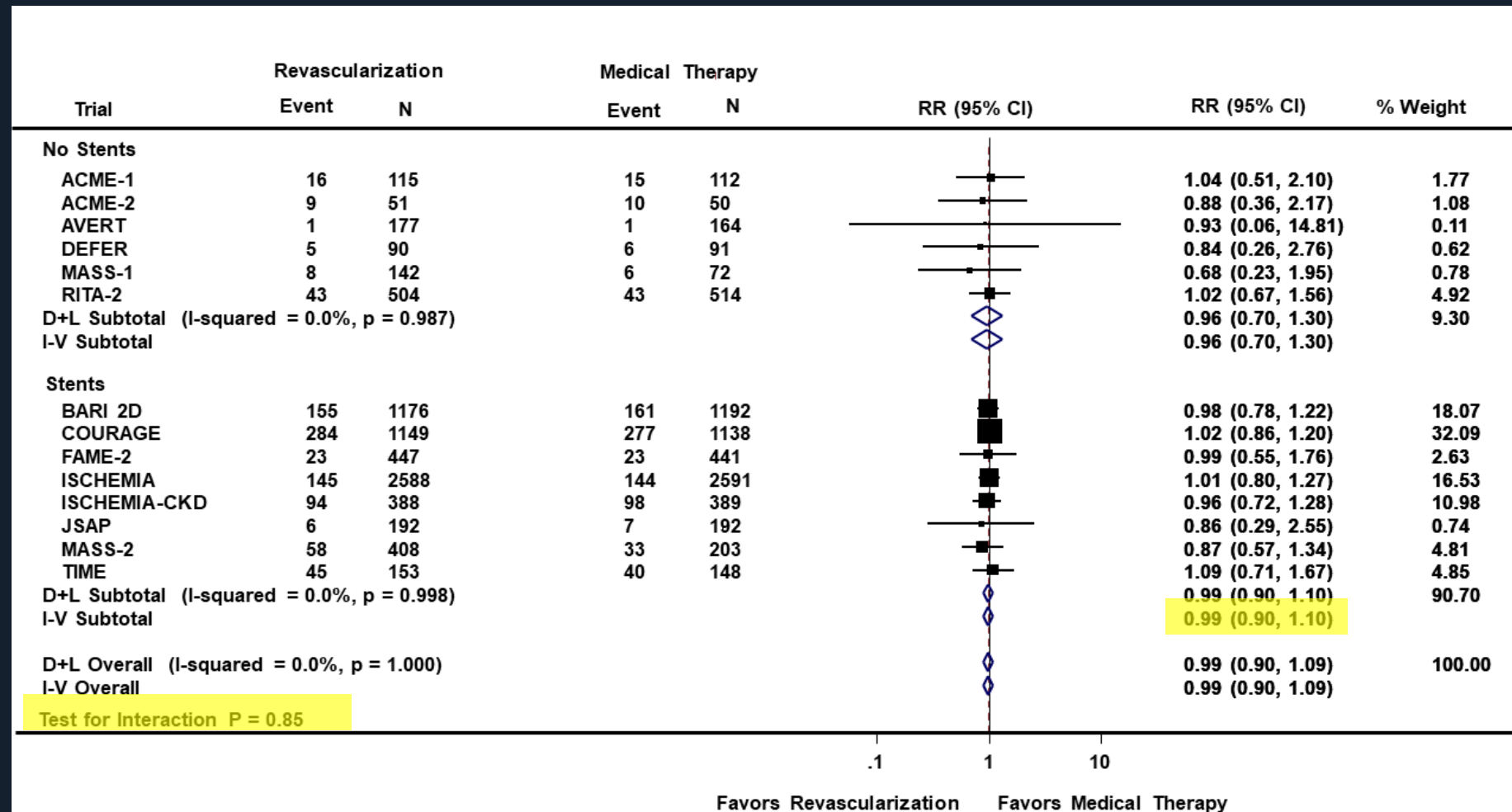
ISCHEMIA-CKD



Routine Revasc vs. Initial Medical Therapy

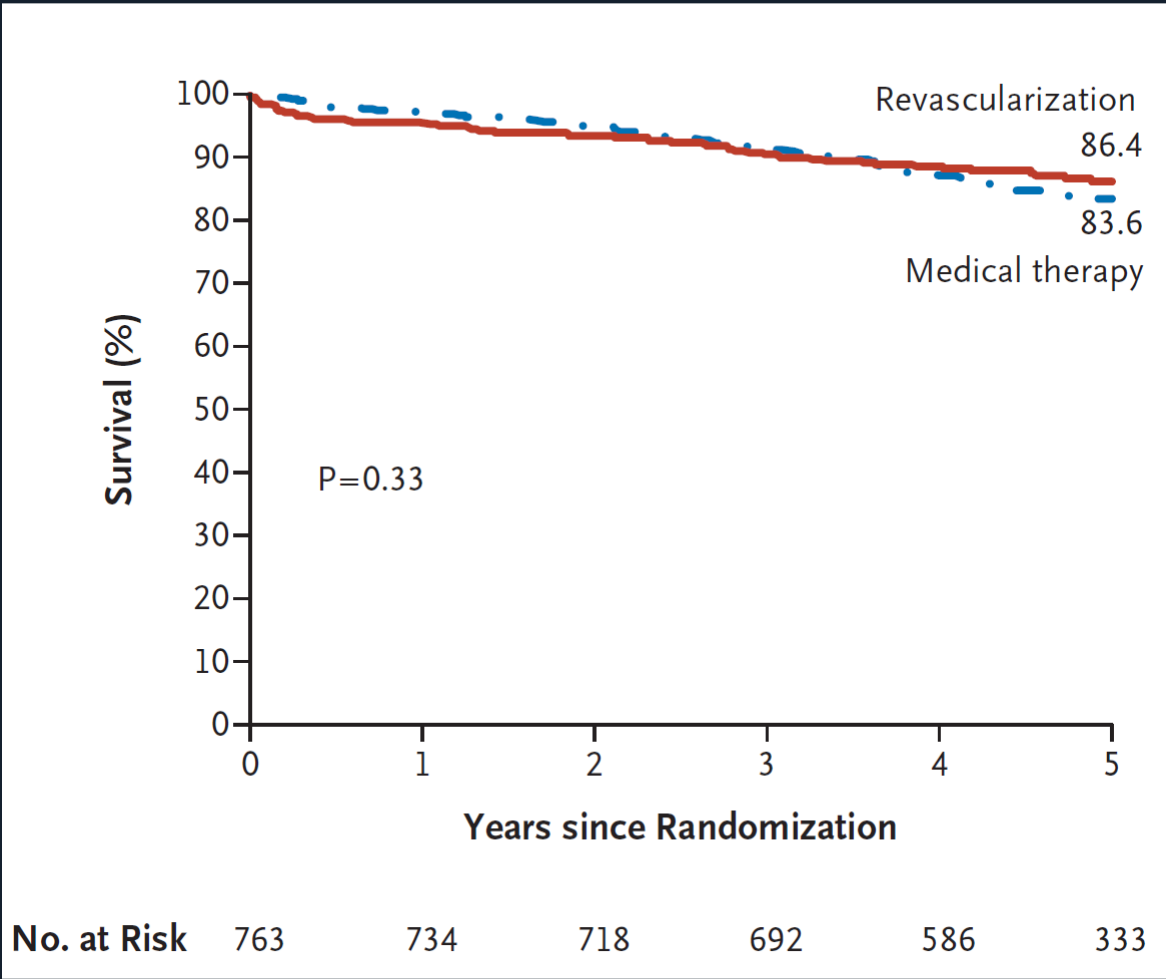
Death

14 RCTs with 14,877 patients followed up for 4.5 years with 64,678 patient years of follow-up



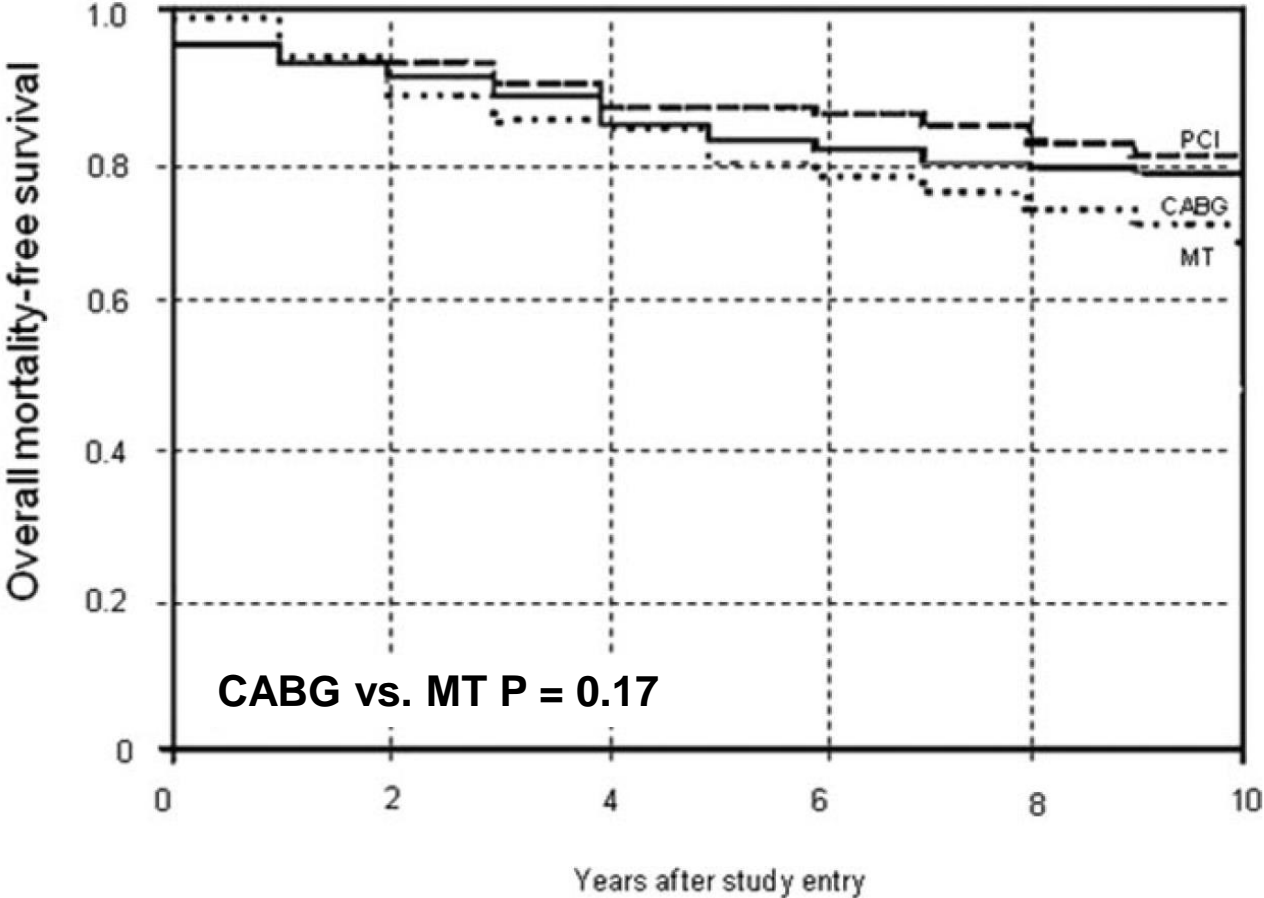
Does CABG Reduce Mortality Over GDMT?

BARI-2D CABG Stratum



Does CABG Reduce Mortality Over GDMT?

MASS II



Surgery has to be the standard for all MVD and preserved EF....

- CABG improves survival
 - *Fallacy. Benefit seen in older trials with no med therapy and curves converge at 10-years*
- ISCHEMIA results doesn't apply to CABG
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CABG as the Revascularization Modality in Trials of Revasc vs. Medical Therapy

- ISCHEMIA (2020): 530 patients
- BARI 2D (2009): 378 patients
- MASS II (2010): 203 patients

- VA study (1984): 332 patients
- European study (1988): 394 patients
- CASS study (1983): 390 patients

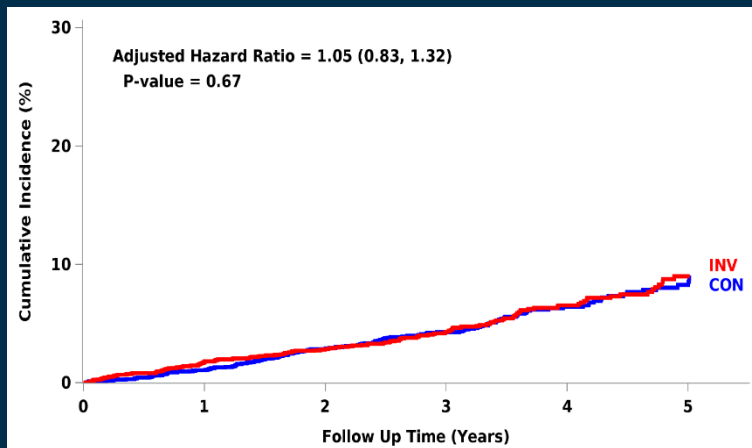
ISCHEMIA in the Context of Prior Trials

Death

Trial	Publication Year	Number of patients who underwent CABG	Follow-up	Mortality Reduction with CABG	P-value for Mortality Difference
Contemporary Trials					
MASS II (7)	2010	203	10 years	No	0.17
BARI 2D CABG Stratum	2009	378	5 years	No	0.33
ISCHEMIA (4)	2020	530*	4 years	No	
Older trials without GDMT					
CASS Study (9)	1983	390	10 years	No	0.25
VA Study (10)	1984	332	11 years	No	0.45
European Study (11)	1988	394	12 years	Yes	0.02

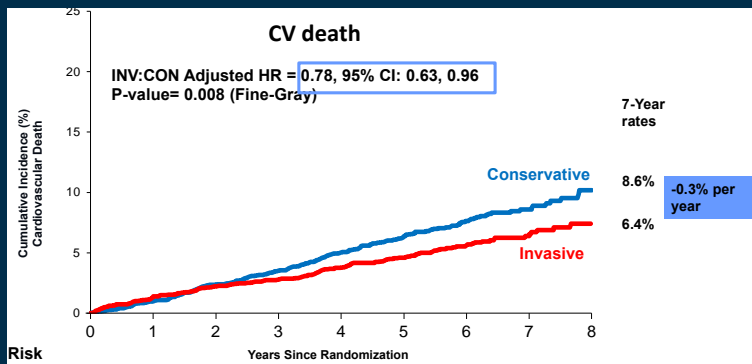
Surgeon's Reaction to ISCHEMIA and ISCHEMIA EXTEND

ISCHEMIA



ISCHEMIA results **do not** apply to CABG

ISCHEMIA EXTEND: CV Death



ISCHEMIA-EXTEND results **must be due to** CABG

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 - *Fallacy. More patients in ISCHEMIA underwent CABG than any trial of revasc vs. med therapy*
- Medical therapy or PCI doesn't reduce MI

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Therapies proven (by RCTs) to reduce CV Events

All patients with SIHD should receive a set of lifestyle interventions and medications:

I	IIa	IIb	III
B	Yellow	Orange	Red
B	Yellow	Orange	Red
B	Yellow	Orange	Red
B	Yellow	Orange	Red
A	Yellow	Orange	Red
A	Yellow	Orange	Red
A	Yellow	Orange	Red
A	Yellow	Orange	Red

- Diet
- Weight loss
- Regular physical activity
- If a smoker, smoking cessation
- Aspirin 75-162mg daily
- High-intensity statin Rx
- If hypertensive, Rx to achieve a BP <140/90
- If diabetic, appropriate glycemic control

Newer Therapies with Potential to Further Reduce Events

GLP-RA

?Lp(a)

?Colchicine

PCSK 9

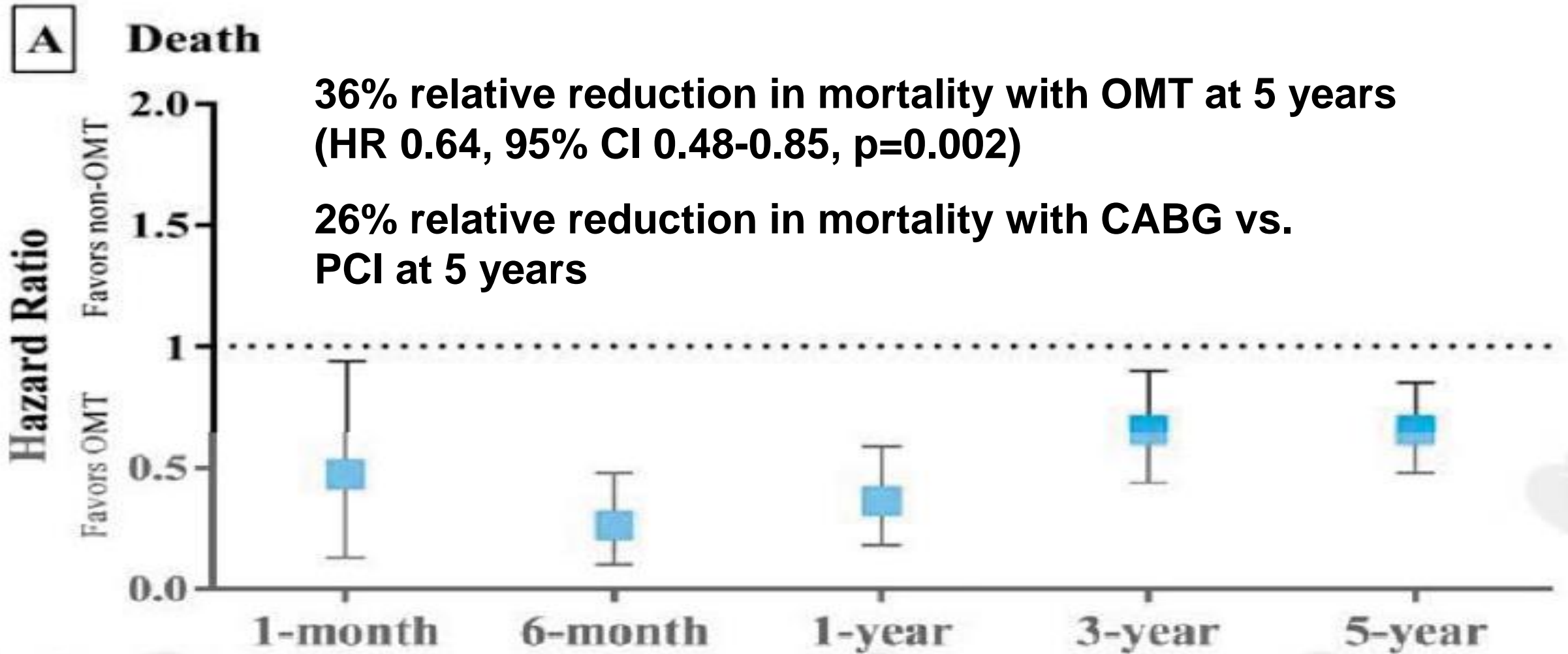
?Canakinumab

DOACs

Inclisiran

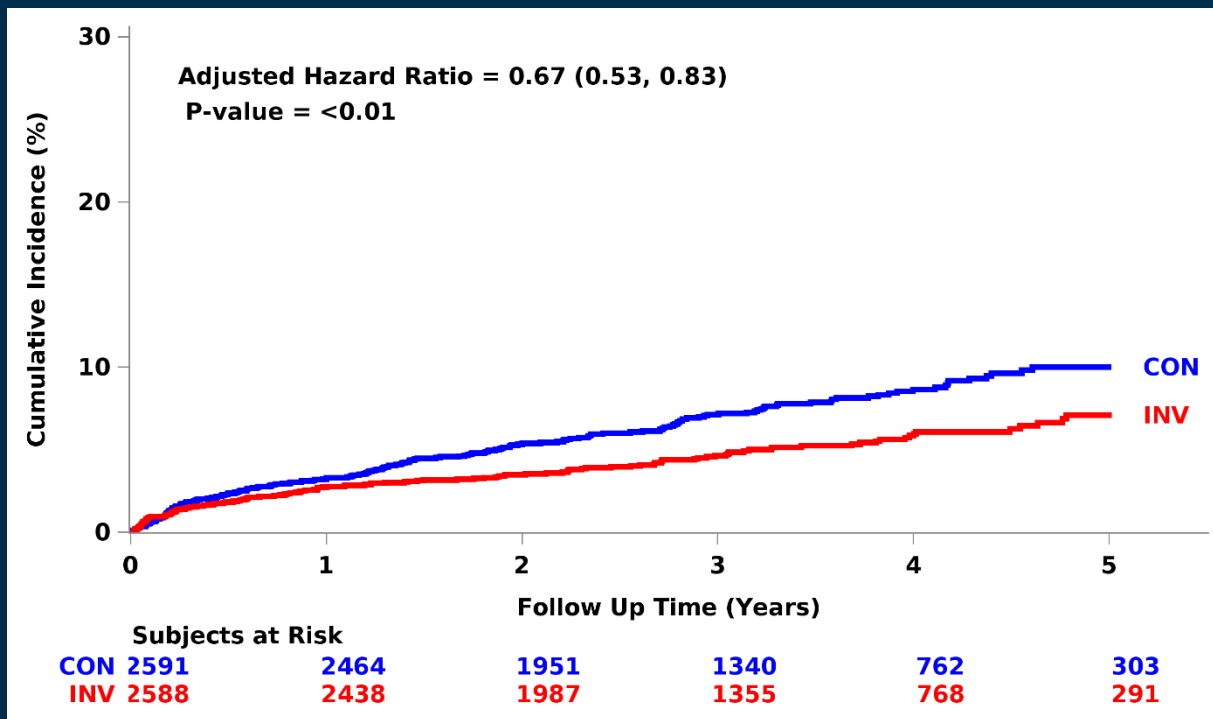
SGLT-2

Effect of OMT on Survival in SYNTAX

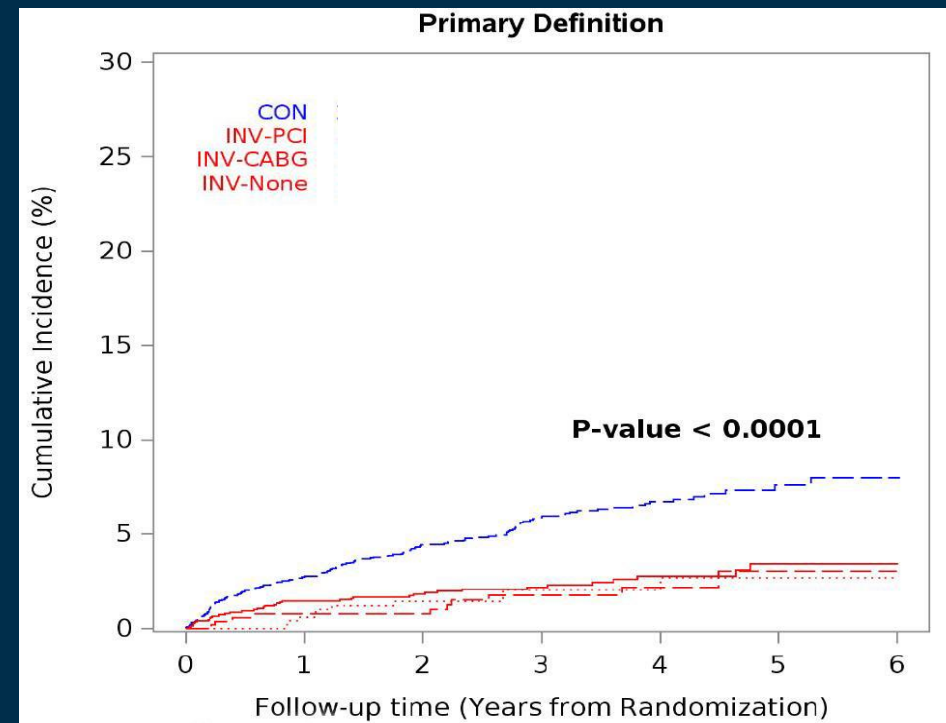


Revascularization Reduces Spontaneous MI

ISCHEMIA: Invasive vs. Conservative



Type 1 MI was Reduced by Both PCI and CABG in ISCHEMIA

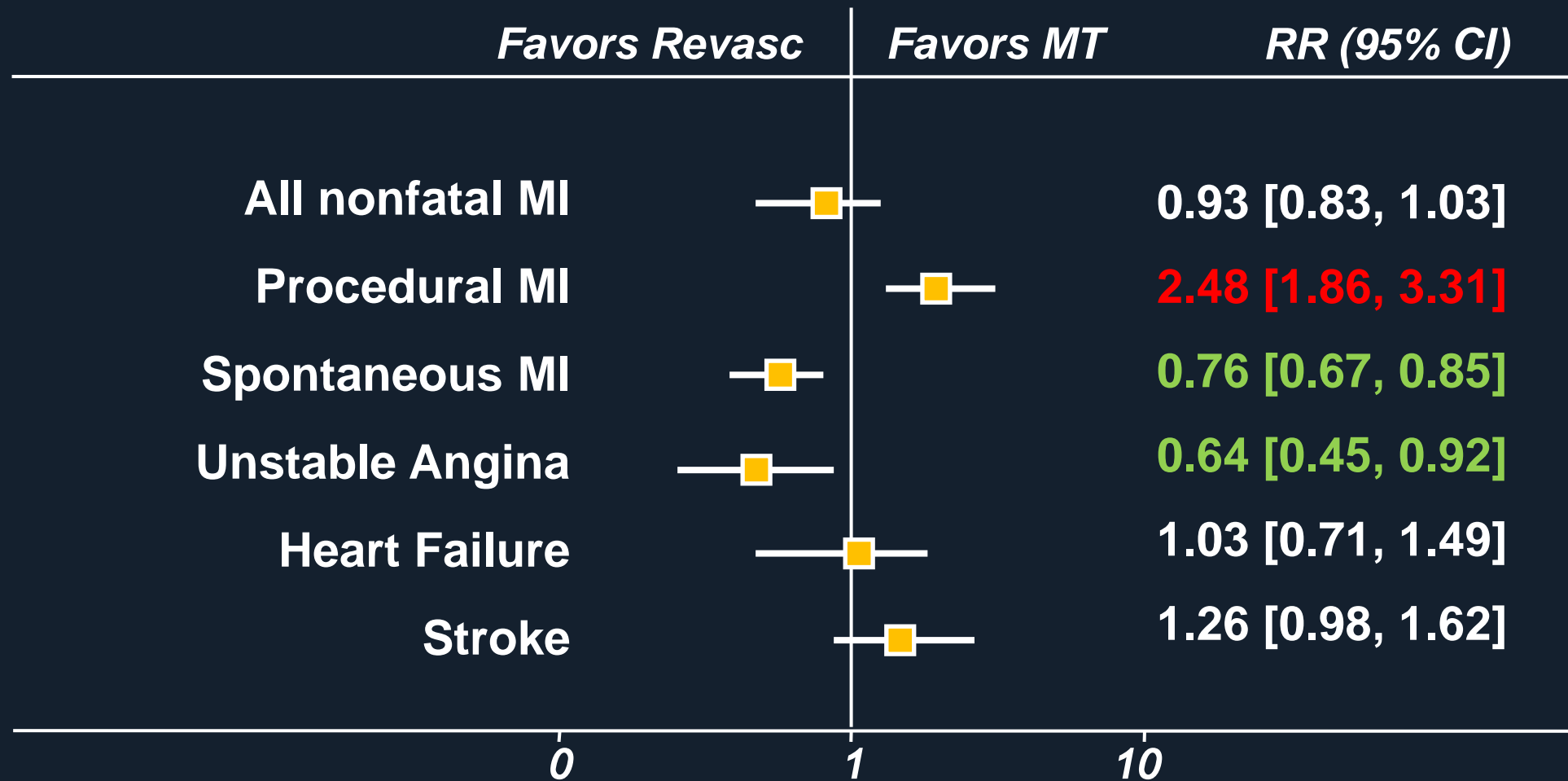


Maron et al. N Engl J Med. 2020 Apr 9;382(15):1395-1407

Chaitman et al. ACC 2020

Routine Revasc vs. Initial Medical Therapy

Other Outcomes



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- ISCHEMIA results doesn't apply to CABG
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 - *Fallacy*

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 - *Fallacy.*

The question we are **NOT** debating is....

- Does CABG improves survival in patients with MVD and reduced LV systolic function? **STICHES** proved CABG does

2021 ACC/AHA/SCAI Revascularization Guidelines

LVSD: CABG is recommended to improve survival

1

B-R

Lawton JS, Tamis-Holland JE, Bangalore S, et al. J Am Coll Cardiol. 2021

The question we are **NOT** debating is....

Does CABG improve CV death ISCHEMIA (and other meta-analysis) shows
Invasive strategy (PCI or CABG) has a small (0.3%/year) reduction in CV death

2021 ACC/AHA/SCAI Revascularization Guidelines

Multivessel-CAD: revascularization is reasonable to lower the risk of cardiovascular events such as spontaneous MI, unplanned urgent revascularizations, or cardiac death

2a

B-R

Lawton JS, Tamis-Holland JE, Bangalore S, et al. J Am Coll Cardiol. 2021

The question we are debating is....

- Does CABG improves survival in patients with MVD and preserved LV systolic function?

2021 ACC/AHA/SCAI Revascularization Guidelines

3V-CAD: CABG maybe reasonable to improve survival

2b

B-R

3V-CAD: Usefulness of PCI to improve survival is uncertain

2b

B-R

Lawton JS, Tamis-Holland JE, Bangalore S, et al. J Am Coll Cardiol. 2021

My final thought....

with or without PCI

Medical therapy [^] is enough for most patients with MVD and preserved LV function with CABG reserved for those with complex coronary disease