

European Society of Cardiology, Stockholm 2005

STATINS IN ACUTE CORONARY SYNDROMES WHY, HOW AND WHEN?

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Relationships:

Astra-Zeneca (current)

Bristol-Myers Squibb (previous)



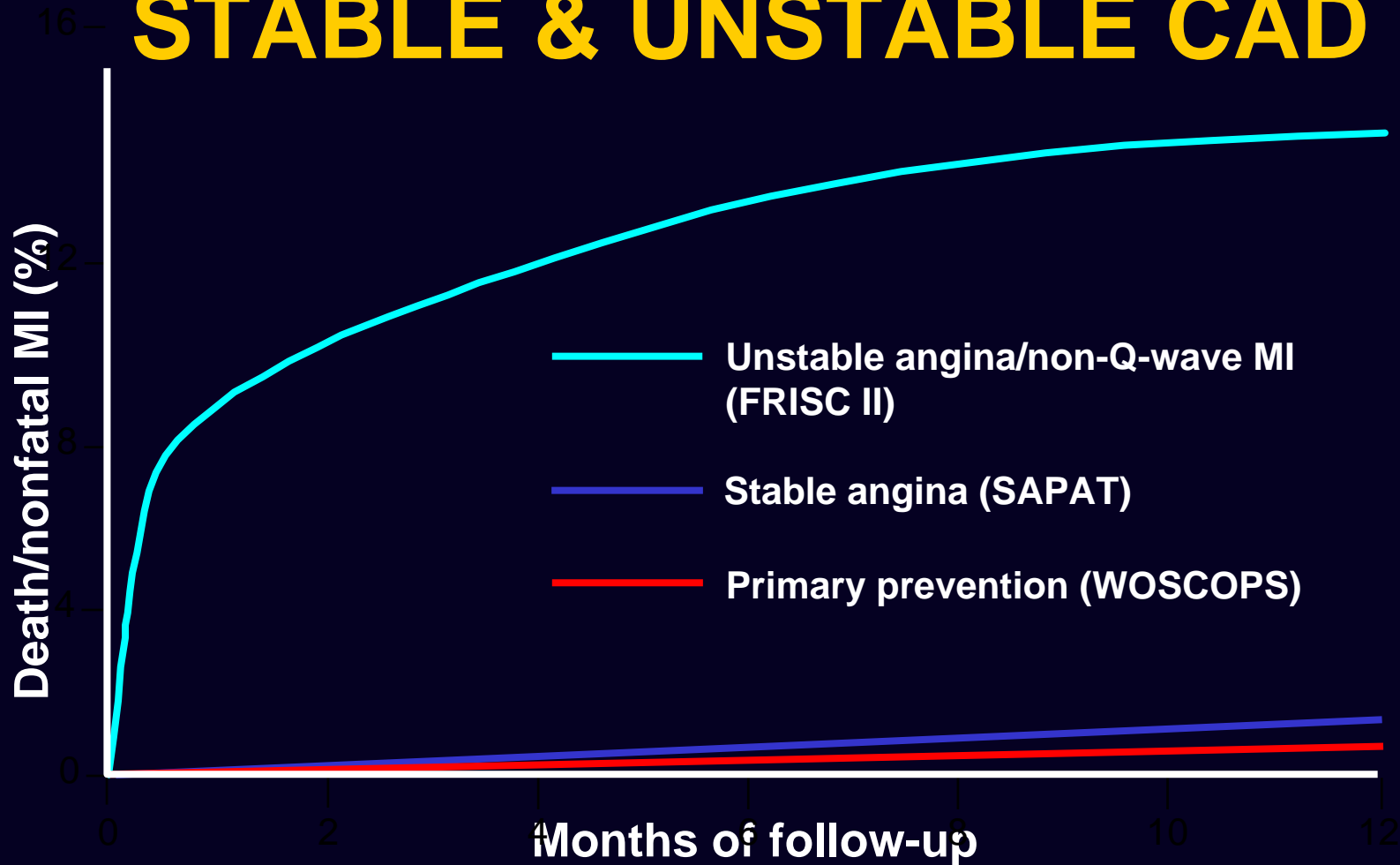
STATINS IN ACUTE CORONARY SYNDROMES WHY, HOW AND WHEN?

- **Prognosis in stable vs unstable CAD**
- **Early statin 2^o prevention trials**
- **Observational studies of lipid lowering**
- **Randomised clinical trial evidence**
- **Mechanisms of early statin effects**

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OUTCOMES IN 1^o PREVENTION, STABLE & UNSTABLE CAD



Wallentin L et al. Lancet 2000;356:9–16.

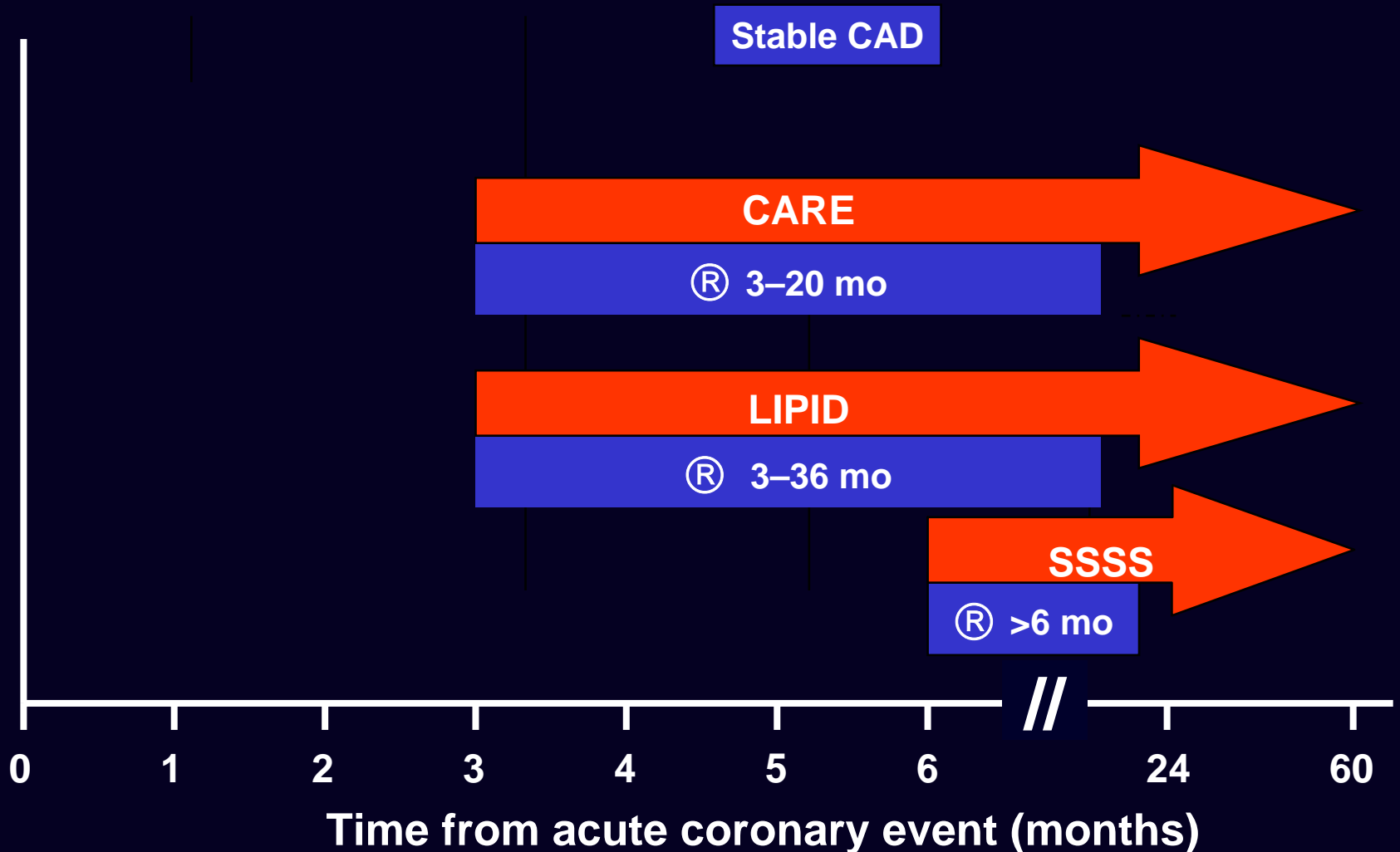
Juul-Moller S et al. Lancet 1992;340:1421–1425.

Shepherd J et al. N Engl J Med 1995;333:1301–1307.

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ONSET & DURATION OF THERAPY IN 2⁰ PREVENTION TRIALS



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OBSERVATIONAL STUDIES OF EARLY LIPID LOWERING IN ACS

modified from Wright Mayo Clinic Proc 2002;77:1085

Early benefit (In-hospital)

Mayo Clinic

PRISM trial

Late benefit (16 wk to 1y)

Swedish Study

Mayo Clinic

PURSUIT/Gusto IIB

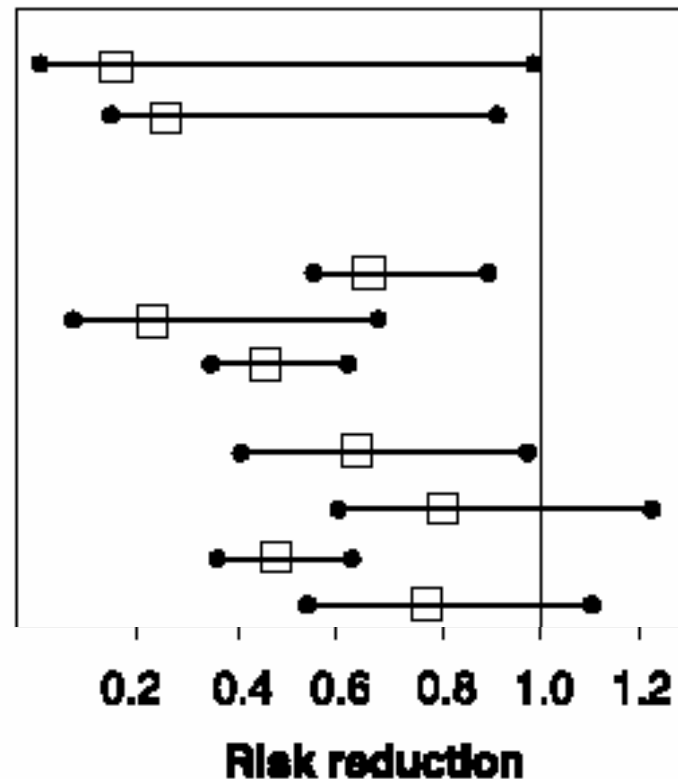
In TIME II

prior lipid treatment

no prior lipid treatment

OPUS/TIMI 16

SYMPHONY



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LIPID ENTRY CRITERIA & MEAN BASELINE VALUES

	MIRACL	A to Z	PROVE-IT
	mmol/l (mg/dl)	mmol/l (mg/dl)	mmol/l (mg/dl)

ENTRY CRITERIA

TC	<6.2(240)	<6.5(250)	<7.0(270)
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on Rx	<5.2(200)	N/A	N/A
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(Poland/SA)			<8.0(310)
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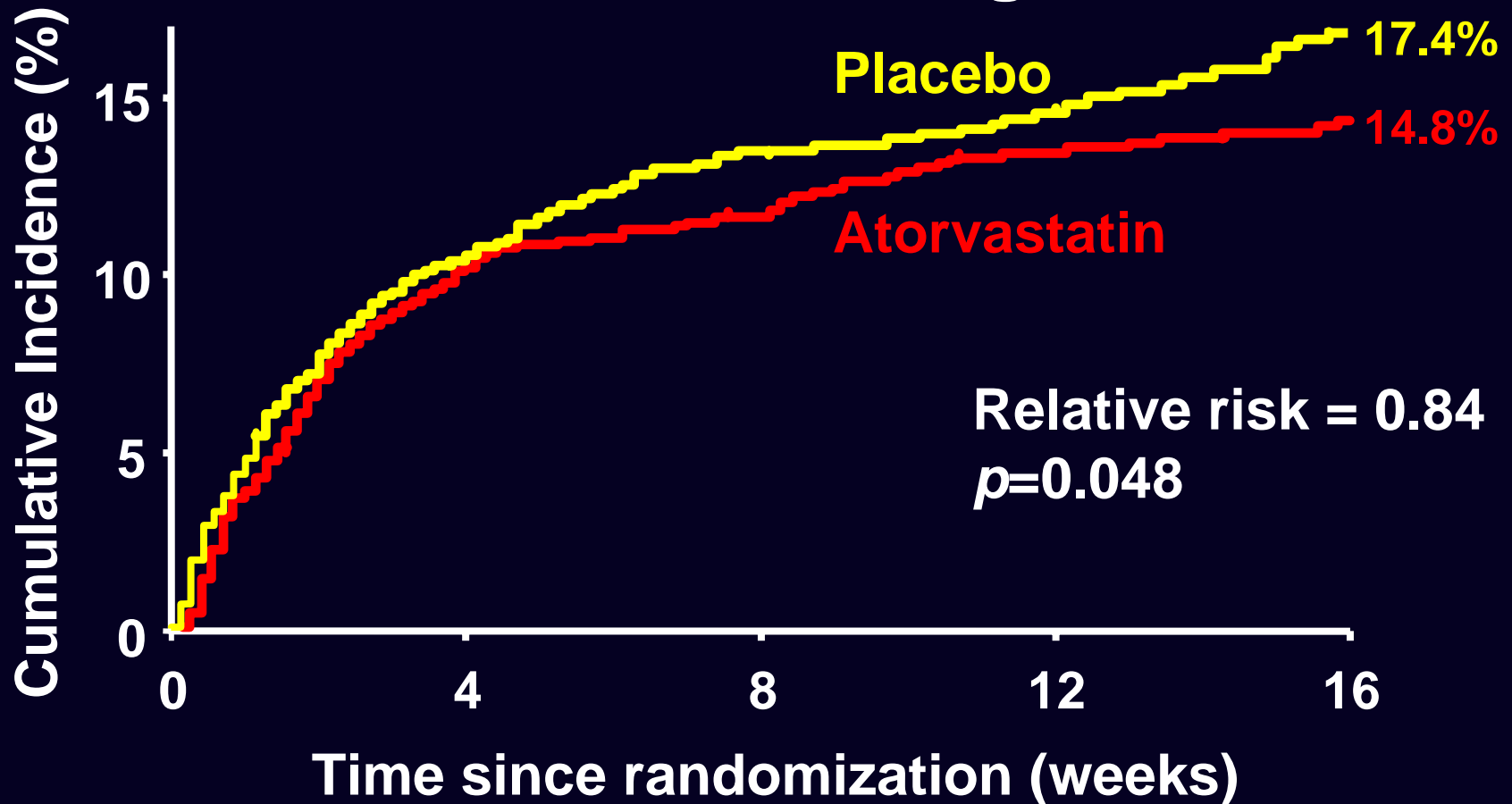
MEAN BASELINE VALUES

TC	5.3(206)	4.8(185)	4.7(181)
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ATORVASTATIN AND EARLY RECURRENT EVENTS AFTER ACS

MIRACL Schwartz JAMA 2001;285:1711

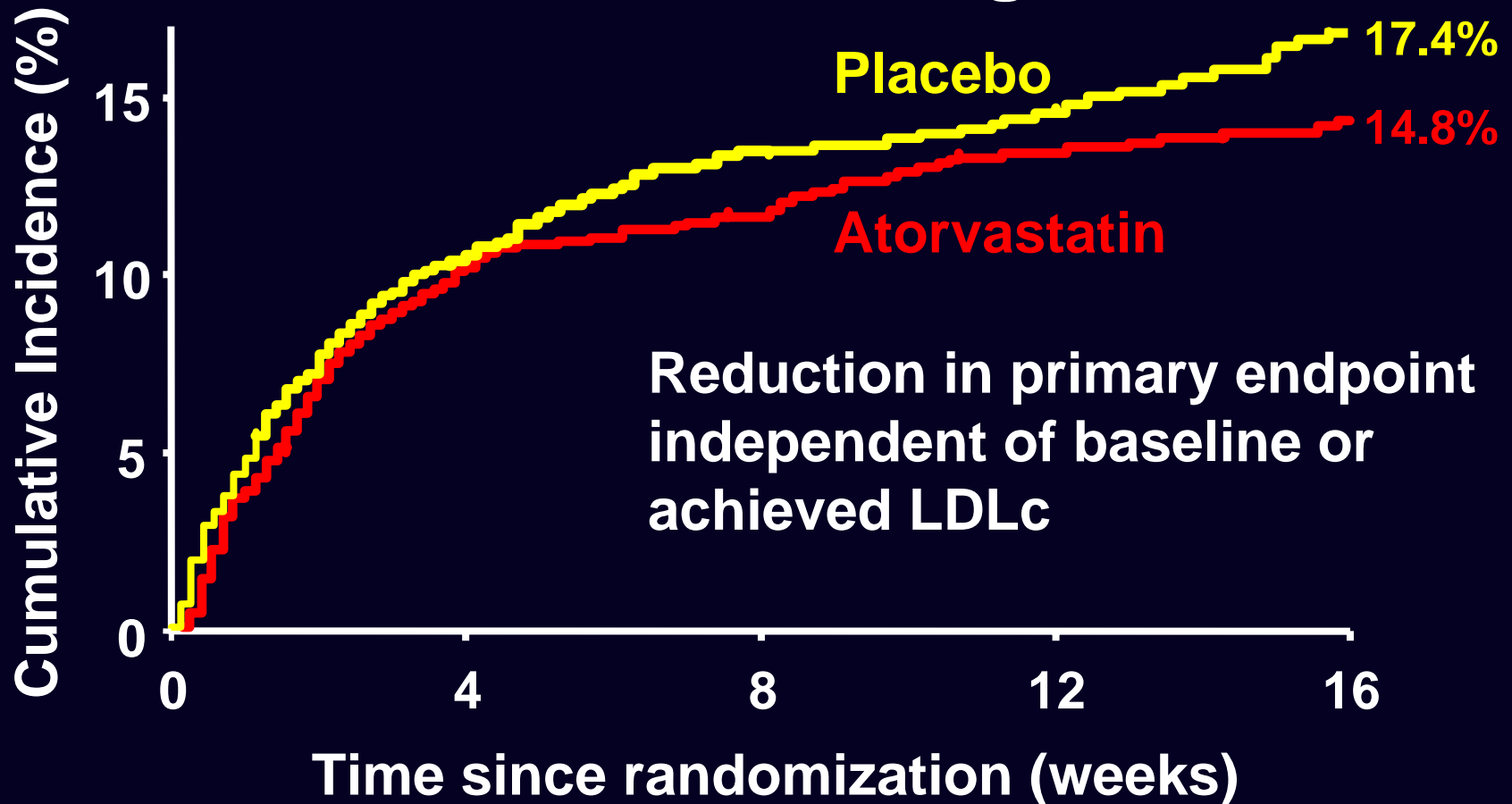
Death/MI/CA/↑angina



ATORVASTATIN AND EARLY RECURRENT EVENTS AFTER ACS

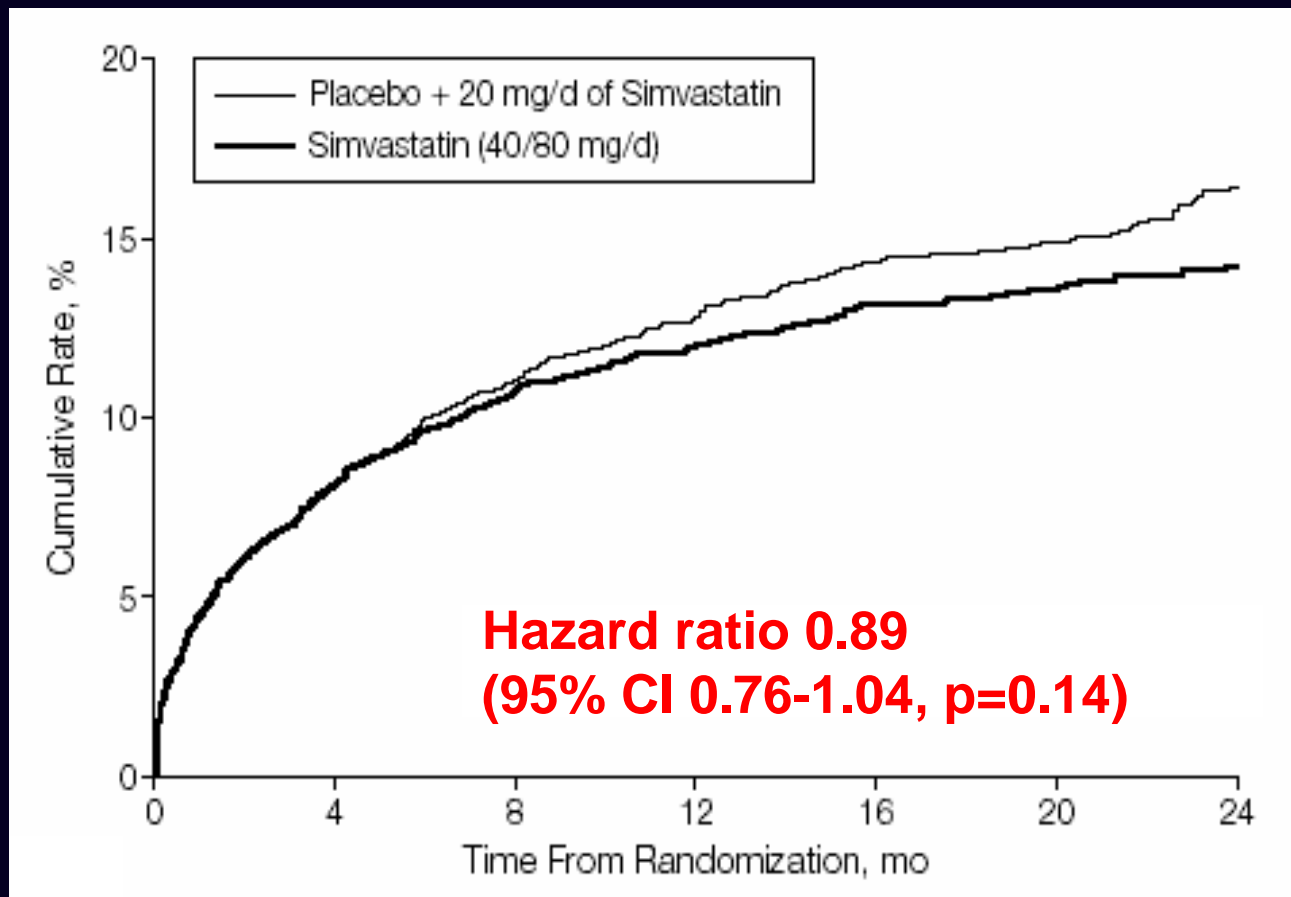
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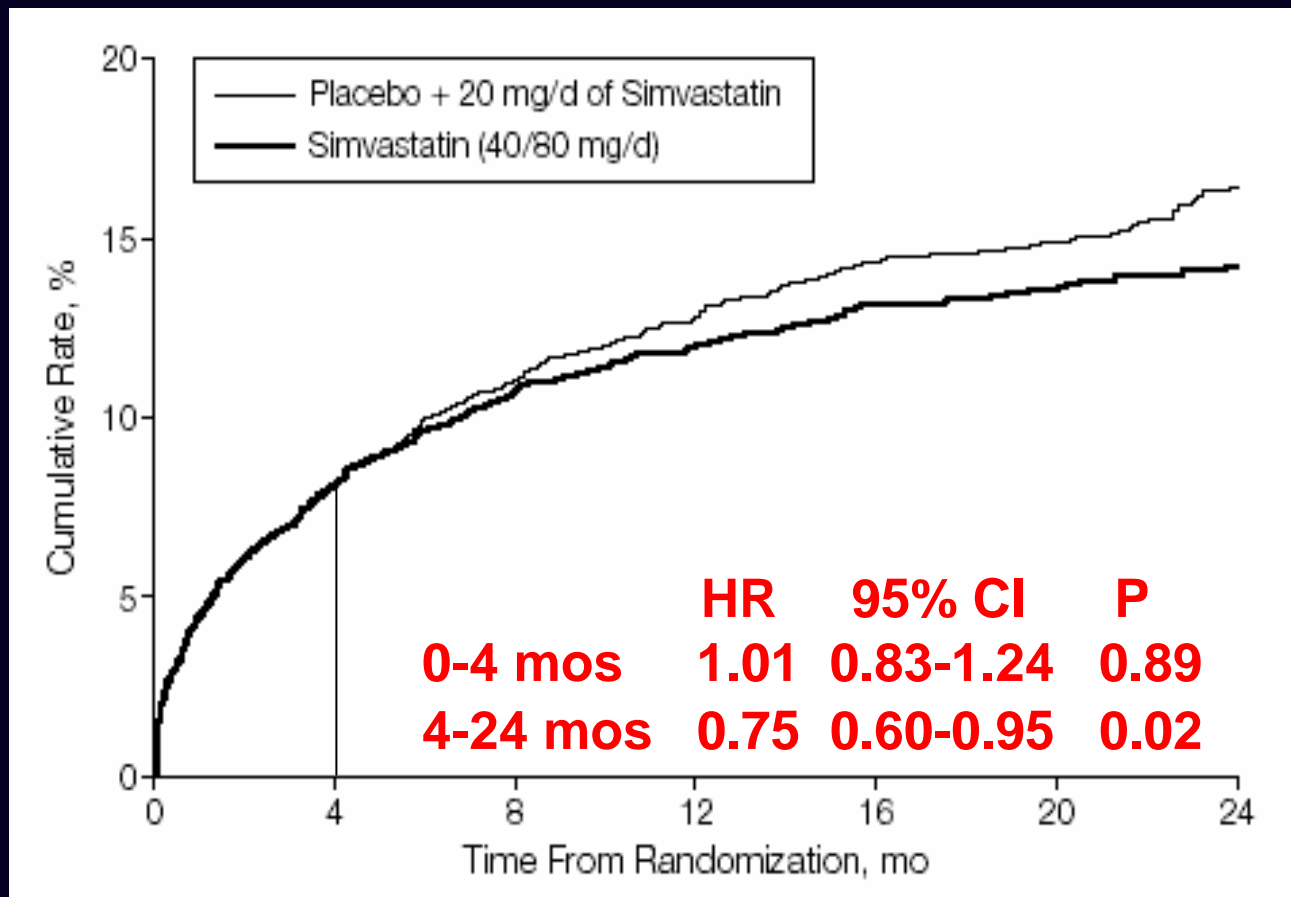
CONSERVATIVE vs AGGRESSIVE SIMVASTATIN Rx POST-ACS

A to Z Trial de Lemos JAMA 2004;292:1307



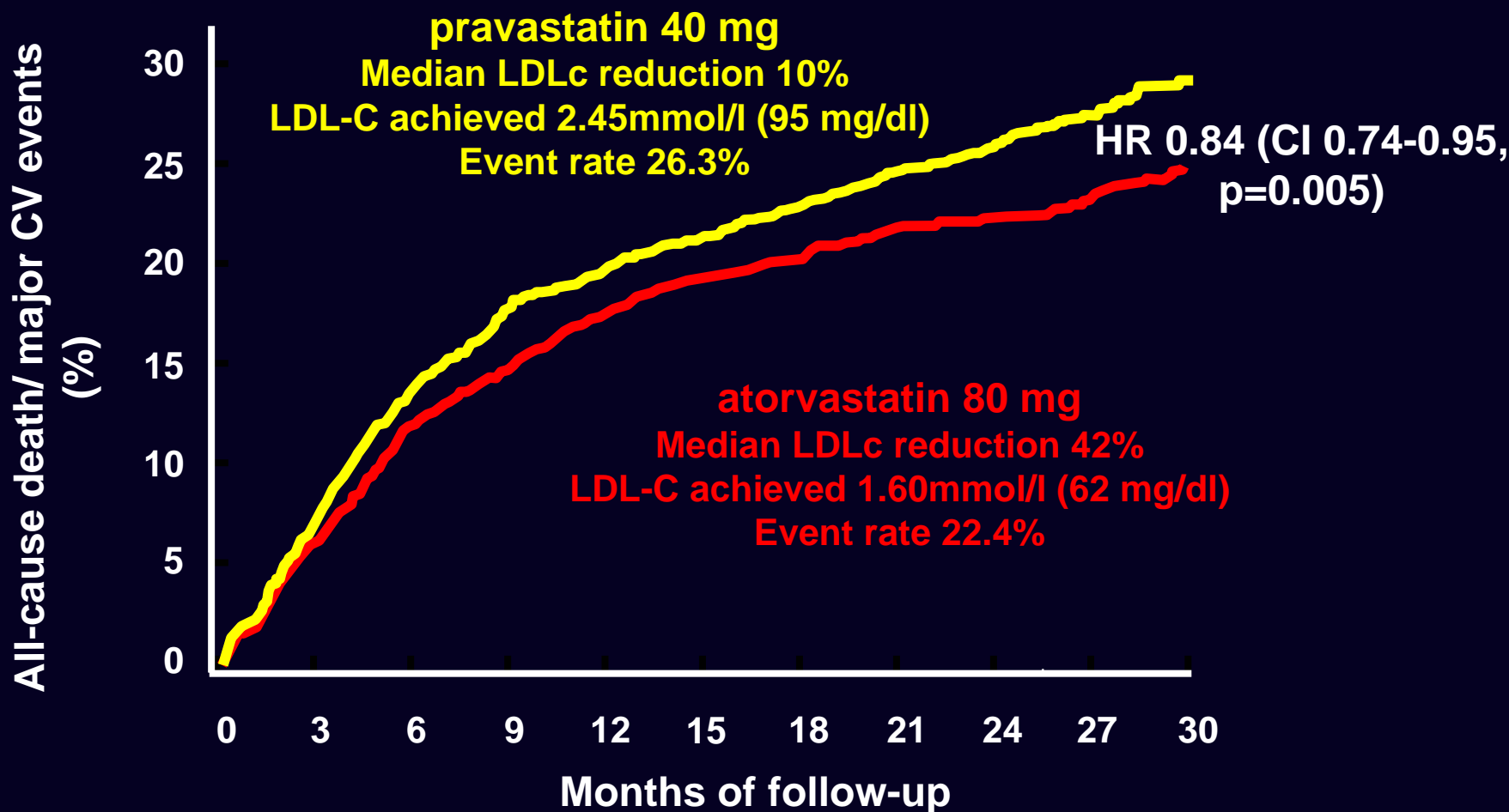
CONSERVATIVE vs AGGRESSIVE SIMVASTATIN Rx POST-ACS

A to Z Trial de Lemos JAMA 2004;292:1307



MODERATE vs INTENSIVE LDLc REDUCTION POST-ACS

PROVE-IT Cannon NEJM 2004;350:1495



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MECHANISMS OF ACTION OF STATINS IN ACS



↑ = significant change
↑ = nonsignificant change

Adapted from Rosenson et al. JAMA 1998;279:1643-1650

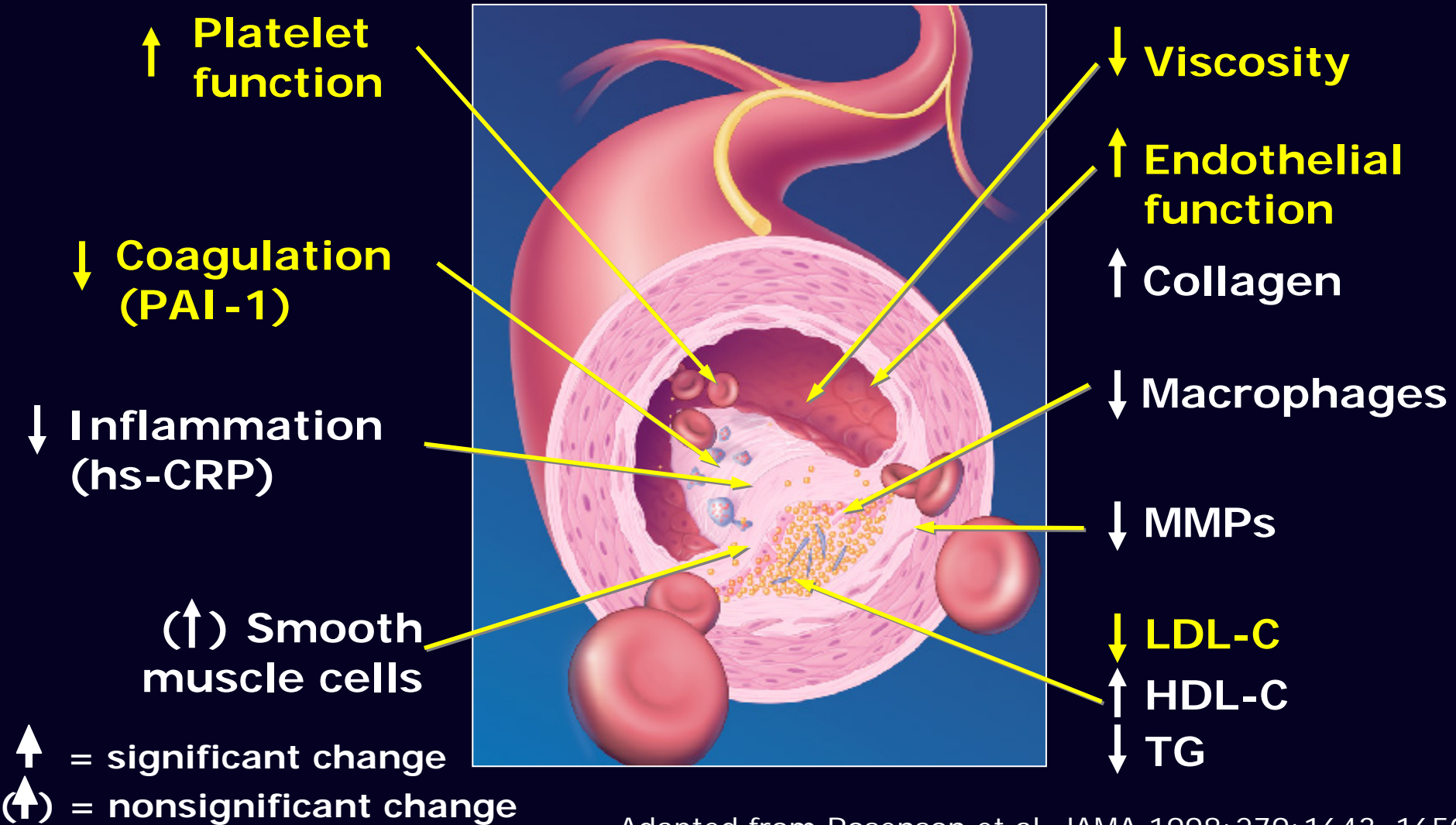
BASELINE & ON-TREATMENT LDL CHOLESTEROL

	MIRACL mmol/l (mg/dl)	A to Z mmol/l (mg/dl)	PROVE-IT mmol/l (mg/dl)
BASELINE	3.2(124)	2.9(112)	2.7(106)
ON-Rx (~4months)			
Control	3.5(135)	3.2(124)	2.5(97)
Intensive	1.9(72)	1.6(62)	1.6(67)
ΔLDLc	1.6(63)	1.6(62)	0.9(30)

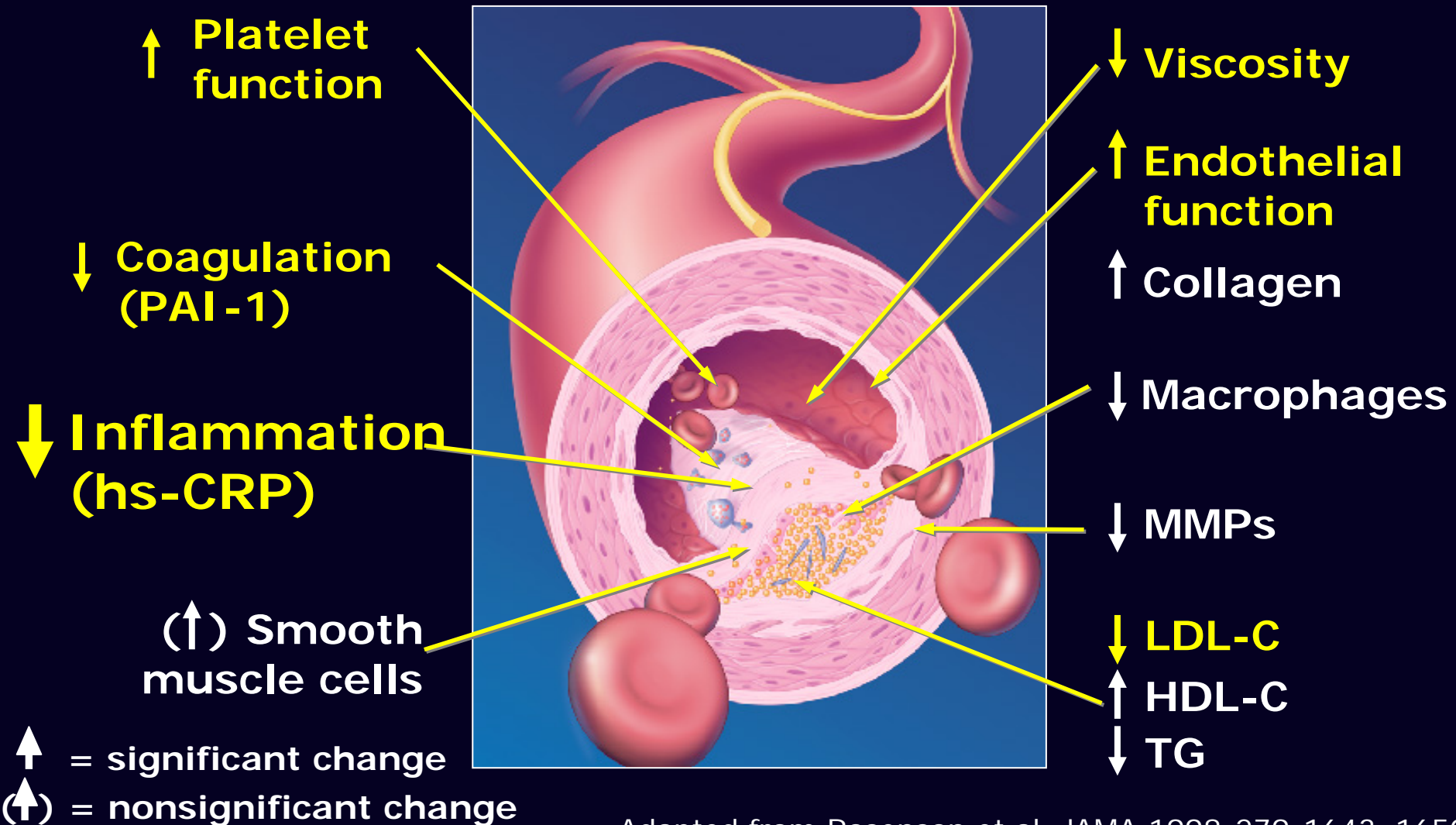
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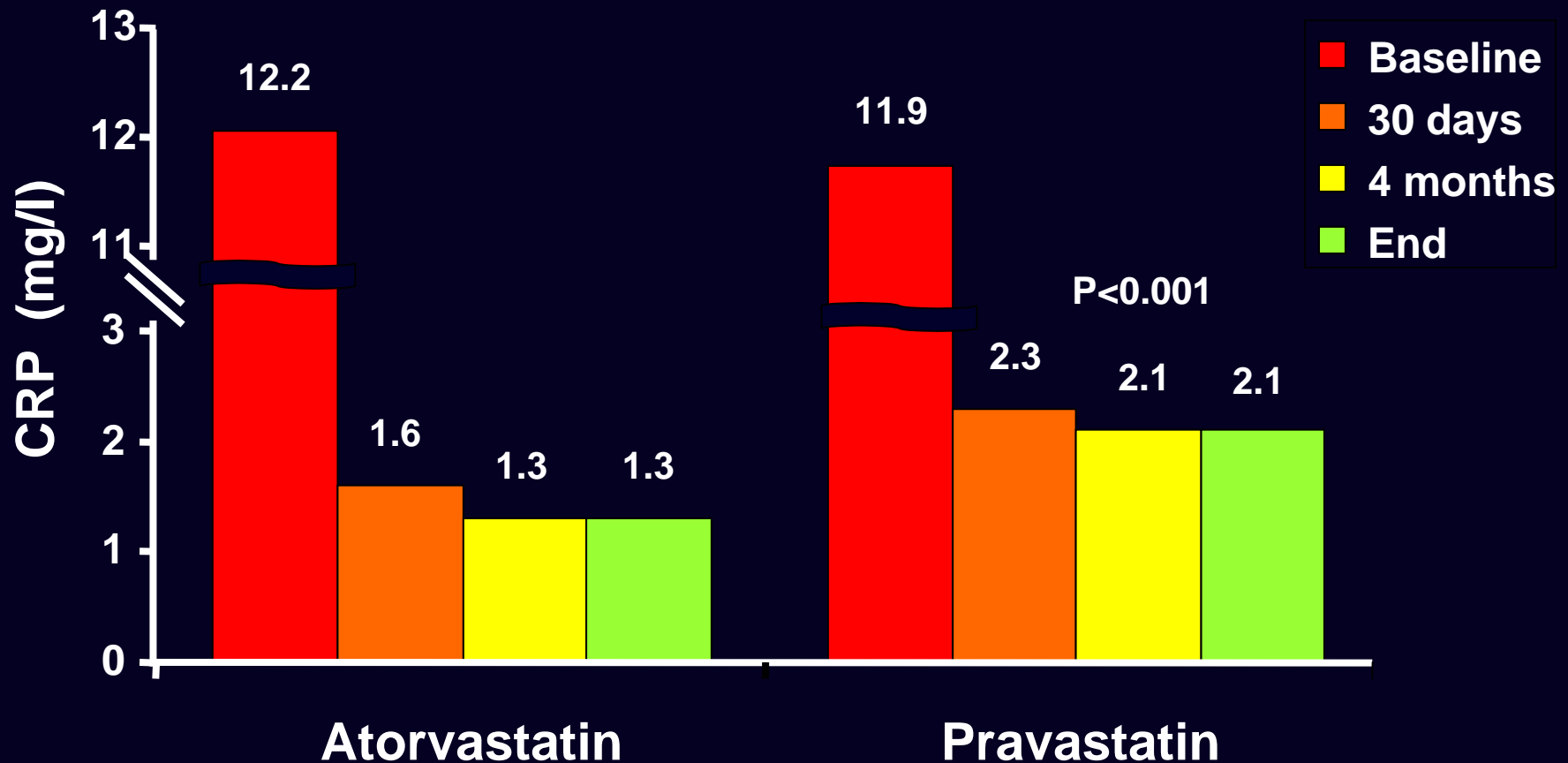


MECHANISMS OF ACTION OF STATINS IN ACS



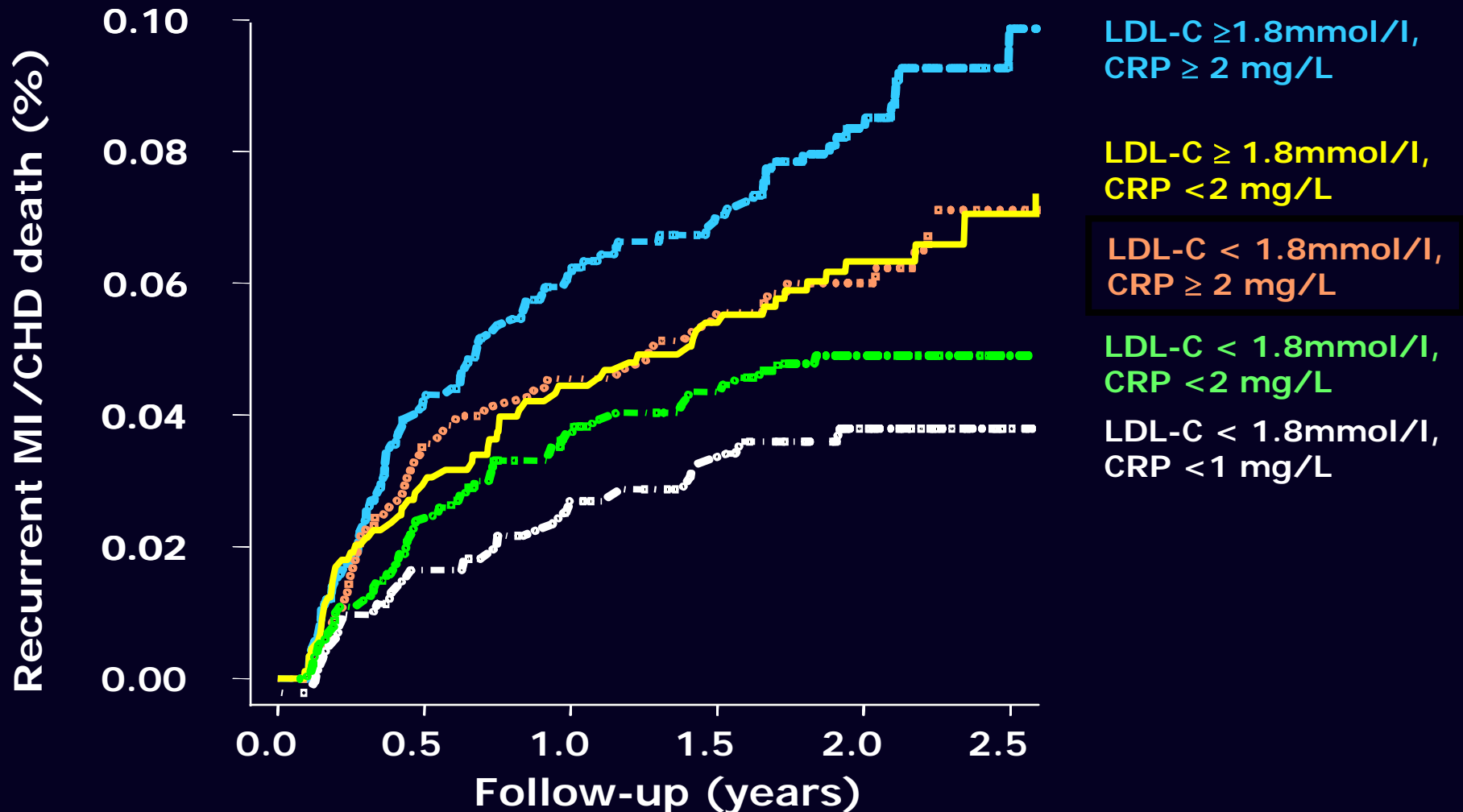
EFFECTS OF STATINS ON INFLAMMATION POST-ACS

PROVE-IT Ridker NEJM 2005;352:20



PREDICTIVE VALUE OF ACHIEVED LDL_C & CRP

PROVE-IT Ridker NEJM 2005;352:20



SUMMARY: STATINS IN ACS

WHY, HOW AND WHEN?

- **Statin treatment early after ACS is safe, and reduces vascular events**
- **Initiation of statin therapy during the initial hospitalisation greatly increases the chance of ongoing Rx post-discharge**
- **High-intensity statin therapy should be initiated early post-admission in ACS**

