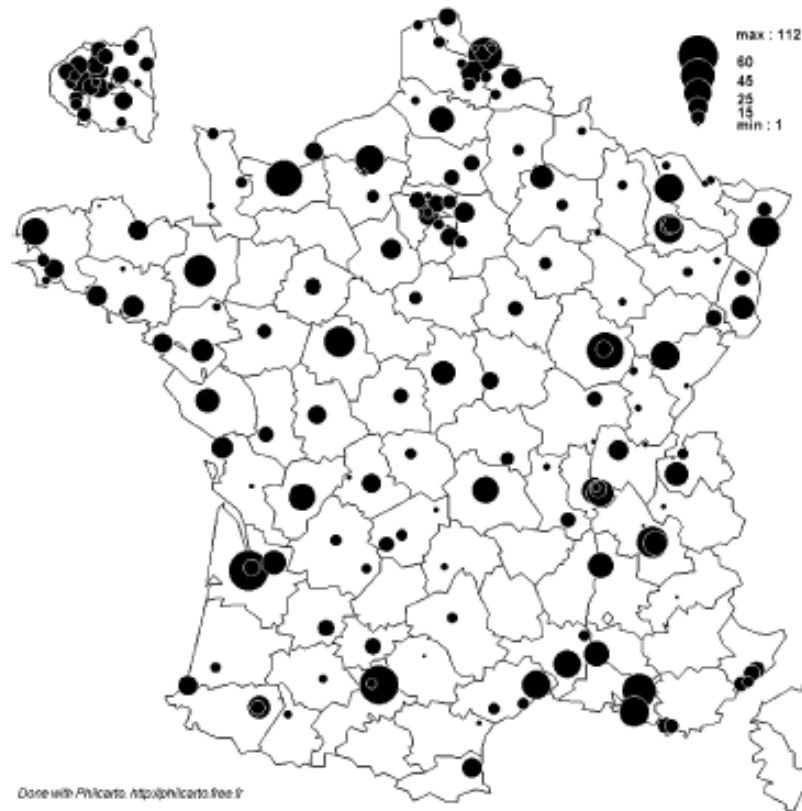


# **Strengths of the study**

- **Homogeneous distribution of enrolling centers across the whole country**

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# **Strengths of the study**

- **Homogeneous distribution of enrolling centers across the whole country**
- **High participation rate**
- **Patients enrollment using similar criteria over a period of 15 years**
- **On-line data recording by dedicated research technicians**
- **Sponsored by the French Society of Cardiology**

# **Weaknesses of the study**

- **Potential biases related to the prevalent inclusion of large volume hospitals**
- **Lack of information on infarct size and MVO**
- **Lack of assessment of EF at discharge**
- **Lack of follow-up data on recurrence of acute coronary events**

# Main points to discuss

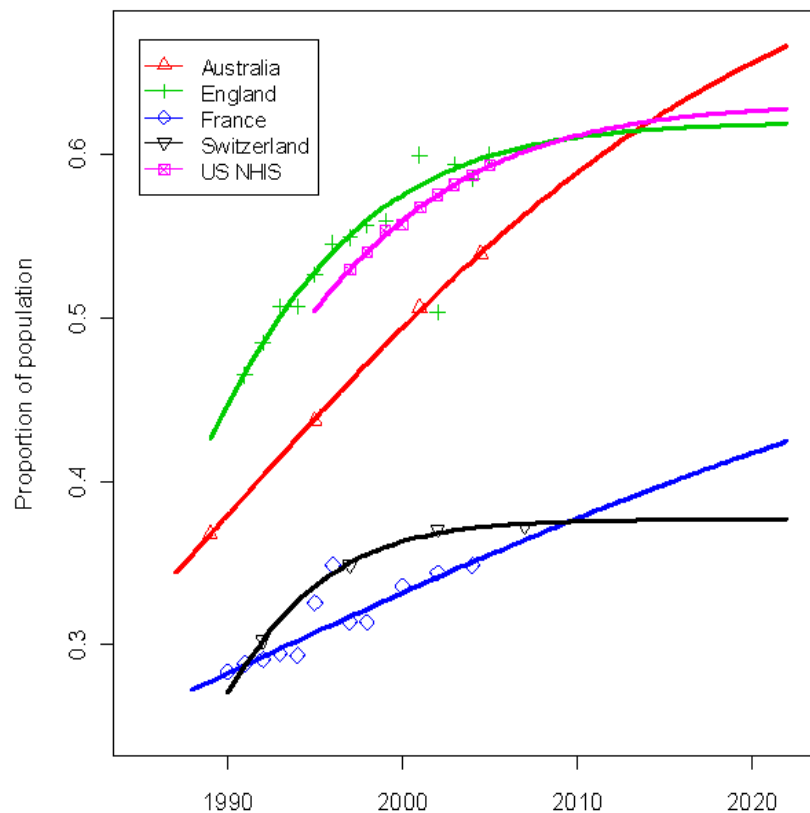
- **Decreasing age at the time of STEMI**
  - **Causes**
    - Increasing prevalence of risk factors
- **Decreasing mortality rate regardless of the initial reperfusion strategy**
  - **Causes**
    - Decreasing time of pain onset to first medical contact
    - Increasing use of statins
    - Increasing use of a pharmaco-invasive approach

# Decreasing age at the time of STEMI

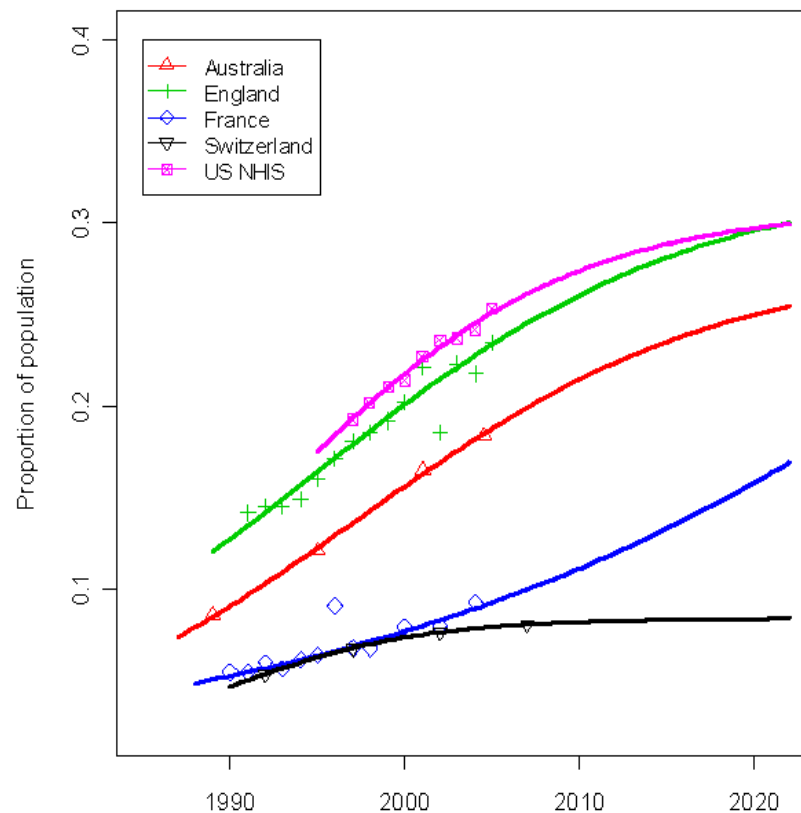
	1995	2000	2005	2010	P value
Age (years)	66.2±14.0	64.5±14.6	64.0±14.7	63.3±14.5	<0.001
<b>Risk factors</b>					
Hypertension	43.8	43.6	49.2	47.0	0.006
Hypercholesterolemia	34.8	39.0	43.4	39.3	0.001
Current smoking	32.0	35.3	37.2	40.9	<0.001
<b>Obesity</b>	14.3	16.3	20.8	20.1	<0.001

# Decreasing age at the time of STEMI

Overweight (BMI  $\geq 25$ )



Obesity (BMI  $\geq 30$ )



(Shneider et al, Int J Env Res Public Health 2010)

Obesity

14.3

16.3

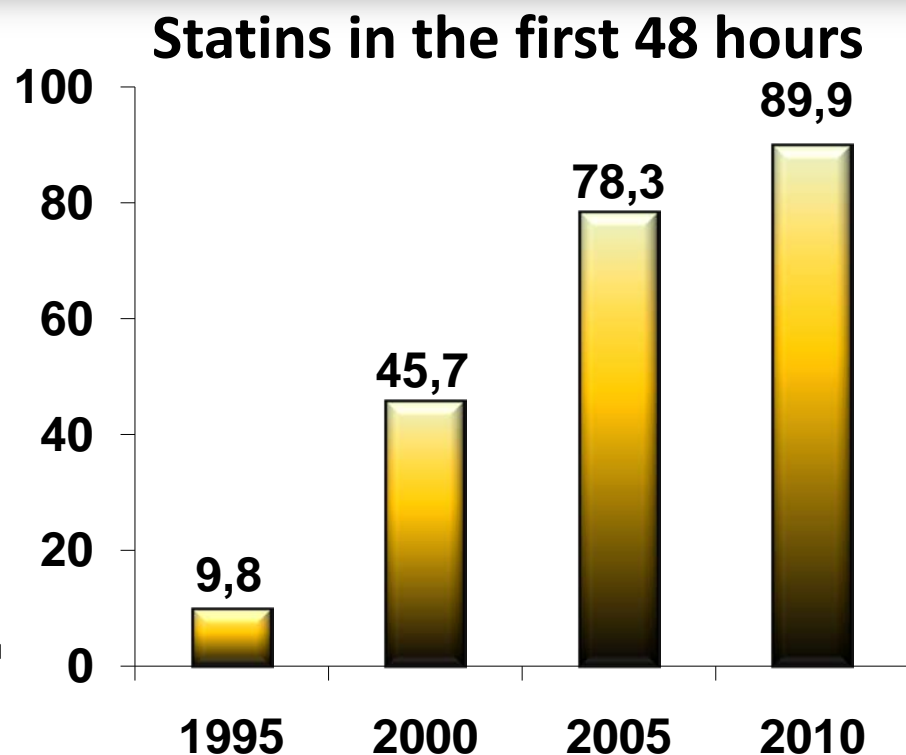
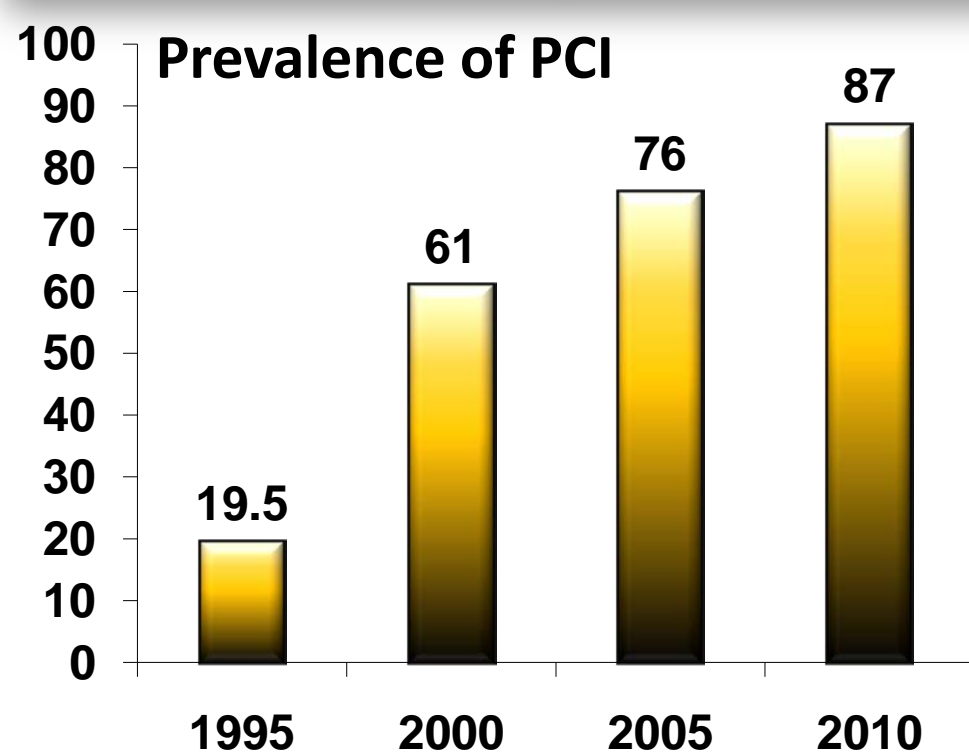
20.8

20.1

<0.001

# Decreasing mortality regardless of initial reperfusion strategy

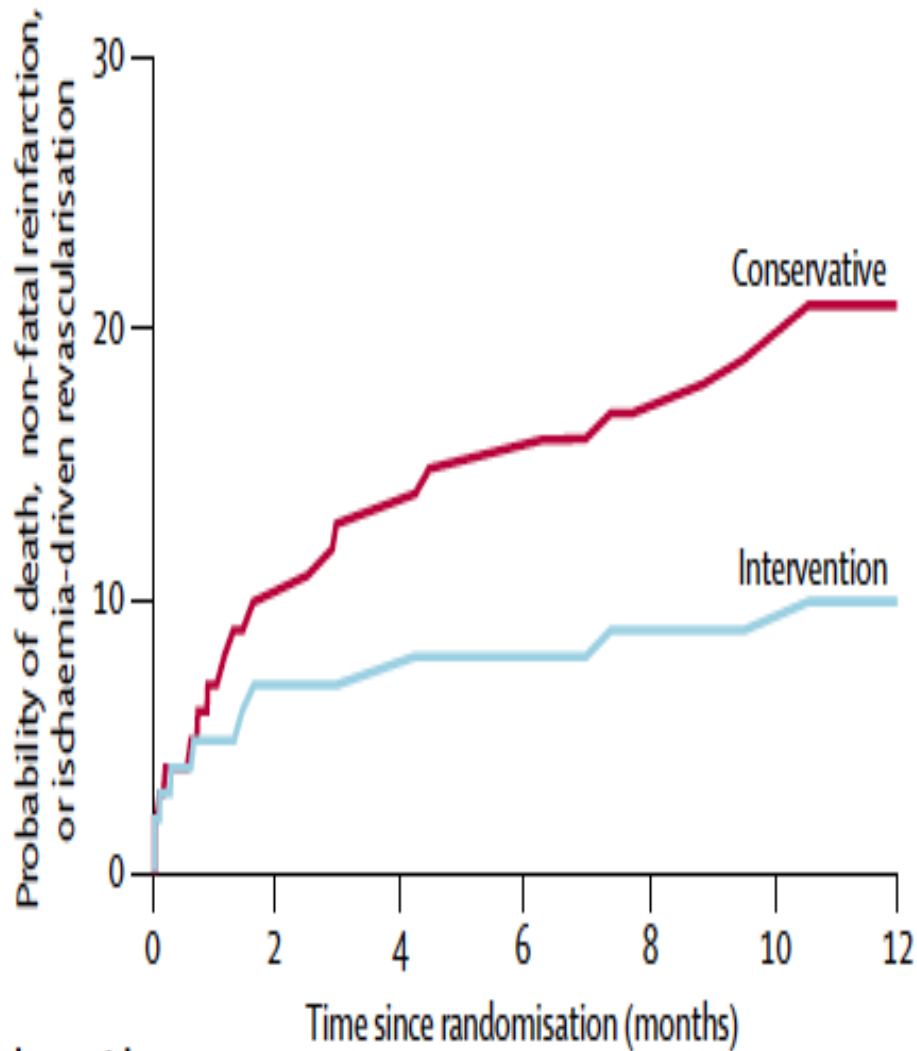
	2000	2005	2010
Time to FMD (min)	120	90	74



PCI after lysis			
15%	60%	84%	87%



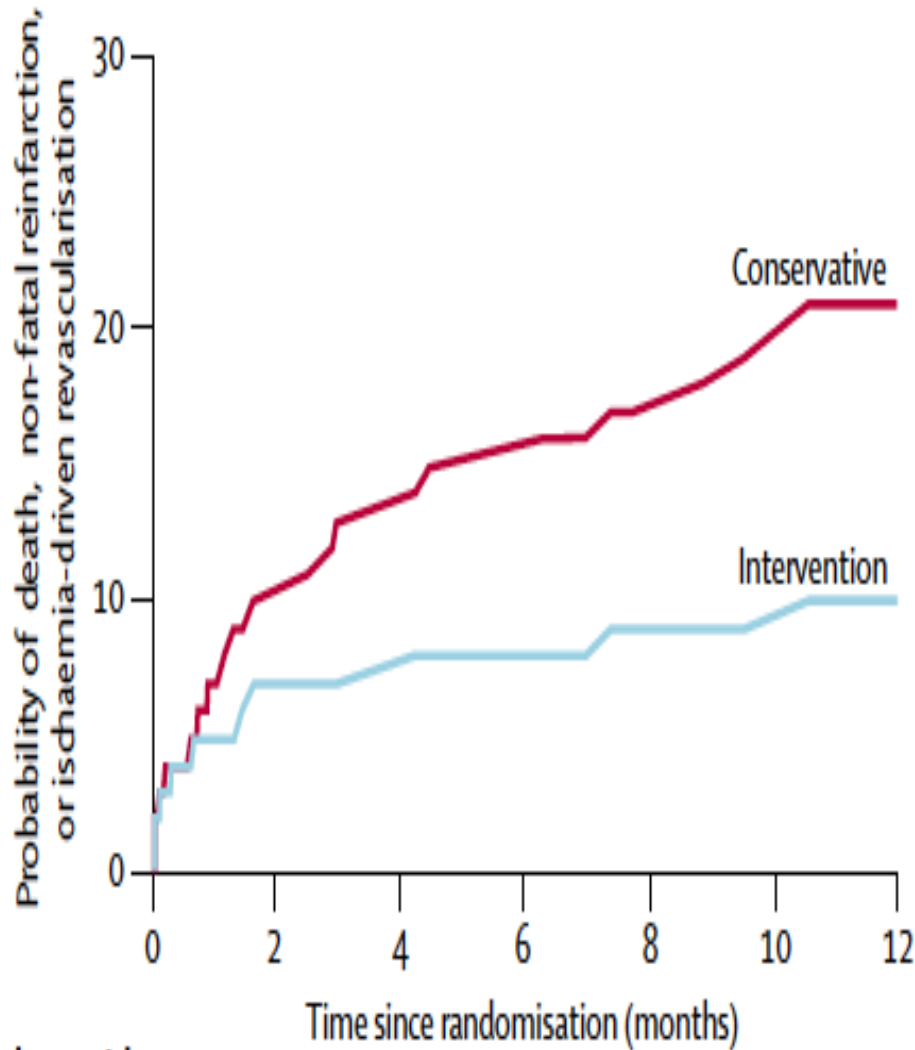
# GRACIA-1, Lancet 2004



## Number at risk

Intervention	248	230	228	226	223	222	221
Conservative	251	225	217	211	208	202	195

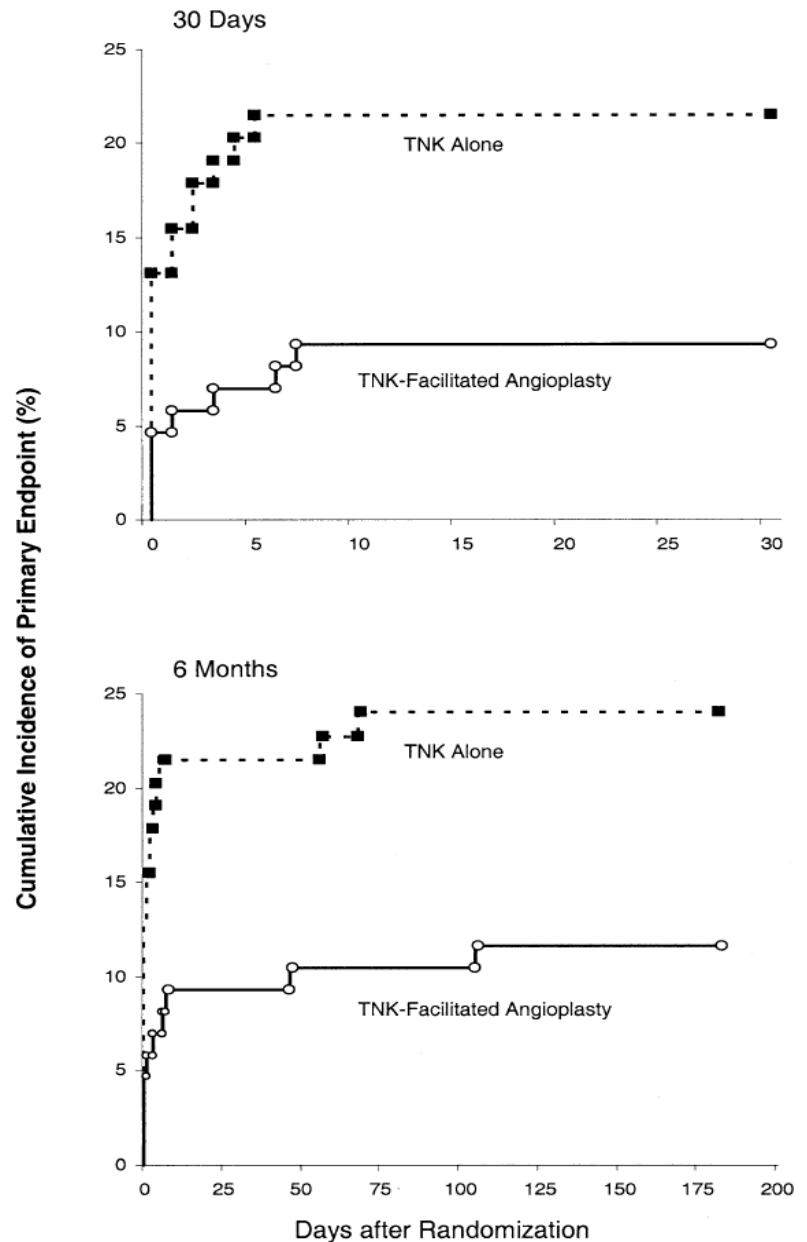
# GRACIA-1, Lancet 2004



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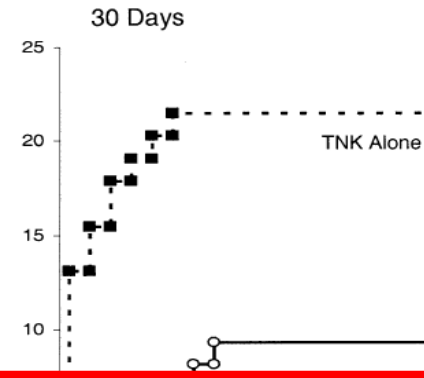
# CAPITAL-AMI, JACC 2005



# GRACIA-1, Lancet 2004

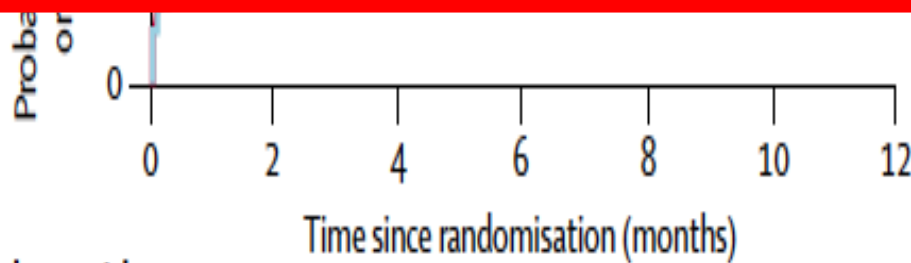


# CAPITAL-AMI, JACC 2005

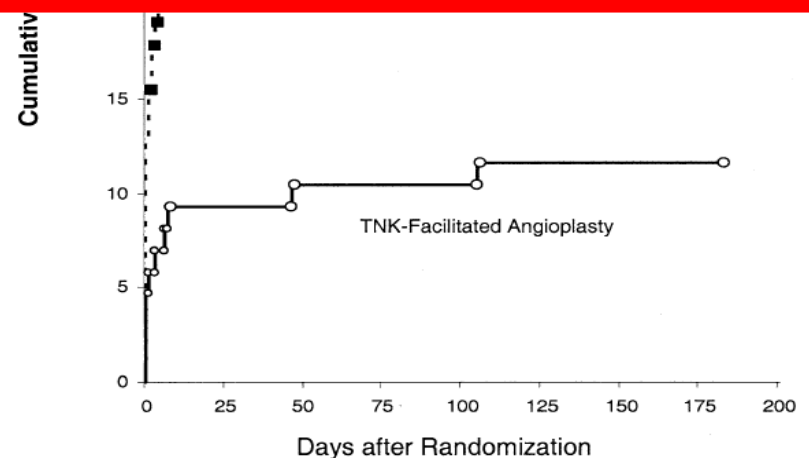


Evidence of successful fibrinolysis: within 3–24 h after start of fibrinolytic therapy IIa A

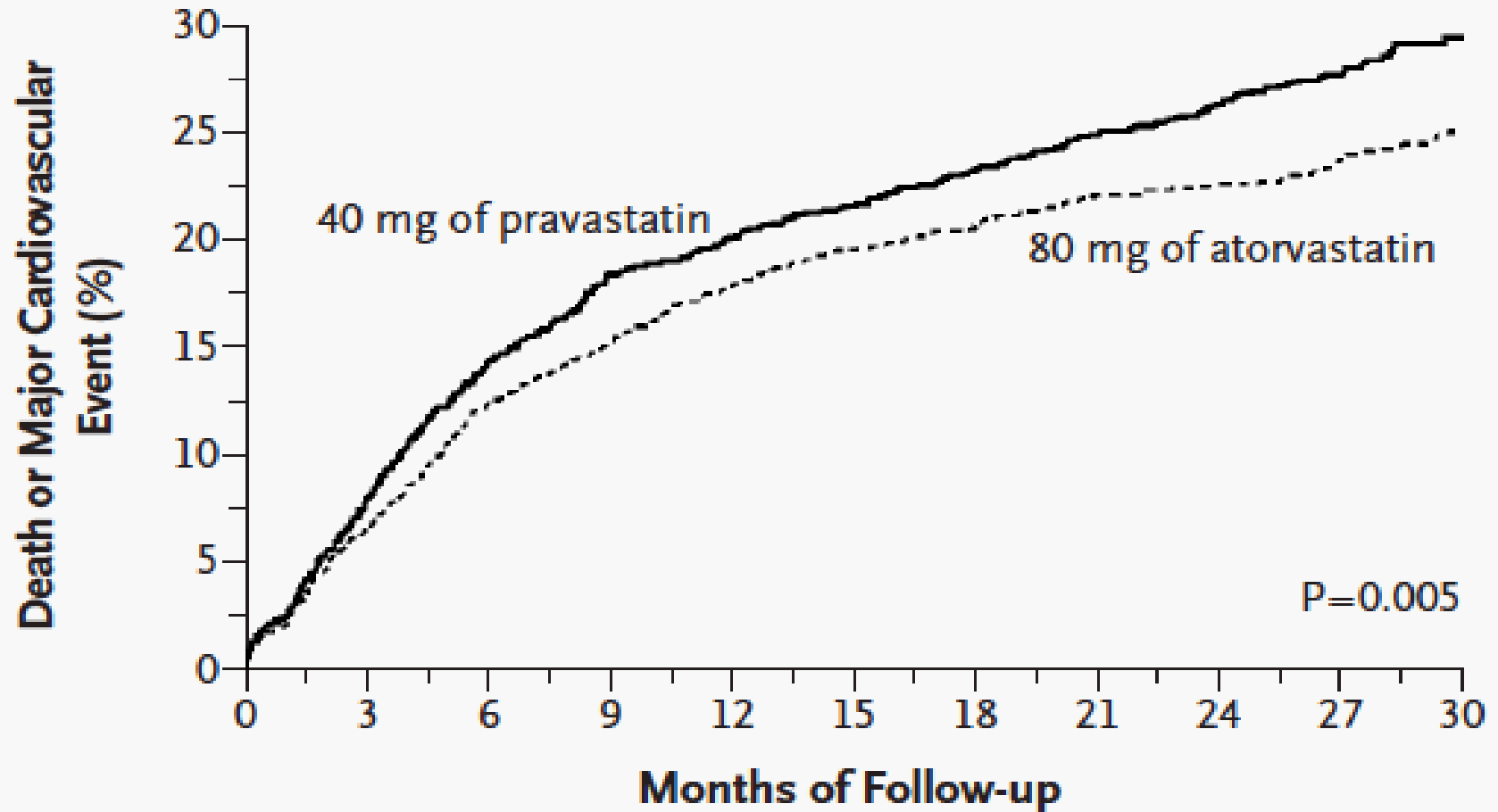
Evidence of failed fibrinolysis or uncertainty about success: immediate IIa B



Number at risk		0	2	4	6	8	10	12
Intervention	248	230	228	226	223	222	221	221
Conservative	251	225	217	211	208	202	195	195



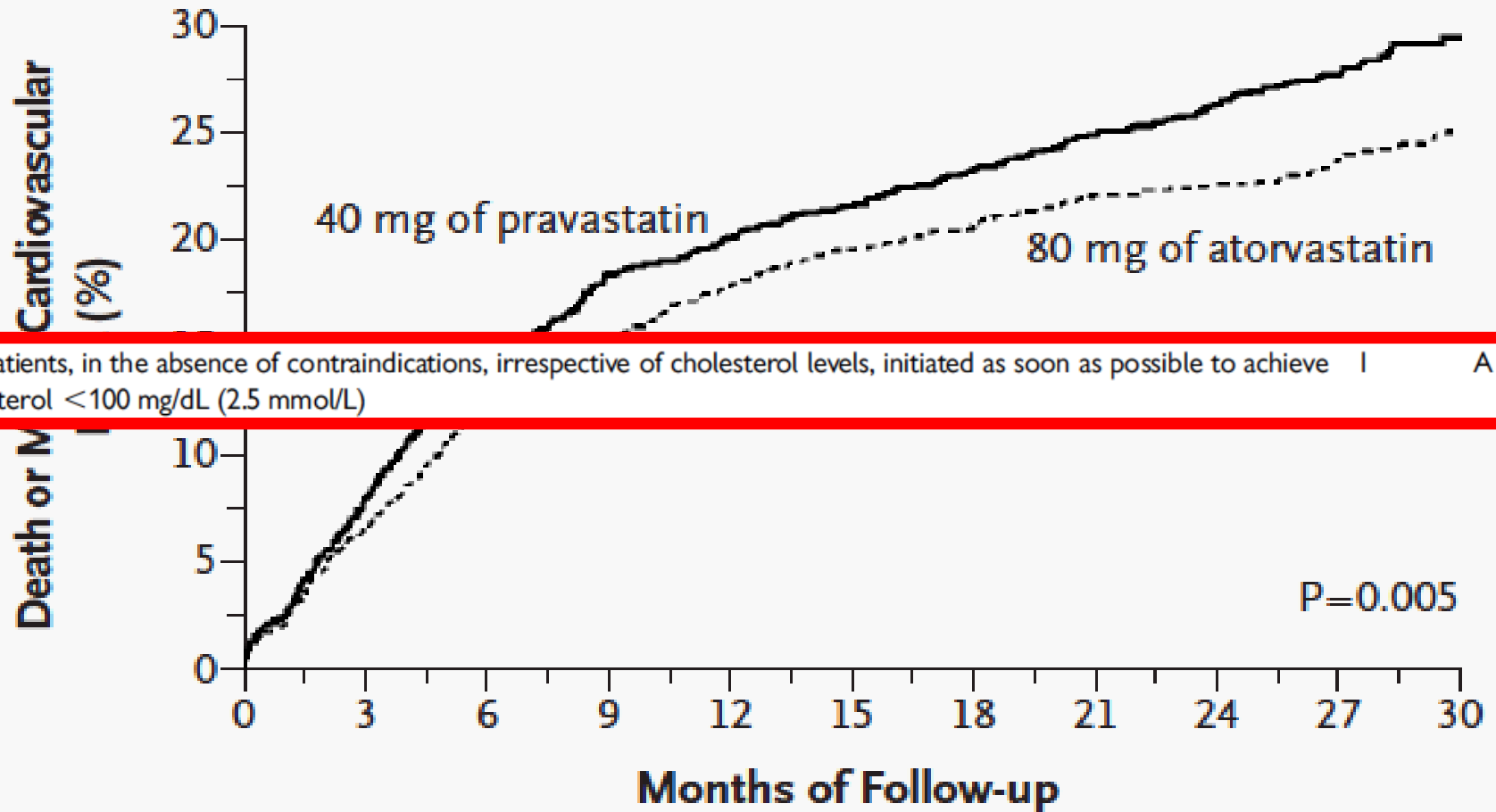
# PROVE-IT: benefit of early intensive statin treatment in ACS (NEJM 2004)



## No. at Risk

Pravastatin	2063	1688	1536	1423	810	138
Atorvastatin	2099	1736	1591	1485	842	133

# PROVE-IT: benefit of early intensive statin treatment in ACS (NEJM 2004)

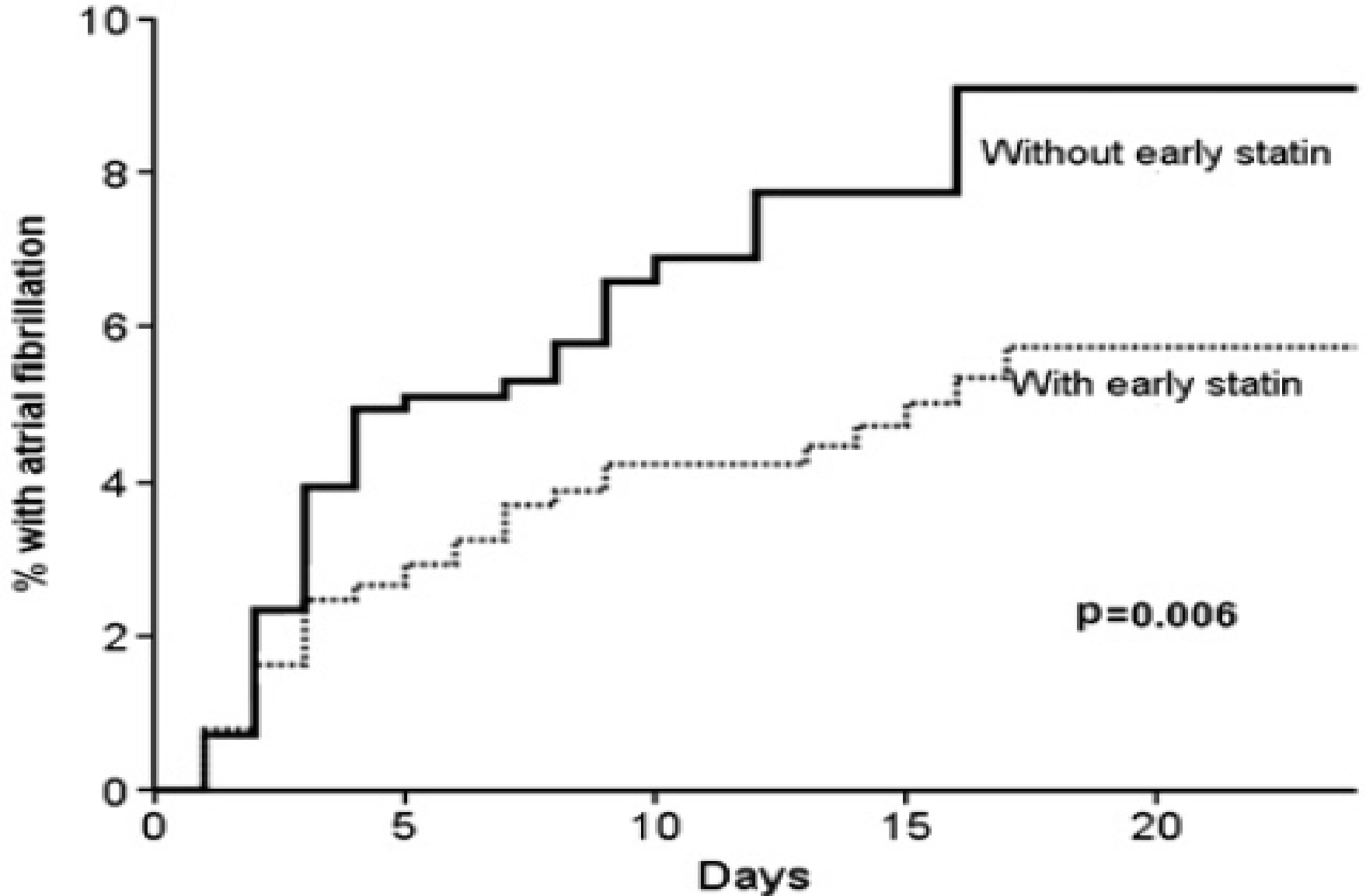


Statins in all patients, in the absence of contraindications, irrespective of cholesterol levels, initiated as soon as possible to achieve LDL cholesterol <100 mg/dL (2.5 mmol/L)

## No. at Risk

Pravastatin	2063	1688	1536	1423	810	138
Atorvastatin	2099	1736	1591	1485	842	133

# Beneficial effects of statins in STEMI (FAST-MI, HEART 2010)



# Final remarks

- **The battle against risk factors is not over**
- **The benefits of an invasive strategy and of early intensive statin treatment in STEMI, shown in CRT and highlighted in Guidelines, have been confirmed in this excellent French survey**

# The virtuous circle

