

New Drugs Under Development in Cardiology

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New Anti-Platelet Opportunities Under Development in Cardiology

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New Anti-Platelet Opportunities

Link between Inflammation and Thrombosis

p-selectin

CD-40

New Anti-Platelet Opportunities

Molecular Engineering - making better drugs

I**IIb/IIIa** Receptor Blockers

Anti-thrombins

Direct Thrombin Inhibitors

Oral Anti-thrombins

Oral I**IIb/IIIa** Receptor Blockers

New Anti-Platelet Opportunities

Other Targets

TFPI

PAI-I

New Anti-Platelet Opportunities

Non-traditional Targets

Statins

Anti-oxidants

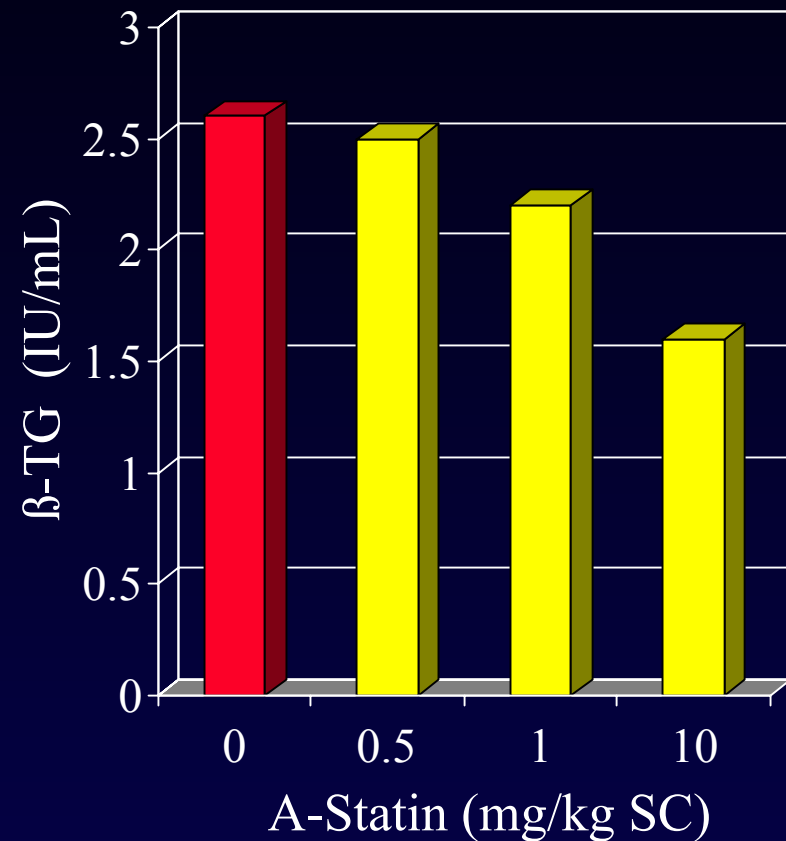
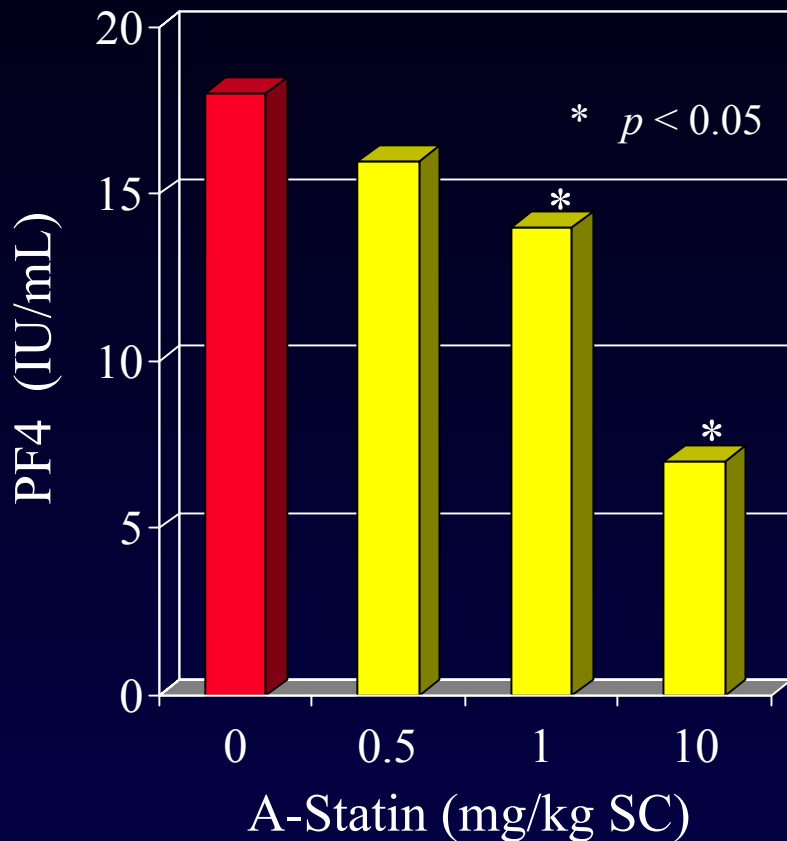
Disease Management

Diabetic control

LDL(ox) reduction

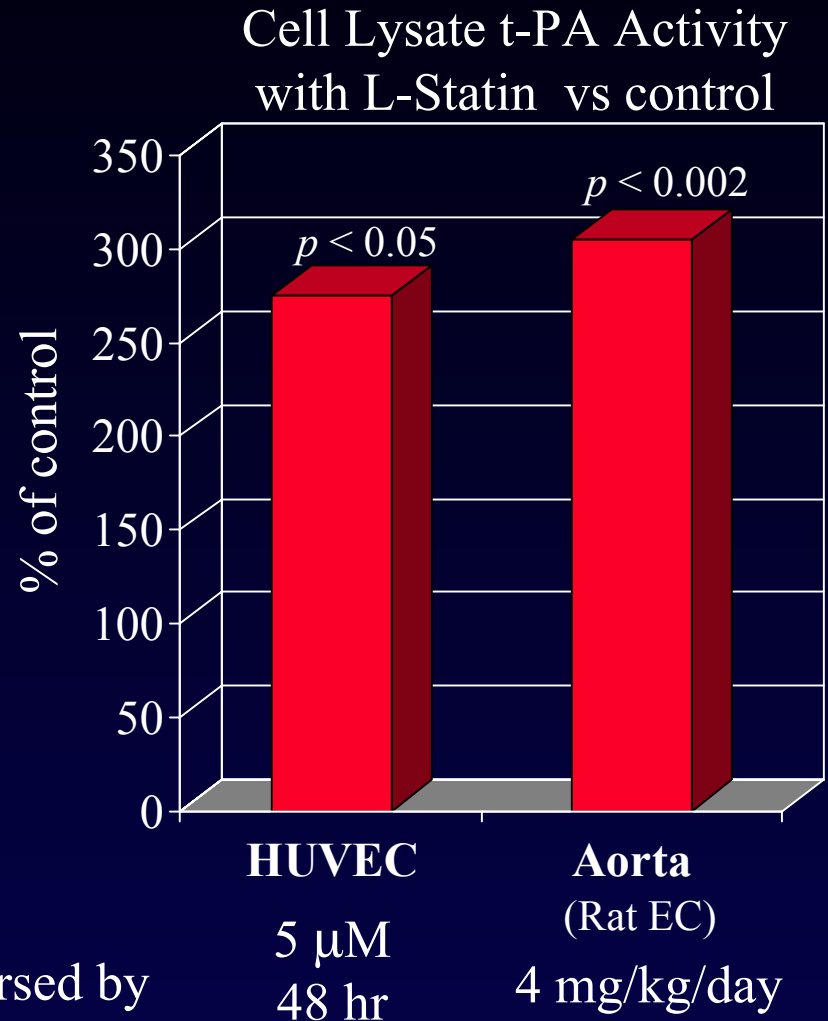
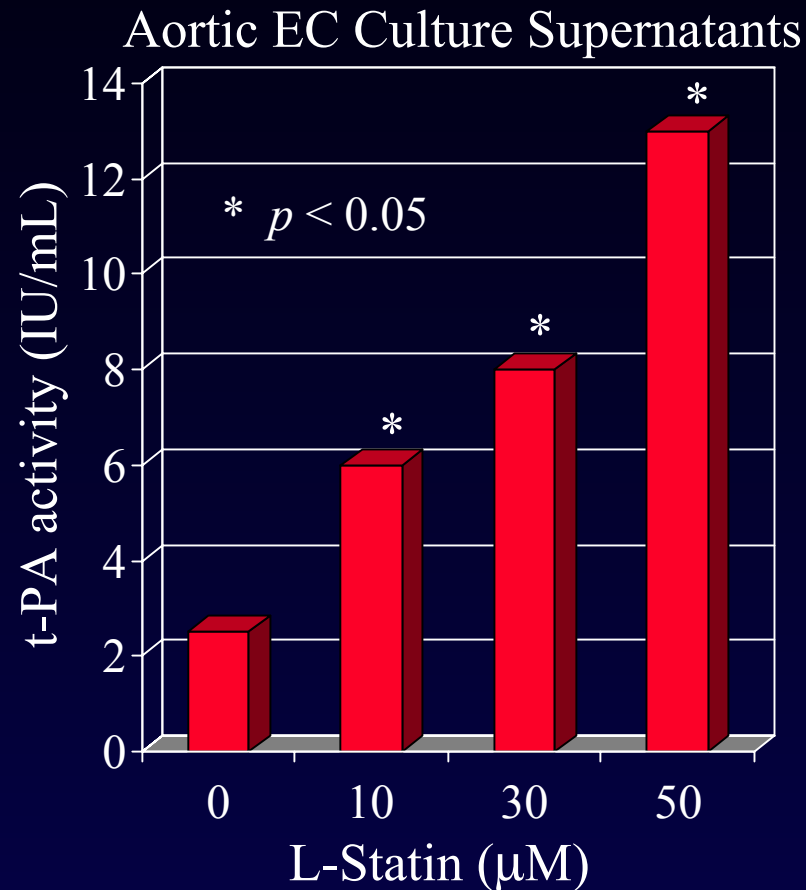
Statins and Thrombosis

Downregulation of Platelet Activation by A-Statin



Statins and Thrombosis

Increased Fibrinolytic Activity in Endothelial Cells



New Anti-Platelet Opportunities

Direct Delivery

coated stents

heparin

PDGF inhibitors

New Anti-Platelet Opportunities

Nutraceuticals

red wine / grape juice / blueberries

garlic / onion / black tree fungus

fish / fish oil

Ginko / Ginseng

Let food be your medicine and medicine be your food,

Hippocrates, 400 BC

New Anti-Platelet Opportunities

Aspirin Resistance

Is it important?

How to detect it

Aspirin Works

Urinary 11-dehydrothromboxane B₂

What to do about it

New Anti-Platelet Opportunities

Diagnostics

Anti-Xa activity

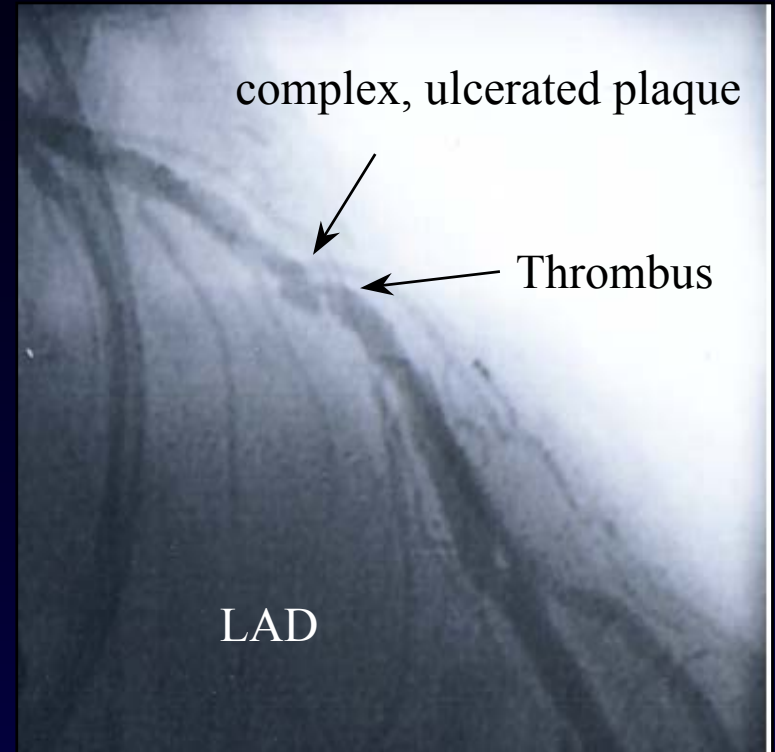
Platelet activation

P-selectin

Platelet inhibition

Acumetrix

Dade



New Anti-Platelet Opportunities

Diagnostics

Anti-Xa activity

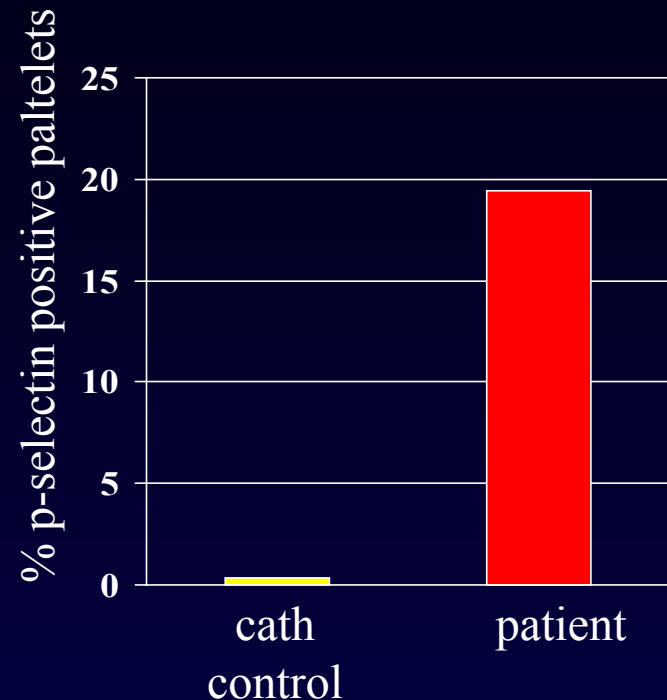
Platelet activation

P-selectin

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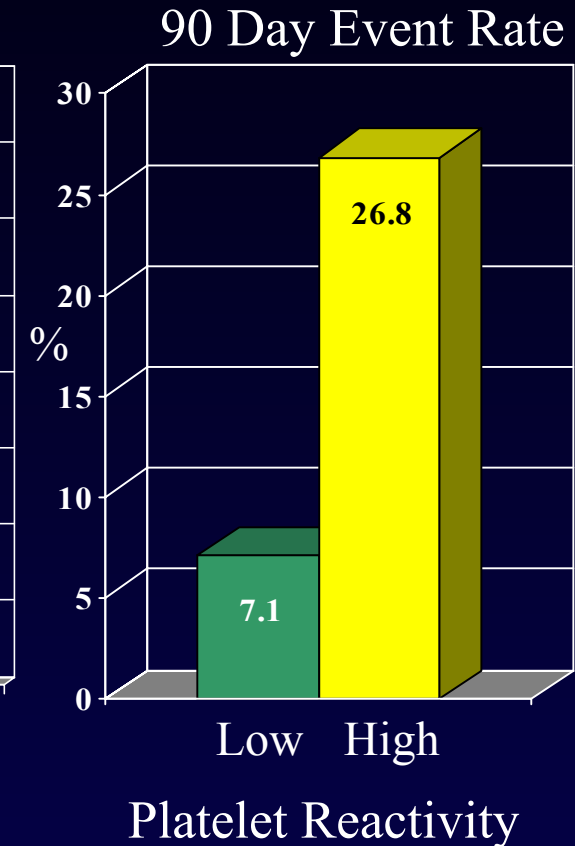
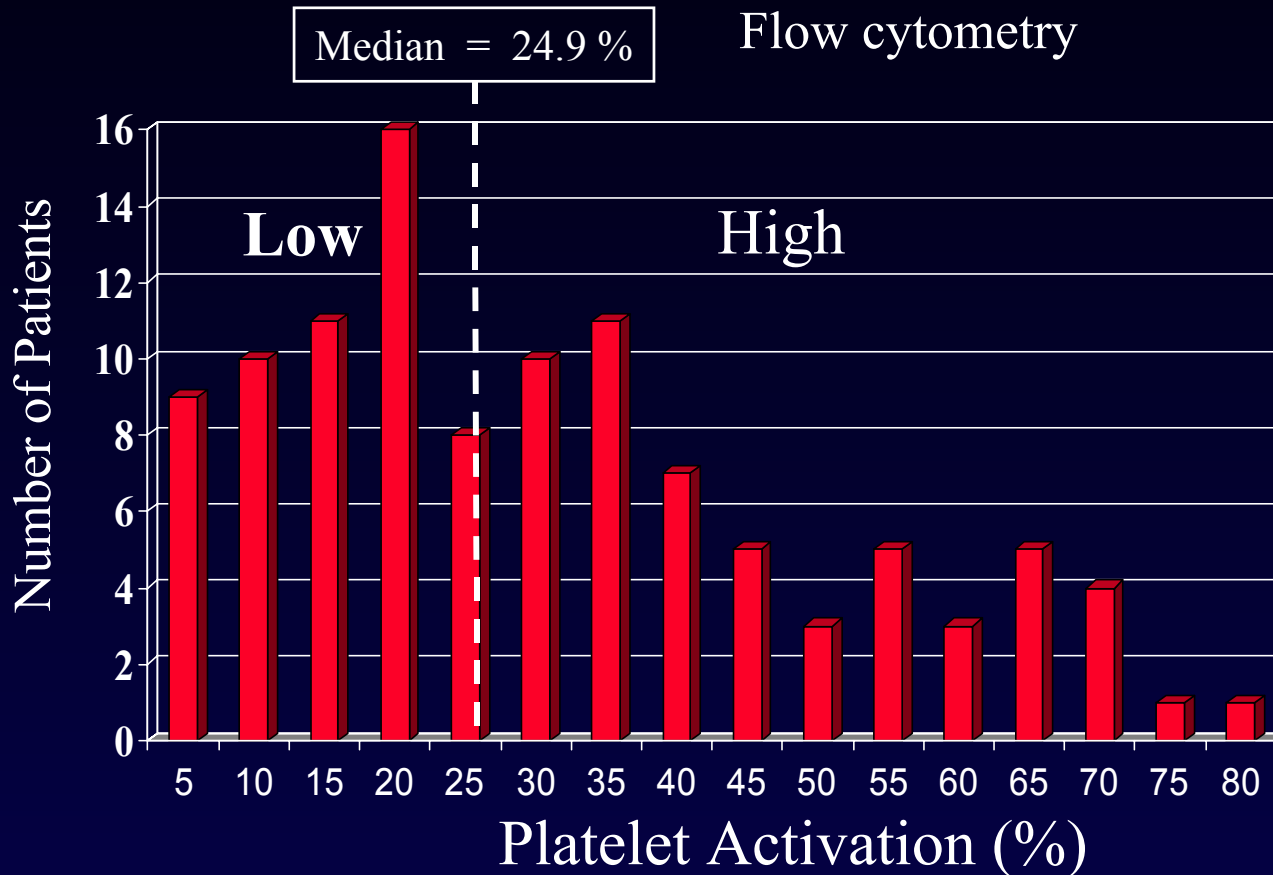
Dade



New Anti-Platelet Opportunities

Diagnostics

112 pts undergoing PCI – ACS and Stable Angina
Activation with 0.2 μ M ADP
Flow cytometry



New Anti-Platelet Opportunities

Summary

Aspirin remains the standard

New agents are rapidly evolving

Measurement will be important

New targets provide opportunity