

**Harvard Medical School Department of
Continuing Education and the Cardiovascular
Division of the Department of Medicine,
Brigham and Women's Hospital**



Cardiology Rounds
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Developing Drugs to Prevent and Treat Arterial Thrombosis

By Robert A. Harrington, M.D.

Objectives:

This issue of *Cardiology Rounds* will provide an understanding of the process of drug development as it relates to arterial antithrombotic therapies. It will also discuss a series of "lessons" on the process of drug development from recent randomized clinical trials evaluating antithrombotic therapies.

TEST:

1. The improved understanding of human disease gained through research into the genome will automatically and directly translate into useful new therapies based on this knowledge.
True False
2. The current FDA regulations concerning drug development in the United States evolved over the past century in response to a series of public tragedies.
True False
3. Inflammation, lipid metabolism, and thrombosis are all distinct pathophysiological processes and, therefore, attempts to modulate atherosclerosis through these pathways should concentrate on the individual components.
True False
4. Because acute coronary syndromes and percutaneous coronary intervention share a common pathophysiological underpinning, antithrombotic therapies with benefit in one setting likely have at least some benefit in the other.
True False
5. Optimal antithrombotic therapy for the treatment of arterial thrombotic diseases could best be defined as that providing: (Select one)
 - a. a reduction in ischemia without any increased risk of bleeding
 - b. a balance between ischemic benefit and bleeding risk
 - c. some reduction in ischemia with an increase in bleeding

6. The development of the platelet GP IIb/IIIa inhibitors demonstrates all of the following except: (Select one)
- a. the importance of proper dosing
 - b. the necessity of measuring clinical outcomes among similar drugs in the same drug class
 - c. the ability to predict a chronic drug effect based on understanding the acute effects
 - d. the limitations of surrogate endpoints to predict a drug's clinical effect
7. Utilizing coagulation tests like the aPTT provides predictable information regarding the antithrombotic effects of novel anticoagulants like the direct FXa inhibitors.
- True False

To receive AMA category 1 credit, you must correctly answer 60% of the test questions.

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