

**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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Oxidative Stress and Coronary Heart Disease

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Objectives:

Inflammation has a fundamental role in mediating all stages of atherosclerotic disease. The key role of oxidation in linking lipids and inflammation to atherosclerosis is compelling and supported by experimental evidence. However, the relevance of the antioxidant hypothesis for the treatment of patients with atherosclerosis has not been definitively proven. The reader of this issue of *Cardiology Rounds*, will gain an improved understanding of the rationale for testing novel approaches to treat atherosclerosis with antioxidant/anti-inflammatory agents, as well as an update on this investigational field.

TEST:

1. Carbon dioxide is one of the major sources of reactive oxygen species (ROS).
True False
2. ROS damages cellular lipid membranes.
True False
3. The expression of chemotactic factors and adhesion molecules is enhanced by oxidative stress.
True False
4. Supplementation with vitamin E potentiates the effects of lipid-lowering therapy in patients with coronary heart disease.
True False
5. AGI-1067 is a powerful synthetic antioxidant that has the ability to selectively block the expression of inflammatory genes that code for VCAM-1 and MCP-1.
True False

6. Intravascular ultrasound is increasingly being used as a primary efficacy measure to assess atherosclerosis progression and regression in randomized clinical trials such as CART-2.

True False

7. The ARISE trial tests the anti-inflammatory hypothesis for the prevention of major cardiovascular events in patients with coronary heart disease.

True False

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

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This program was issued in November 2003. All tests must be returned by February 28, 2004.

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