

**CARDIOVASCULAR PHARMACOGENETIC STUDY:
CHOLESTEROL AND ATORVASTATIN PHARMACOGENETIC
STUDY (CAPS)**

IRB# 2002-032

Principal Investigator: Ronald Krauss, MD

Synopsis:

The goal of this research is to identify common gene variants that contribute to inter-individual differences in response to HMG CoA reductase inhibitors (statins), a modern class of drugs used to lower cholesterol levels and angiotensin converting enzyme (ACE) inhibitors which have antihypertensive and metabolic effects. Both statins and ACE inhibitors have been proven in large clinical trials to lower the risk for CVD. However, the therapeutic effectiveness of these agents varies between individuals. The hypothesis to be tested in this research is that differences in the therapeutic effect of statins and ACE inhibitors is, at least in part, related to genetic variability among individuals. A secondary hypothesis is that the association of specific genetic variants with phenotypic changes induced by statin and ACE inhibitor therapy will yield information regarding the functions of these genes.