

**National Heart, Lung, and Blood Institute**  
**Action to Control Cardiovascular Risk in Diabetes (ACCORD)**

*ACCORD (Action to Control Cardiovascular Risk in Diabetes) is evaluating approaches to decrease the occurrence of major CVD events—heart attack, stroke or death from CVD—among high-risk patients with type 2 diabetes.*

**Lead Agency:**

National Heart, Lung, and Blood Institute (NHLBI)/

National Institutes of Health (NIH)

**Agency Mission:**

- Provide leadership for a national program in diseases of the heart, blood vessels, lung, and blood; blood resources; and sleep disorders.
- Plan, conduct, foster, and support an integrated and coordinated program of basic research, clinical investigations and trials, observational studies, and demonstration and education projects related to the causes, prevention, diagnosis, and treatment of heart, blood vessel, lung, and blood diseases; and sleep disorders.
- Conduct educational activities for health professionals and the public with an emphasis on prevention.
- Support research training and career development of new and established researchers in fundamental sciences and clinical disciplines.

**Principal Investigator(s):**

**Coordinating Center PI:**

Robert Byington, Ph.D

Email: [bbyingto@wfubmc.edu](mailto:bbyingto@wfubmc.edu)

Phone: 336-716-2885

**Steering Committee Chairman:**

William Friedewald, M.D.

Email: [william.cushman@med.va.gov](mailto:william.cushman@med.va.gov)

Phone: 212-305-3017

**NHLBI Project Officer:**

Denise Simons-Morton, M.D., Ph.D

Email: [simonsd@nhlbi.nih.gov](mailto:simonsd@nhlbi.nih.gov)

Phone: 301-435-0384

**Partner Agencies:**

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

National Center on Minority Health and Health Disparities (NCMHD)

National Institute on Aging (NIA)  
National Eye Institute (NEI)  
Centers for Disease Control and Prevention (CDC)  
Sanofi Aventis (Conditional gift fund)

### **General Description:**

#### **Action to Control Cardiovascular Risk in Diabetes (ACCORD)**

ACCORD ([www.accordtrial.org](http://www.accordtrial.org)) is a large clinical trial of adults with established type 2 diabetes who are at especially high risk of cardiovascular disease (CVD). Type 2 diabetes is a complex metabolic disease characterized by high blood glucose (sugar) levels. People with this form of diabetes have insulin resistance and a progressive loss of the ability to produce insulin.

Type 2 diabetes increases the risk of a number of complications, especially CVD. Adults with type 2 diabetes are two to four times more likely to die of heart disease and stroke than adults without diabetes; about 65 percent of people with diabetes succumb to these diseases. Many people with type 2 diabetes are overweight and have high blood pressure and undesirable cholesterol levels—conditions that further add to CVD risk.

ACCORD is testing approaches to decrease the high rate of major CVD events—heart attack, stroke, or death from CVD—among high-risk patients with type 2 diabetes. Three treatment approaches are being evaluated: intensive lowering of blood sugar levels compared with lowering to the conventional target level, intensive lowering of blood pressure compared with lowering to the conventional target level, and modification of blood cholesterol levels using a fibrate plus a statin compared with a statin alone.

The study began enrolling participants in 2001 at 77 clinical sites across the United States and Canada. A total of 10,251 adults with established type 2 diabetes are participating. At enrollment, they were 40-79 years of age (average age, 62), had diabetes for an average of 10 years, and either had diagnosed CVD or had at least two CVD risk factors (high LDL cholesterol, high blood pressure, smoking, obesity) in addition to type 2 diabetes.

In addition to CVD, outcomes of interest include microvascular diseases, cognition, and quality of life.

Treatment is scheduled to end in 2009, with final results reported in 2010.

***Excellence:*** What makes this project exceptional?

ACCORD is testing aggressive strategies to reduce the burden of CVD among highly vulnerable patients with type 2 diabetes.

***Significance:*** How is this research relevant to older persons, populations and/or an aging society?

Type 2 diabetes primarily affects older persons, and its prevalence is growing as the population ages and risk factors such as obesity affect increasing numbers of people

***Effectiveness:*** What is the impact and/or application of this research to older persons?

Recently, ACCORD found that intensively lowering blood sugar to near-normal levels did not significantly reduce the risk of major CVD events, such as fatal or non-fatal heart attacks or strokes. In fact, when compared with standard treatment this approach appeared to increase the risk of death. This is important evidence to help guide treatment of adults with type 2 diabetes who already have CVD or are at high risk of developing it. For such individuals, intensively lowering blood sugar may be too risky.

***Innovativeness:*** Why is this research exciting or newsworthy?

The research addresses an important clinical problem for which no effective preventive strategies have heretofore been identified.