



1725 I Street NW • Suite 510 • Washington, DC 20006
Tel 202-659-0599 • Fax 202-659-0709 • www.asn-online.org

EMBARGOED FOR RELEASE UNTIL 12:00 PM ON NOVEMBER 1

Contact: Shari Leventhal: 202-416-0658, sleventhal@asn-online.org

ACE INHIBITORS REDUCE KIDNEY DISEASE RISK IN DIABETICS WITH HIGH BLOOD PRESSURE

Washington, DC (October 31, 2006) — In diabetic patients with hypertension, ACE inhibitors reduce the risk of developing diabetes-related kidney disease, independent of their effect in lowering blood pressure, reports a study in the December *Journal of the American Society of Nephrology*.

"Our results clearly show that an ACE inhibitor should always be used in patients with high blood pressure and diabetes, even when they have no evidence of renal or cardiovascular disease," comments the study's lead author, Dr. Piero Ruggenenti of Mario Negri Institute for Pharmacological Research in Bergamo, Italy.

The BERgamo NEphrologic DIabetes Complications Trial (BENEDICT) study included 1,204 patients with type 2 diabetes and high blood pressure. At the beginning of the study, none of the patients had any signs of kidney disease. They were randomly assigned to treatment with an ACE inhibitor, another type of blood pressure drug called a calcium channel blocker, a combination of an ACE inhibitor with a calcium channel blocker, or an inactive placebo. Rates of microalbuminuria—small amounts of the protein albumin in urine, the first sign of diabetic kidney disease—were compared between groups.

After an average of 3½ years, patients who had good blood pressure control—regardless of which treatment they received—had lower rates of microalbuminuria. Patients taking the combination treatment had the greatest reduction in blood pressure and were less likely to require additional drugs to keep their blood pressure under control.

MORE

Taking an ACE inhibitor, alone or as part of the combination treatment, provided further protection against diabetic kidney disease. This was also the case for patients whose blood pressure remained high—as long as they were taking an ACE inhibitor, their microalbuminuria risk was similar to that of patients whose blood pressure was well-controlled. Dr. Ruggenenti points out, "Treatment with an ACE inhibitor was particularly important when the blood pressure was poorly controlled—as may happen in most diabetic patients with hypertension, despite the use of two, three, or even more drugs."

About 30 percent of people with diabetes will go on to develop kidney failure, while even more may be at risk of premature death from cardiovascular disease. Eighty to ninety percent of patients with type 2 diabetes also have hypertension, a major risk factor for diabetic kidney disease. "Optimizing blood pressure control appears extremely important to reduce or prevent the risk of kidney failure or death for these patients," says Dr. Ruggenenti.

All doctors who treat diabetes need to know about the protective benefits of ACE inhibitor treatment—especially primary care doctors who care for the vast majority of diabetic patients without kidney disease. "Early and effective treatment of hypertension is of paramount importance in people with diabetes, and ACE inhibitors should be the treatment of choice," Dr. Ruggenenti concludes. "However, in most patients, an ACE inhibitor alone is not enough to achieve good control of arterial blood pressure—less than 130/80 mm Hg. In these patients, the doctor should also use other antihypertensive drugs, including a diuretic, in most cases, to achieve this target. Although using an ACE inhibitor is important, so is achieving the target blood pressure whenever possible." For patients who can't take ACE inhibitors, another class of drugs—the angiotensin II receptor antagonists—may be a valid alternative.

The ASN is a not-for-profit organization of 9,500 physicians and scientists dedicated to the study of nephrology and committed to providing a forum for the promulgation of information regarding the latest research and clinical findings on kidney diseases.

###