

# Aliskiren Achieved Better Control Than Irbesartan

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NEW ORLEANS — Monotherapy with the direct renin inhibitor aliskiren was more effective at lowering blood pressure in hypertensive patients with metabolic syndrome than the angiotensin-receptor blocker irbesartan in a randomized study with 138 evaluable patients.

Aliskiren monotherapy also resulted in a significantly higher percentage of patients reaching their goal blood pressure, compared with those on irbesartan, Dr. Wilhelm Krone, professor and chairman

of the second department of internal medicine at the University of Cologne (Germany), and his associates reported in a poster at the annual scientific sessions of the American Heart Association.

“Chronic activation of the renin system has been implicated in many of the key features of metabolic syndrome,” they said. “We hypothesize that the greater blood pressure-lowering effects by aliskiren relative to irbesartan in meta-

bolic syndrome may be the result of more complete renin system inhibition by aliskiren in the kidney and/or adipose tissue. Adipocytes may contribute to blood pressure elevation in obesity-related hypertension through the generation of angiotensin II.” They also noted that metabolic syndrome occurs in more than a third of patients with hypertension.

The study was supported by Novartis, which markets aliskiren (Tekturna).

The subjects were aged 40-75 (average 59), 65% were men and 96% were white, and had metabolic syndrome. They all had essential hypertension (systolic pressure of at least 130 mm Hg or diastolic pressure of at least 85 mm Hg) and a waist circumference that met the definition for metabolic syndrome (at least 102 cm in men and 88 cm in women). In addition, they had to either have a plasma triglyceride level of more than 150 mg/dL or a

## Early Diastolic Dysfunction Seen in Diabetics

NEW ORLEANS — Preclinical diastolic dysfunction was highly prevalent among patients with diabetes, occurring in 24% of more than 1,700 largely unselected patients in a retrospective study.

Diastolic dysfunction without any initial clinical manifestations in patients with either type 1 or type 2 diabetes also had substantial clinical consequences, leading to a significantly increased rate of both heart failure and all-cause mortality during up to 5 years of follow-up, Dr. Aaron M. From reported at the annual scientific sessions of the American Heart Association.

Dr. From, of the Mayo Clinic in Rochester, Minn., and his associates studied the natural history of preclinical diastolic dysfunction in diabetes patients by reviewing the records of 2,770 patients with either type 1 or type 2 diabetes who were residents of Olmsted County, Minn. and who underwent an echocardiographic examination at the clinic during 1996-2006. A total of 1,794 patients were included in the final analysis.

The average age of these patients was 60, about half were women, their average body mass index was 33 kg/m<sup>2</sup>, 86% were hypertensive, 37% had coronary disease, and most had type 2 diabetes.

Using the ratio between the patient's early mitral filling velocity—the E wave—and the mitral annulus velocity—the e' wave—431 (24%) of the 1,784 patients with diabetes had diastolic dysfunction at the time of their echo exam.

Subsequent development of heart failure was identified by finding ICD-9 code 428 in the patient's record. A prior study of Olmsted County patients showed that this code identified 90% of heart failure cases. During up to 5 years of follow-up, the rate of new-onset heart failure was 37% in patients with diastolic dysfunction at baseline and 17% in those without diastolic dysfunction, a statistically significant difference, said Dr. From, who also reported that he and his coauthors had no conflicts of interest related to the study.

—Mitchel L. Zoler



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