New York — Combination antihypertensive therapy must be used more aggressively as the first-line treatment for patients, especially those with diabetes, Dr. Joel M. Neutel said at the annual meeting of the American Society of Hypertension.

“We know that we need combination therapy to get patients to their goal blood pressure, but in practice [physicians in the United States] are very reluctant to titrate multiple drugs,” said Dr. Neutel, medical director of clinical pharmacology at the Orange County Research Center in Tustin, Calif. “We need to be much more aggressive with combination therapy, and use even three or four drugs to get patients to their goal. All the evidence shows that there is no increase in adverse effects with more aggressive treatment.”

The added value of a two-drug combination compared with monotherapy was documented by the results from two separate studies reported by Dr. Neutel at the meeting. One study examined adding the calcium channel blocker amlopidine to treatment with either quinapril or losartan. The second study looked at the effect of adding the angiotensin II receptor blocker (ARB) irbesartan to the diuretic hydrochlorothiazide (HCTZ).

Dr. Neutel acknowledged that the results from many prior studies had already proved the added efficacy and safety of combination therapy, but he stressed the importance of adding to this evidence base.

“We need to provide physicians with a lot of data to make them comfortable with the fact that we can better control blood pressure control with complementary combinations of drugs.” He noted that only about half of U.S. patients with diagnosed hypertension are on medical treatment, and within that fraction only about one-third have their blood pressure controlled to their goal level. Among patients with diabetes, fewer than 20% are at their goal pressure, which was set at less than 130/80 mm Hg in the National Heart, Lung, and Blood Institute’s Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7).

“The more reports, we hope that physicians will be more willing to use combination therapy and use it as first-line therapy,” he said.

The first study enrolled diabetic patients with a systolic pressure of 140-170 mm Hg and a diastolic pressure of 90-110 mm Hg who were not on any treatment. Patients with a pressure of more than 135/80 mm Hg who were uncontrolled on either monotherapy or combination therapy were also included.

Patients were initially treated with either 20 mg/day of the ACE inhibitor quinapril or 50 mg/day of the ARB losartan. After 4 weeks, the daily dosages were titrated to 40 mg quinapril or 100 mg losartan. Another 4 weeks, patients were randomized to treatment with either 5 mg/day of amlopidine or placebo. After 6 weeks, the amlopidine dosage was increased to 10 mg/day.

The primary end point was the percentage of patients whose blood pressure was below 130/80 mm Hg after 6 weeks of treatment on the final, titrated regimen. This goal was met by 27.5% of the 211 patients in the combination-therapy group, and by 12.5% of the 200 patients treated with just one drug, a statistically significant difference. The combination regimens were as safe as monotherapy, with no excess incidence of adverse effects, Dr. Neutel reported.

The second study randomized nondiabetic patients to either combination therapy with 150 mg/day irbesartan plus 12.5 mg/day HCTZ, or to monotherapy with the ARB irbesartan alone at a dosage of 150 mg/day. After 1 week, the dosage received by all patients was doubled, to 300 mg irbesartan plus 25 mg HCTZ or to 300 mg of irbesartan alone. The primary end point was the percentage of patients with a diastolic pressure of less than 90 mm Hg after 5 weeks of treatment.

This goal was met by 47% of the 423 patients in the combination arm, and by 33% of the 206 patients in the monotherapy arm, a statistically significant difference. The study’s secondary end point was the percentage of patients with a pressure of less than 140/90 mm Hg, which was reached by 35% of patients on combination therapy and by 19% of those on monotherapy. The adverse-effect profile and severity was similar in the two treatment groups, Dr. Neutel said.

References