Control, Side Effects Are Factors

Combination *from page 1*

man, chief of the Diabetes Trials Unit at the University of Oxford (England), during a press briefing held at the meeting.

The second and third years of the study are designed to investigate these more complex insulin regimens, he added.

The first-year results of 4-T were published online (N. Engl. J. Med. 2007 [Epub-doi:10.1056/NEJMoa075392]) on Sept. 21, the same day as the presentation in Amsterdam. The report will be printed in the Oct. 25 issue of the New England Journal of Medicine. The study is funded by Novo Nordisk.

Greater decreases in mean glycated hemoglobin levels were seen in patients randomized to either biphasic insulin aspart twice daily or prandial insulin aspart three times daily, compared with basal insulin detemir once daily (or twice daily if needed).

When the data were analyzed in terms of baseline glycated hemoglobin levels, efficacy differed between the regimens only for patients with baseline levels above 8.5%, perhaps reflecting greater effects of postprandial glycemia on glycated hemoglobin, Dr. Holman and associates said in the published article.

The biphasic and prandial regimens were associated with significantly higher rates of hypoglycemia and weight gain.

DR. HOLMAN

The biphasic and prandial regimens, however, were associated with significantly higher rates of hypoglycemia and weight gain, compared with the basal insulin regimen. "I suspect that we will not find a single insulin [regimen] that will do everything perfectly, and it will be a balance between the degree of control and the cost and complexity of the side effects," Dr. Holman remarked at the briefing.

Patients in the biphasic group injected insulin twice daily and those in the prandial group injected immediately before meals; basal group injections were done at bedtime. Insulin doses could be adjusted between visits if deemed appropriate. Patients with unacceptable hyperglycemia at 24 weeks or later added a second type of insulin, and stopped any use of a sulfonylurea.

At 1 year, mean glycated hemoglobin levels were 7.3% in the biphasic group and 7.2% in the prandial group, both significantly lower than the 7.6% levels in the basal group. The proportion achieving a glycated hemoglobin level of 6.5% or lower was 17% in the biphasic group, 24% in the prandial group, and 8% in the basal group.

The proportions of patients achieving glycated hemoglobin targets were "disappointing" in these first-year results and worse than seen in other trials of insulin initiation, Dr. Graham T. McMahon and Dr. Robert G. Dluhy, two editors of the New England Journal of Medicine, commented in the same issue (N. Engl. J. Med. 2007 Sept.21 [Epub-doi:10.1056/NEJMe078196]).

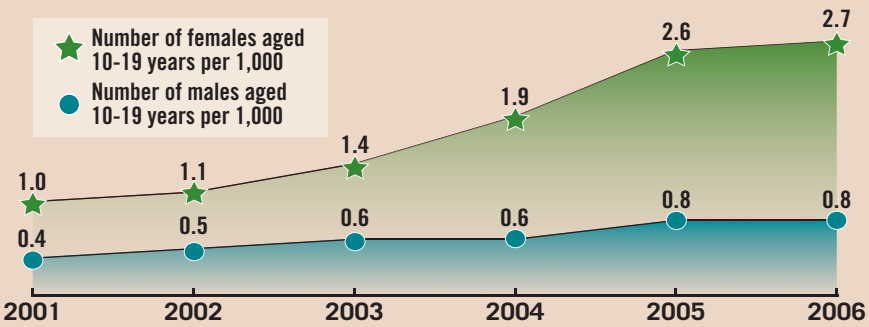
These preliminary findings shouldn't change recommendations for starting insulin therapy. "The best approach is to continue metformin and add a basal insulin; sulfonylureas are not synergistic with insulin and should generally be stopped," they wrote.

Dr. Holman and two coinvestigators have received grant support or fees for consulting and lecturing from Novo Nordisk and other pharmaceutical companies. ■

Sherry Boschert, San Francisco Bureau, contributed to this story.

DATA WATCH

Females' Use of Type 2 Diabetes Medication Growing Faster Than Males'

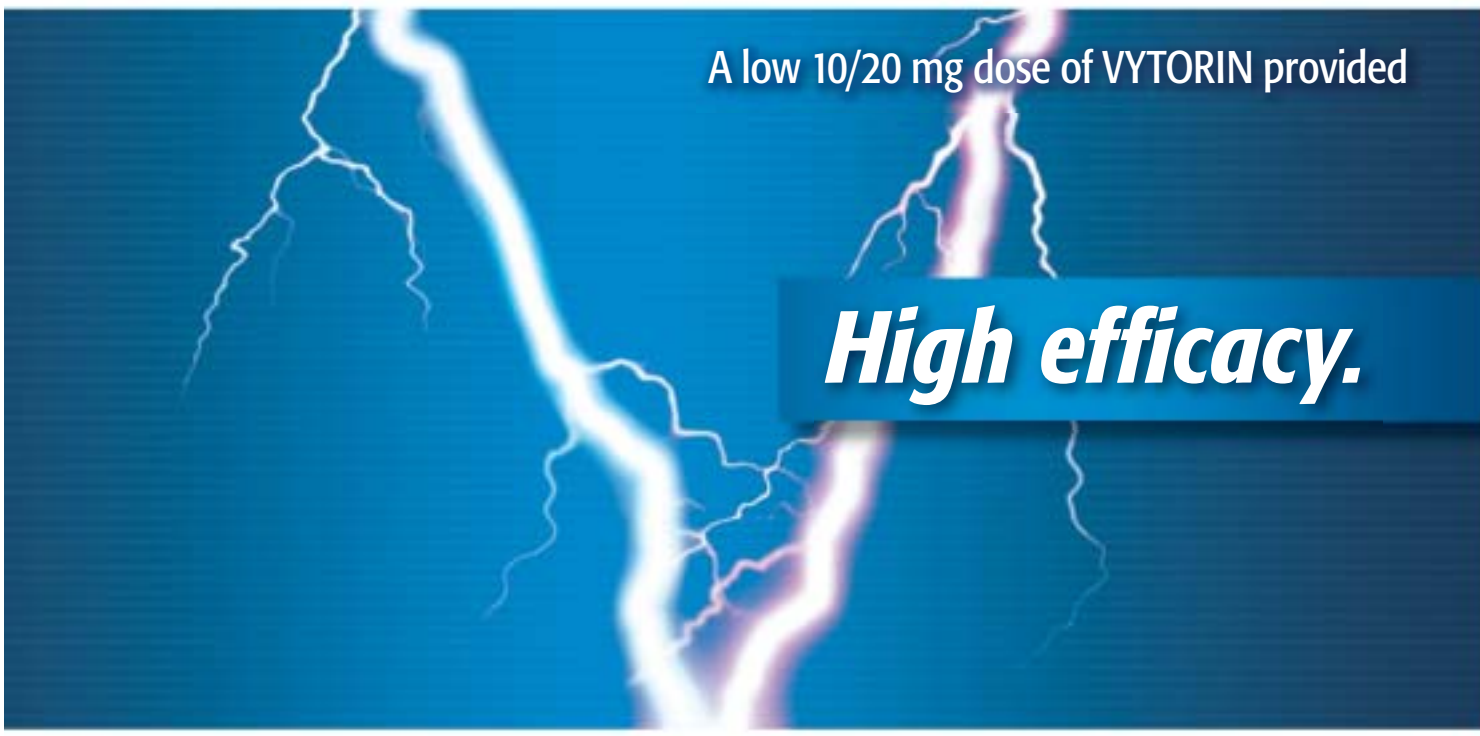


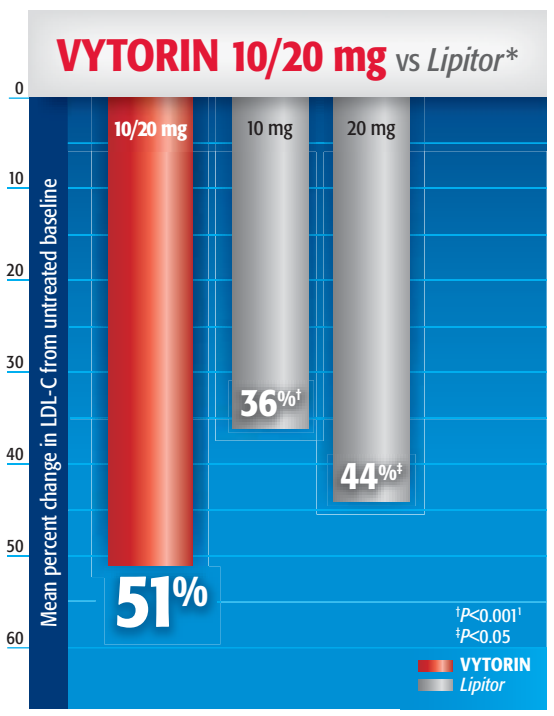
Source: Medco Health Solutions Inc.

ELSEVIER GLOBAL MEDICAL NEWS

As an adjunct to diet when diet alone is not enough, for patients beginning LDL-C drug therapy,

Choose VYTORIN for superior LDL-C





Reference: 1. Ballantyne CM, Abate N, Yuan Z, King TR, Palmisano J. Dose-comparison study of the combination of ezetimibe/simvastatin (Vytorin) versus atorvastatin in patients with hypercholesterolemia: the Vytorin Versus Atorvastatin (VYVA) study. *Am Heart J.* 2005;149:464–473.

- VYTORIN 10/40 mg was superior to atorvastatin 40 mg at lowering LDL-C (57% vs 48%, *P*<0.05).
- VYTORIN 10/80 mg was superior to atorvastatin 80 mg at lowering LDL-C (59% vs 53%, *P*<0.05).

*Mean percent change in LDL-C from untreated baseline in a multicenter, double-blind, randomized, active-controlled, 8-arm, parallel-group study (6 weeks of active treatment) (N=1,902). Patients with hypercholesterolemia who had not met their LDL-C goal as defined by NCEP ATP III were randomized to VYTORIN 10/10, 10/20, 10/40, or 10/80 mg or atorvastatin 10, 20, 40, or 80 mg. Mean pooled baseline LDL-C values for VYTORIN and atorvastatin were 178 mg/dL and 179 mg/dL, respectively.[1] VYTORIN 10/10 mg reduced LDL-C by 47% from baseline vs 36% with atorvastatin 10 mg (*P*<0.05).

- The dosage should be individualized according to the baseline LDL-C level, the recommended goal of therapy, and the patient's response.

The clinical impact of comparative differences in lipid changes between products is not known.

VYTORIN is indicated as adjunctive therapy to diet for the reduction of elevated TOTAL-C, LDL-C, Apo B, TG, and non–HDL-C, and to increase HDL-C in patients with primary (heterozygous familial and nonfamilial) hypercholesterolemia or mixed hyperlipidemia when diet alone is not enough.

Contraindications: hypersensitivity to any component of this medication; active liver disease; unexplained persistent elevations of serum transaminases; and women who are pregnant, nursing, or may become pregnant.

No incremental benefit of VYTORIN on cardiovascular morbidity and mortality over and above that demonstrated for simvastatin has been established.