Liraglutide Tops Others for Lowering HbA_{1c}

BY HEIDI SPLETE

FROM THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS

SAN DIEGO – Type 2 diabetes patients achieved greater blood sugar control with once-daily liraglutide injections than with other standard type 2 diabetes medications, according to the findings from a meta-analysis of seven phase III studies.

"The progressive nature of type 2 diabetes makes it difficult for any single therapy to be effective long-term," Dr. Robert Henry of the University of California, San Diego, said at the meeting.

Liraglutide (Victoza) was approved by the Food and Drug Administration in January 2010 to treat type 2 diabetes in adults as an adjunct therapy to a healthy diet and exercise.

To further evaluate the impact of liraglutide on blood sugar control, Dr. Henry and his colleagues consolidated data from the phase III clinical trials and divided the patients into five categories based on their baseline hemoglobin A_{1c} level: 7.5% or less (651 patients), 7.6%-8.0% (601), 8.1%-8.5% (538), 8.6%-9.0% (432), and greater than 9.0% (607).

They reviewed the mean changes in HbA_{1c} from baseline to 26 weeks of treatment. Overall, mean hemoglobin A_{1c} reductions with a once-daily, 1.8-mg dose of liraglutide were greater than those achieved with standard regimens involving exenatide, insulin glargine, glimepiride, rosiglitazone, or sitagliptin.

HbA_{1c} levels were significantly reduced in patients with a baseline HbA_{1c} of 7.5% or less in the liraglutide group compared with all other groups. The mean reductions in HbA_{1c} for patients on liraglutide ranged from 0.7% in the 7.5%-or- less cat-

egory to 1.8% in the greater than 9.0% category. The next best mean reduction in HbA_{1c} was seen in patients taking insulin glargine and exenatide. Reductions in HbA_{1c} in patients taking insulin glargine ranged from 0.3% to 1.5%, and HbA_{1c} reductions in those taking exenatide ranged from 0.4% to 1.3%.

Patients on sulfonylureas, sitagliptin, or thiazolidinediones showed less improvement from baseline than did patients taking the injectables. The average reduction ranged from 0.0% to 1.1% in patients on sitagliptin, 0.4% to 1.4%, in those on sulfonylureas, and 0.4% to 0.8%. in those on thiazolidinediones.

Among 348 patients in the liraglutide group with baseline HbA_{1c} levels of 7.5% or less, 216 (63%) reached the AACE-recommended HbA_{1c} target of 6.5% or less, compared with less than half (20%-49%) of patients with a baseline HbA_{1c} of 7.5% or less in the other groups, Dr. Henry said.

Among 333 patients in the liraglutide group with HbA_{1c} levels greater than 9.0%, 33 (10%) reached the 6.5% or less target, compared with 4 (12%) of 34 patients in the insulin glargine group and 0%-5% of patients in the other groups. ■

VITALS

Major Finding: The mean reductions in HbA_{1c} for patients on liraglutide ranged from 0.7% in the 7.5%-or-less category to 1.8% in the greater-than-9.0% category. The next best mean reduction in HbA_{1c} was seen among patients taking two other injectable therapies: insulin glargine and exenatide. Reductions in HbA_{1c} in patients taking insulin glargine ranged from 0.3% to 1.5%, and HbA_{1c} reductions in those taking exenatide ranged from 0.4% to 1.3%.

Data Source: A meta-analysis of seven phase III trials.

Disclosures: The study was sponsored by Novo Nordisk, which manufactures liraglutide. Dr. Henry has received research support from multiple pharmaceutical companies, including Amylin Pharmaceuticals, AstraZeneca, and Novartis. He has served as an adviser or consultant for, and has received consulting fees from, several companies, including Amylin, Eli Lilly, and Novo Nordisk.

FORTEO® (teriparatide [rDNA origin] 20 mcg for injection) PA 097 FSAM00