FDA on May 2 approved linagliptin, a dipeptidyl peptidase-4 inhibitor, for the improvement of blood glucose control in adults with type 2 diabetes mellitus.

The drug is available under the brand name Tradjenta by Boehringer Ingelheim and Eli Lilly and Company, which earlier this year formed an alliance to develop new medications for diabetes.

According to the FDA-approved labeling for linagliptin, the drug is indicated, in combination with diet and exercise, to improve glycemic control in adults with type 2 diabetes. Linagliptin is not suitable for use in patients with type 1 diabetes or for the treatment of diabetic ketoacidosis.

Like other drugs in its class, linagliptin inhibits the degradation of incretins, causing an increase in insulin release and a decrease in circulating levels of glucagon.

The recommended dosage of linagliptin is 5 mg taken once daily with or without food. No dosage adjustments are needed in patients with kidney or liver disease, according to the labeling.

In clinical trials, linagliptin was studied as monotherapy and in combination with metformin, glimepiride, or pioglitazone.

As monotherapy compared with placebo, linagliptin resulted in improvements in trial participants’ glycosylated hemoglobin, fasting blood glucose, and postprandial glucose levels. The addition of linagliptin to metformin, glimepiride, or pioglitazone therapy likewise improved these indicators of glycemic control.

The labeling warns that the use of linagliptin in combination with a sulfonylurea or other insulin secretagogue may result in hypoglycemia. To lower the risk of hypoglycemia, a reduction in the secretagogue dosage is recommended for patients who take such a medication along with linagliptin.

Inducers of P-glycoprotein or cytochrome P-450 isoenzyme 3A4 may decrease patients’ exposure to linagliptin. The labeling for the antidiabetic drug strongly recommends that users take alternatives to those medications.

In clinical trials, the most common adverse events associated with linagliptin use were upper-respiratory-tract infection, stuffy or runny nose, sore throat, muscle pain, and headache.

Linagliptin 5-mg tablets are available in 30-, 90-, and 1000-count bottles. The medication should be stored at controlled room temperature.

—Kate Traynor
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Home-based medication management system looks to future

A federally recognized program that uses pharmacists’ medication therapy management skills is targeting hospital-to-home transitions in an attempt to reduce hospital readmission rates.

June Simmons, president of the Partners in Care Foundation in San Fernando, California, said her organization’s Web-based medication reconciliation program, the HomeMeds Medication Management Improvement System, is being tested in two California hospitals to gather basic information about patients’ medication regimens.

Soon after the patients are discharged, Simmons said, a care manager visits them at home and uses the HomeMeds system to analyze the medications being taken. The care manager then works with a pharmacist or other medication expert to resolve any therapeutic duplication issues and other drug-related problems.

“The hospital, of course, does medication reconciliation when someone is leaving the hospital,” Simmons said. “But very often, the big thrill is to go to the home and then see what’s really there. And there are often big surprises.”

Simmons said medication-related issues are a major reason for hospital readmissions. Her organization’s care-transition work coincides with efforts by the Centers for Medicare and Medicaid Services (CMS) to decrease 30-day readmission rates for Medicare beneficiaries.

CMS in 2009 began reporting hospitals’ 30-day readmission rates for Medicare beneficiaries diagnosed with pneumonia, acute myocardial infarction, or heart failure. Last year’s health care re-