



Indiana Medicaid Therapeutics Committee Therapeutic Class Review Summary

Therapeutic Class:

Non-insulin Injectable Anti-hyperglycemics

Overview:

Initial treatment for type 2 diabetes consists of diet, exercise, and metformin, followed by other oral antidiabetic agents and/or insulin. While this approach improves glycemic control, beta-cell function cannot be completely restored. Available therapies do not correct defects in secretion of other hormones in the glycemic control pathway. In addition to insulin resistance and decreased insulin production, type 2 diabetes is characterized by insufficient secretion of the neuroendocrine hormone amylin from the pancreatic beta-cells and insufficient incretin hormone stimuli from incretins, including glucagon-like peptide-1 (GLP-1) and glucose dependent insulintropic polypeptide (GIP).

Exenatide (Byetta[®]), liraglutide (Victoza[®]), and pramlintide (Symlin[®]) are non-insulin medications that can contribute to the regulation of carbohydrate metabolism in diabetes. Exenatide and liraglutide, both incretin mimetics, mimic the enhancement of glucose-dependent insulin secretion and several other antihyperglycemic actions of incretins. Exenatide is administered twice daily within 60 minutes before morning and evening meals, while liraglutide is administered once daily independently of meals. Pramlintide should be given immediately prior to major meals; it mimics the hormone amylin by modulating gastric emptying, preventing postprandial rise in plasma glucagon, and causing satiety. Exenatide, liraglutide, and pramlintide are available in pre-filled pens for convenient dosing. Pramlintide is also available in a vial.

Generic Name	Brand Name	Manufacturer
Exenatide	Byetta [®]	Amylin
Liraglutide	Victoza [®]	Novo Nordisk
Pramlintide	Symlin [®]	Amylin

Summary:

Exenatide, liraglutide, and pramlintide are non-insulin medications that can contribute to the regulation of carbohydrate metabolism in diabetes. These medications are not first-line agents and are indicated as adjunctive therapies for patients with diabetes. Therefore, a prior authorization process may be warranted to ensure these products are utilized according to their place in therapy.