OVERVIEW
Bydureon, Byetta, Tanzeum, Trulicity, Victoza, and Adlyxin are glucagon-like peptide-1 (GLP-1) agonists indicated in adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes. Incretins, such as GLP-1, enhance glucose-dependent insulin secretion and exhibit other antihyperglycemic actions following their release into circulation from the gut. The GLP-1 agonists enhance glucose-dependent insulin secretion by the pancreatic beta-cell, suppress inappropriately elevated glucagon secretion, and slow gastric emptying.

All of the GLP-1 agonists are administered by subcutaneous (SC) injection. Bydureon is an extended release formulation of Byetta allowing for once-weekly (QW) administration. Unlike Byetta, Trulicity and Victoza, Bydureon and Tanzeum require reconstitution. Byetta is a twice-daily (BID) injection, Trulicity and Tanzeum are QW injections, and Victoza and Adlyxin are a once-daily (QD) injection.

The prescribing information for Bydureon and Byetta note that neither of these agents are recommended in patients with severe renal impairment (creatinine clearance [CrCl] < 30 mL/min) or end-stage renal disease (ESRD) and should be used with caution in patients with renal transplantation. Victoza’s prescribing information notes that it has not been found to be directly nephrotoxic in animal studies or clinical trials. Caution is recommended when initiating or escalating doses of Victoza in patients with renal impairment. Adlyxin clinical trial only examined 5 members with severe renal impairment and Adlyxin exposure was higher in those patients; no dosing adjustment is recommended in moderate renal impairment. The Tanzeum prescribing information does not have dosing restrictions in patients with any degree of renal impairment, and was specifically studied in patients with varying degrees of renal impairment. Trulicity does not have any dosage adjustments in patients with renal impairment including ESRD.

POLICY STATEMENT
A preferred step therapy program has been developed to encourage the use of a preferred product prior to the use of a non-preferred product. If the preferred step therapy rule is not met for a non-preferred agent at the point of service, coverage will be determined by the preferred step therapy criteria below. All approvals are provided for 12 months in duration.

Basic/Basic Plus Formulary and High Performance Plus Formulary Preferred Medications
- Bydureon® (exenatide extended-release for injectable suspension)
- Byetta® (exenatide injection)

Non-Preferred Medications
- Tanzeum™ (albiglutide for subcutaneous injection)
- Trulicity™ (dulaglutide injection)
- Victoza® (liraglutide [rDNA origin] injection)
- Adlyxin® (Lixisenatide injection)

*For the High Performance Plus Formulary, Adlyxin is a non-formulary product and follows non-formulary criteria.

**National Preferred Formulary**

**Preferred Medications**
- Bydureon® (exenatide extended-release for injectable suspension)
- Byetta® (exenatide injection)
- Trulicity™ (dulaglutide injection)

**Non-Preferred Medications**
- Tanzeum™ (albiglutide for subcutaneous injection)
- Victoza® (liraglutide [rDNA origin] injection)
- Adlyxin® (Lixisenatide injection)**

*For National Preferred Formulary, Trulicity is also preferred. All other non-preferred medications are non-formulary products and follows non-formulary criteria.

**BASIC/BASIC PLUS AND HIGH PERFORMANCE PLUS PREFERRED STEP THERAPY CRITERIA**

1. If the patient has tried a preferred medication, then authorization for a non-preferred medication may be given.
2. If the patient has stage 3 chronic kidney disease (CKD) or severe renal impairment (creatinine clearance [CrCl] < 30 mL/min) according to the prescribing physician, approve the requested non-preferred product.
3. If, per the prescriber, the patient has had or has any one of the following, approve Victoza.
   a. History of myocardial infarction, stroke, transient ischemic attack, unstable angina, symptomatic coronary heart disease, chronic heart failure; OR
   b. History of an estimated creatinine clearance < 60 mL/min; OR
   c. Undergone at least one prior coronary, carotid, or peripheral arterial revascularization procedure; OR
   d. Has significant stenosis of coronary, carotid, or lower extremity arteries.

**REFERENCES**
- Bydureon® injectable suspension [prescribing information]. Willmington, DE: AstraZeneca Pharmaceuticals LP; September 2015.
- Victoza® injection [prescribing information]. NovoNordisk: Bagsvaerd, Denmark; April 2016.
- Trulicity™ for subcutaneous injection [prescribing information]. Indianapolis, IN: Eli Lilly; March 2015.
• Adlyxin® injection [prescribing information]. Sanofi-aventis U.S. LLC; Bridgewater, NJ. July 2016