Clinical Policy: Glucagon-Like Peptide-1 (GLP-1) Receptor Agonists

Description
The following agents are synthetic glucagon-like peptide-1 (GLP-1) receptor agonists requiring step therapy: albiglutide (Tanzeum®), dulaglutide (Trulicity®), exenatide ER (Bydureon®, Bydureon® BCise™), exenatide IR (Byetta®), liraglutide (Victoza®), liraglutide/insulin degludec (Xultophy®), lixisenatide (Adlyxin®), and lixisenatide/insulin glargine (Soliqua®).

FDA Approved Indication(s)
GLP-1 receptor agonists are indicated as adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus.

Victoza is also indicated to reduce the risk of major adverse cardiovascular events in adults with type 2 diabetes mellitus and established cardiovascular disease.

Soliqua and Xultophy should be used in those inadequately controlled on basal insulin (< 60 units daily for Soliqua; < 50 units daily for Xultophy), lixisenatide (for Soliqua only), or liraglutide ≤ 1.8 mg daily (for Xultophy only).

Limitation(s) of use:
• GLP-1 receptor agonists are not recommended as a first-line therapy for patients inadequately controlled on diet and exercise.
• Other than Soliqua and Xultophy which contain insulin, GLP-1 receptor agonists are not a substitute for insulin. They should not be used for the treatment of type 1 diabetes or diabetic ketoacidosis.
• Other than Trulicity, concurrent use with prandial insulin has not been studied and cannot be recommended.
• GLP-1 receptor agonists have not been studied in patients with a history of pancreatitis. Other antidiabetic therapies should be considered.
• Tanzeum and Trulicity are not for patients with pre-existing severe gastrointestinal disease.
• Adlyxin has not been studied in patients with gastroparesis and is not recommended in patients with gastroparesis.

Policy/Criteria
Provider must submit documentation (including such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation® that GLP-1 receptor agonists are medically necessary when the following criteria are met:
I. Initial Approval Criteria.

**Victoza** is on Louisiana Healthcare Connection’s (LHCC) Common Preferred Drug List (PDL) which is mandated by Louisiana Department of Health (LDH). If a member has a prescription for **Victoza**, “no prior authorization” is required. However, age and quantity limits may apply.

**A. Step Therapy for GLP-1 Receptor Agonists** (must meet all):

1. Age $\geq$ 18 years;
2. Member meets one of the following (a or b):
   a. Previous use of $\geq$ 3 consecutive months of metformin, unless contraindicated or clinically significant adverse effects are experienced;
   b. HbA1c drawn within the past 3 months is $\geq$ 9%, and concurrent use of metformin unless contraindicated or clinically significant adverse effects are experienced;
3. If request is for a non-preferred GLP-1 receptor agonist, previous use of $\geq$ 3 consecutive months of a preferred GLP-1 receptor agonist, unless contraindicated or clinically significant adverse effects are experienced;
4. Dose does not exceed the FDA approved maximum recommended dose.

**Approval duration:** 12 months

**B. Other diagnoses/indications:** Not applicable

II. Continued Therapy

**A. Step Therapy for GLP-1 Receptor Agonists** (must meet all):

1. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
2. If request is for a dose increase, the new dose does not exceed the FDA approved maximum recommended dose.

**Approval duration:** 12 months

**B. Other diagnoses/indications:** Not applicable

III. Diagnoses/Indications for which coverage is NOT authorized: Not applicable

IV. Appendices/General Information

**Appendix A:** Abbreviation/Acronym Key

- AACE: American Association of Clinical Endocrinologists
- ACE: American College of Endocrinology
- ADA: American Diabetes Association
- ER: extended-release
- FDA: Food and Drug Administration
- GLP-1: glucagon-like peptide-1
- HbA1c: glycated hemoglobin
- IR: immediate-release
**Appendix B: Therapeutic Alternatives**

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Dose Limit/Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metformin (Fortamet®, Glucophage®)</td>
<td>Regular-release (Glucophage): 500 mg PO BID or 850 mg PO QD; increase as needed in increments of 500 mg/week or 850 mg every 2 weeks</td>
<td>Regular-release: 2550 mg/day Extended-release</td>
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</table>

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
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</tr>
</thead>
</table>
| Glucophage® XR, Glumetza® | Extended-release:  
- Fortamet, Glumetza: 1000 mg PO QD; increase as needed in increments of 500 mg/week  
- Glucophage XR: 500 mg PO QD; increase as needed in increments of 500 mg/week |  
- Fortamet: 2500 mg/day  
- Glucophage XR, Glumetza: 2000 mg/day |

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

**Appendix C: General Information**

- A double-blind, placebo-controlled dose-response trial by Garber et al. found the maximal efficacy of metformin to occur at doses of 2000 mg. However, the difference in adjusted mean change in HbA1c between the 1500 and 2000 mg doses was 0.3%, suggesting that the improvement in glycemic control provided by the additional 500 mg may be insufficient when HbA1c is > 7%.

- Per the 2018 American Diabetes Association (ADA) and 2017 American Association of Clinical Endocrinologists and American College of Endocrinology (AACE/ACE) guidelines:
  - Metformin is recommended for all patients with type 2 diabetes. Monotherapy is recommended for most patients; however:
    - Starting with dual therapy (i.e., metformin plus another agent, such as a sulfonylurea, thiazolidinedione, dipeptidyl peptidase-4 inhibitor, sodium-glucose co-transporter inhibitor, GLP-1 receptor agonist, or basal insulin) may be considered for patients with baseline HbA1c 2.9% per the ADA (2.7.5% per the AACE/ACE).
Starting with combination injectable therapy (i.e., with GLP-1 receptor agonist or insulin) may be considered for patients with baseline HbA1c 2 10% per the ADA (2.9% if symptoms are present per the AACE/ACE).

- If the target HbA1c is not achieved after approximately 3 months of monotherapy, dual therapy should be initiated. If dual therapy is inadequate after 3 months, triple therapy should be initiated. Finally, if triple therapy fails to bring a patient to goal, combination injectable therapy should be initiated. Each non-insulin agent added to initial therapy can lower HbA1c by 0.9-1.1%.

### V. Dosage and Administration

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adlyxin (lixisenatide)</td>
<td>Initial dose: 10 mcg SC daily for 14 days Maintenance dose: 20 mcg SC daily</td>
<td>20 mcg/day</td>
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<tr>
<td>Bydureon (exenatide ER)</td>
<td>2 mg SC once weekly</td>
<td>2 mg/week</td>
</tr>
<tr>
<td>Bydureon BCise (exenatide ER)</td>
<td>2 mg SC once weekly</td>
<td>2 mg/week</td>
</tr>
<tr>
<td>Byetta (exenatide IR)</td>
<td>5 mcg to 10 mcg SC twice daily</td>
<td>20 mcg/day</td>
</tr>
<tr>
<td>Soliqua (lixisenatide/insulin glargine)</td>
<td>15 units (15 units insulin/5 mcg lixisenatide) or 30 units (30 units insulin/10 mcg lixisenatide) SC QD</td>
<td>60 units (60 units insulin/20 mcg lixisenatide)/day</td>
</tr>
<tr>
<td>Tanzeum (liraglutide)</td>
<td>30 mg to 50 mg SC once weekly</td>
<td>50 mg/week</td>
</tr>
<tr>
<td>Trulicity (dulaglutide)</td>
<td>0.75 mg to 1.5 mg SC once weekly</td>
<td>1.5 mg/week</td>
</tr>
<tr>
<td>Victoza (liraglutide)</td>
<td>Initial: 0.6 mg SC daily for 7 days Maintenance: 1.2 mg to 1.8 mg SC daily</td>
<td>1.8 mg/day</td>
</tr>
<tr>
<td>Xultophy (liraglutide/insulin degludec)</td>
<td>16 units (16 units insulin/0.58 mg liraglutide) SC QD</td>
<td>50 units (50 units insulin/1.8 mg liraglutide)/day</td>
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### VI. Product Availability

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adlyxin (lixisenatide)</td>
<td>- Multi-dose prefilled pen: 50 mcg/mL in 3 mL (14 doses; 10 mcg/dose)</td>
</tr>
<tr>
<td></td>
<td>- Multi-dose prefilled pen: 100 mcg/mL in 3 mL (14 doses; 20 mcg/dose)</td>
</tr>
<tr>
<td>Bydureon (exenatide ER)</td>
<td>- Single-dose tray: 2 mg vial</td>
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<tr>
<td></td>
<td>- Single-dose prefilled pen: 2 mg pen</td>
</tr>
<tr>
<td>Bydureon BCise (exenatide ER)</td>
<td>Single-dose autoinjector: 2 mg</td>
</tr>
<tr>
<td>Byetta (exenatide IR)</td>
<td>- Prefilled pen: 5 mcg/dose (0.02 mL) in 1.2 mL (60 doses)</td>
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<tr>
<td></td>
<td>- Prefilled pen: 10 mcg/dose (0.04 mL) in 2.4 mL (60 doses)</td>
</tr>
<tr>
<td>Soliqua (lixisenatide/insulin glargine)</td>
<td>Single-patient use pen: 33 mcg/100 units per mL in 3 mL</td>
</tr>
<tr>
<td>Tanzeum (liraglutide)</td>
<td>Single-dose prefilled pen powder: 30 mg and 50 mg</td>
</tr>
</tbody>
</table>
Trulicity (dulaglutide) | Single-dose prefilled pen: 0.75 mg/0.5mL and 1.5 mg/0.5mL  
| Single-dose prefilled syringe: 0.75 mg/0.5mL and 1.5 mg/0.5mL

Victoza (liraglutide) | Multi-dose prefilled pen: 6 mg/mL in 3 mL (doses of 0.6 mg, 1.2 mg, or 1.8 mg)

Xultophy (liraglutide/insulin degludec) | Single-patient use pen: 3.6 mg/100 units per mL in 3 mL

VII. References

Reviews, Revisions, and Approvals

| Policy created Centene reference CP.PST.14. | 11.07.17 | 02.18 |
| Policy Modified and created for Louisiana LA.PST.14 | 03.20.18 |
Important Reminder
This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

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This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

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