

# MTF Formulary Management for the Glucagon-Like Peptide-1 Receptor Agonists (GLP1RAs)

Defense Health Agency Pharmacy Operations Division

## Bottom Line

- **Step therapy exists in this class. Patients must first try metformin OR a sulfonylurea before using a GLP1RA.**
- **Bydureon and Tanzeum are the step-preferred GLP1RAs. Patients must first try Bydureon and Tanzeum (once weekly products) before using Byetta (BID dosing), Victoza (QD dosing), or Trulicity (Q week dosing).**
- **Step therapy applies to all current and new users of the GLP1RAs (no grandfathering). Existing Victoza patients are required to try Bydureon AND Tanzeum, unless manual Prior Authorization is met.**
- **Bydureon was selected for Basic Core Formulary (BCF) status, based on cost-effectiveness.**
- **Byetta, Victoza, and Trulicity are nonformulary and non step-preferred.**

**Uniform Formulary Decision:** The Director, DHA, approved the recommendations from the August 2015 DoD P&T Committee meeting on October 30, 2015. Implementation will occur by February 3, 2016.

Uniform Formulary (UF) Agents		Nonformulary Agents
BCF drugs – MTFs <u>must</u> have on formulary	MTFs <u>may</u> have on formulary	MTFs <u>must not</u> have on formulary
<p style="text-align: center;"><u>Step-Preferred</u></p> <ul style="list-style-type: none"> <li>• Exenatide Q Week (Bydureon)</li> </ul>	<p style="text-align: center;"><u>Step-Preferred</u></p> <ul style="list-style-type: none"> <li>• Albiglutide (Tanzeum)</li> </ul>	<p style="text-align: center;"><u>Non Step-Preferred</u></p> <ul style="list-style-type: none"> <li>• Exenatide BID (Byetta)</li> <li>• Liraglutide (Victoza)</li> <li>• Dulaglutide (Trulicity)</li> </ul>
Step Therapy applies to ALL (new and current) users of the GLP1RAs; no grandfathering applies for any user. See below for detailed criteria.		

## GLP1RAs: Clinical Summary

- All guidelines focus on a patient-centered approach to therapy and treatment goals.
- Metformin remains the first-line treatment in all type 2 diabetes mellitus (T2DM) patients unless contraindications exist.
- The GLP1RAs are indicated for monotherapy as an adjunct to diet and exercise, to improve glycemic control in adult T2DM patients. They are not first-line therapies.
- Trulicity, Tanzeum, and Bydureon have the advantage of once weekly dosing, Victoza is dosed once daily, and Byetta is dosed twice daily.
- When used as monotherapy or in combination with other oral agents, the GLP1RAs decrease A1c on average approximately 1% to 2% from baseline.
- The results of seven head-to-head trials do not show clinically significant differences between GLP1RAs in effects on glycemic control.
- Weight loss was observed in all seven head-to-head studies. When used as monotherapy or as an add-on agent, a 2 kg to 3 kg weight loss overall is expected with the GLP1RAs.
- Long-acting agents have more of an effect on fasting glucose, whereas short-acting agents have a greater effect on post-prandial glucose.
- The GLP1RAs either do not adversely impact or provide small improvements in blood pressure. The subclass either has no effect on or may improve lipid parameters.
- The reported incidence of hypoglycemia with GLP1RAs is low (3% to 9%); however, the incidence is higher when used with a sulfonylurea (13% to 40%). Albiglutide (Tanzeum) has the lowest incidence of hypoglycemia.
- Tanzeum has the lowest incidence of nausea (11.1%) compared to Bydureon (14.4%), Victoza (22.7%), Trulicity (12.1 %–21.1%) or Byetta (29.9%).
- There are no completed trials with any FDA-approved GLP1RA that assess long-term cardiovascular (CV) outcomes; however, CV safety studies are underway.
- There are no trials assessing adherence with the GLP1RAs.

- Tanzeum and Trulicity have an advantage in offering a smaller needle size for patient convenience.
- Trulicity, Byetta, and Victoza have an advantage that they do not require mixing prior to administration.

### Prior Authorization (PA) Criteria for GLP1RAs

- All new users of Bydureon, Tanzeum, Byetta, Trulicity, and Victoza are required to try metformin or a sulfonylurea (SU) before receiving a GLP1RA. Patients currently taking a GLP1RA must have had a trial of metformin or a SU first.

Manual PA criteria: Bydureon, Tanzeum, Byetta, Trulicity, or Victoza is approved (e.g., trial of metformin or SU is NOT required) if:

- The patient has a confirmed diagnosis of Type 2 diabetes mellitus
  - The patient has experienced any of the following issues on metformin:
    - impaired renal function precluding treatment with metformin
    - history of lactic acidosis
  - The patient has experienced any of the following issues on a SU:
    - hypoglycemia requiring medical treatment
  - The patient has had inadequate response to metformin or a SU
  - The patient has a contraindication to metformin or a SU
- Additionally, Bydureon and Tanzeum are the preferred agents in the GLP1RA subclass. New and current users of Byetta, Victoza, and Trulicity must try Bydureon and Tanzeum first.
- Manual PA Criteria: In addition to the above criteria regarding metformin and SU, the following PA criteria would apply specifically to **new** and **current** users of Byetta, Trulicity, and Victoza:
- The patient has had an inadequate response to Bydureon and Tanzeum

### Dosage Conversion

- There are no dosage conversion charts available for the GLP1RAs. When transitioning patients from Victoza to Bydureon or Tanzeum, start at the lowest dose of the new drugs, and titrate up slowly, based on patients response. Refer to the chart below for dosing recommendations.

**Table: Dosing Recommendations for the GLP1RAs** (Pharmacist's Letter/Prescriber's Letter Dec. 2014)

Drug	Dosages Available	Dosing	Notes
Exenatide Q Week (Bydureon)	<ul style="list-style-type: none"> <li>• 2 mg single-dose dual chamber pen with 23 gauge needle</li> </ul>	<ul style="list-style-type: none"> <li>• 2 mg SC once weekly without regard to meals</li> </ul>	<ul style="list-style-type: none"> <li>• For single-dose pen, one chamber has active drug; the other has diluent</li> <li>• Must reconstitute immediately prior to use</li> <li>• The 2 mg vial suspension is still available, but difficult to administer; the single-dose pen is recommended</li> </ul>
Albiglutide (Tanzeum)	<ul style="list-style-type: none"> <li>• 30 mg pens</li> <li>• 50 mg pens</li> <li>• 29 gauge needle</li> </ul>	<ul style="list-style-type: none"> <li>• 30 mg SC once weekly, without regard to meals</li> <li>• Can increase dose to 50 mg once weekly</li> </ul>	<ul style="list-style-type: none"> <li>• Reconstitute 15 minutes prior to administering 30 mg dose</li> <li>• Reconstitute 30 minutes prior to administering the 50 mg dose</li> </ul>
Dulaglutide (Trulicity)	<ul style="list-style-type: none"> <li>• 0.75 mg pens</li> <li>• 1.5 mg pens</li> <li>• 29 gauge needle</li> </ul>	<ul style="list-style-type: none"> <li>• 0.75 mg SC once weekly with or without meals</li> <li>• Can increase dose to 1.5 mg once weekly</li> </ul>	<ul style="list-style-type: none"> <li>• Ready to use liquid; no mixing required</li> </ul>
Exenatide BID (Byetta)	<ul style="list-style-type: none"> <li>• 5 mcg in 1.2 mL pre-filled multidose pen (60 doses)</li> <li>• 10 mcg in 2.4 mL pre-filled multidose pen (60 doses)</li> </ul>	<ul style="list-style-type: none"> <li>• 5 mcg SC BID</li> <li>• Can increase to 10 mg SC BID after one month</li> <li>• Inject within 60 minutes prior to morning and evening meals; 6 hours or more apart</li> </ul>	<ul style="list-style-type: none"> <li>• Pen needles are not supplied; must purchase separately</li> <li>• No mixing required</li> </ul>
Liraglutide (Victoza)	<ul style="list-style-type: none"> <li>• 0.6 mg, 1.2 mg, and 1.8 mg prefilled pens</li> </ul>	<ul style="list-style-type: none"> <li>• 0.6 mg SC QD for one week; to reduce incidence of nausea</li> <li>• After one week increase to 1.2 mg QD</li> <li>• Can increase to 1.8 mg QD</li> <li>• Administer without regard to meals</li> </ul>	<ul style="list-style-type: none"> <li>• Pen needles are not supplied; must be purchased separately</li> <li>• No mixing required</li> </ul>

**References**

- DoD P&T Committee minutes:  
<http://www.health.mil/PandT>
- Current/future drug classes under review by the DoD P&T Committee:  
<http://www.health.mil/PandT> (scroll down to DoD P&T Committee Meeting Schedule)
- TRICARE Formulary Search Tool:  
<http://www.health.mil/formulary>
- Prior Authorization/Medical Necessity forms: See Formulary Search Tool above.
- Formulary Management Documents (including this one) available at:  
<http://www.health.mil/DoDPTResources>
- Point of contact for additional information:  
[dha.jbsa.pharmacy.list.poduf@mail.mil](mailto:dha.jbsa.pharmacy.list.poduf@mail.mil)

GLP1RA Price Comparison at MTF	
Drug	MTF Cost (August 2015)
<b>Basic Core Formulary Step-Preferred</b>	
Exenatide Q Week (Bydureon)	<b>\$</b> = Most Cost-Effective
<b>Uniform Formulary Step-Preferred</b>	
Albiglutide (Tanzeum)	<b>\$</b> = Most Cost-Effective
<b>Non-Formulary Non-Step-Preferred</b>	
Exenatide BID (Byetta)	<b>\$\$\$</b> = Less Cost-Effective
Liraglutide (Victoza)	<b>\$\$\$\$</b> = Least Cost-Effective
Dulaglutide (Trulicity)	<b>\$\$\$\$</b> = Least Cost-Effective
Legend: <b>\$</b> = "Most Cost-Effective" represents Rx's with the <u>lowest cost</u> and/or best clinical efficacy <b>\$\$</b> = "Less Cost-Effective" represents <u>higher cost</u> Rx's with similar clinical efficacy <b>\$\$\$</b> = "Less Cost-Effective" represents <u>next higher cost</u> Rx's with similar clinical efficacy <b>\$\$\$\$</b> = "Least Cost-Effective" represents Rx's with the <u>highest cost</u> with similar clinical efficacy	