MTF Formulary Management for Basal Insulin Analogs

Defense Health Agency Pharmacy Operations Division

Bottom Line

- **Lantus pens and vials remain the Basic Core Formulary (BCF) basal insulin.**
- **Step therapy now exists in the class; all <u>new</u> users must first try Lantus (the step-preferred insulin) prior to use of the other basal insulin analogs. See below.**
- **New users of any of the non step-preferred products (Levemir, Tresiba, Toujeo, and Basaglar) will require manual prior authorization. See below.**
- **There are no clinically significant differences in glycemic control among the basal insulins.**

Uniform Formulary Decision: The Director, DHA, approved the recommendations from the August 2017 DoD P&T Committee meeting on October 20, 2017. Implementation will occur on November 22, 2017.

BCF drugs MTFs <u>must</u> have on formulary	Uniform Formulary MTFs <u>may</u> have on formulary	Nonformulary MTFs <u>must not</u> have on formulary
Step-Preferred • glargine pen and vial (Lantus)	**Non Step-Preferred** • detemir vial (Levemir) • glargine 300 U/mL (Toujeo)	**Non Step-Preferred** • detemir pen (Levemir) • degludec (Tresiba) • glargine 100 U/mL (Basaglar)

Clinical Summary

- Basal insulin analogs are dosed subcutaneously once daily and have similar initial dosing.
  - Lantus was first marketed in 2000 and was designated as BCF in 2010.
  - Insulin detemir may be dosed once or twice daily.
  - Tresiba has a long duration of action of up to 42 hours versus 24 hours for the other products. It also has flexibility with regard to time of administration and is available in two concentrations (100 U/mL, 200 U/mL).
  - Basaglar is another insulin glargine identical to Lantus in terms of amino acid sequence and pH.
  - Toujeo is a more concentrated version of Lantus containing 300 u/mL, and has an onset of action developing over 6 hours compared to Lantus at 3-4 hours.
- While basal insulins differ in pharmacokinetic profiles, this variance does not translate into improved glycemic control or improvements in A1c when comparing one product to another.
- Head-to-head trials did not show clinically relevant differences between the basal insulin analogs and their effect on glycemic control. Lantus was the active comparator in the majority of the non-inferiority trials.
- Common adverse effects are similar among the basal insulin analogs. Cardiovascular outcomes trials with glargine (ORIGIN) and degludec (DEVOTE) showed no increased risk for cardiovascular events. To date, the FDA has not concluded that any insulin increases the risk of cancer.
- Hypoglycemia: Overall, it is difficult to conclude emphatically that one basal insulin is less likely to cause clinically relevant severe or nocturnal hypoglycemia events due to the differences in the definitions of hypoglycemia used in the individual clinical trials and different primary endpoints.
- The basal insulin analogs are rated pregnancy category C with the exception of Levemir, which is rated as pregnancy category B.
- Lantus, Levemir, and Tresiba are approved for use in pediatrics.
- DoD clinicians were asked to provide their opinion on the basal insulins. The majority of providers (90%) preferred Lantus in their clinical setting and for inclusion on the BCF due to their familiarity with the product. Additionally, most clinicians voiced preference for allowing two basal insulins on the formulary. After Lantus, most providers stated a preference for Levemir, followed by Tresiba as a second available agent.
- The majority of DoD patients can be treated with Lantus, based on the lack of compelling advantages of the newer basal insulins, existing MHS utilization, and MHS provider opinions.

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Step Therapy and Prior Authorization (PA)

- All new users of the non step-preferred products (Levemir pen and vial, Tresiba, Toujeo, and Basaglar) must try Lantus first. If a patient has not already received one of the non step-preferred products, manual PA must be filled out to receive Levemir, Tresiba, Toujeo, and Basaglar.
- For the full manual PA criteria, refer to the August 2017 DoD P&T Committee meeting minutes (link provided below).
- Acceptable clinical reasons for a patient to receive a non step-preferred basal insulin after a trial of Lantus include the following examples:
  - therapeutic failure or intolerable adverse effects to Lantus (all the products)
  - patient is as young as one year old (Tresiba)
  - patient is pregnant and cannot use Lantus (Levemir)
  - patient is using a minimum of 100 units of Lantus daily and is experiencing clinically significant, severe hypoglycemia episodes despite splitting the Lantus dose (Toujeo).
- Medical Necessity (MN) criteria is also required for the nonformulary drugs (Levemir pen, Tresiba, and Basaglar). Medical necessity requirements pertain to all MTF patients receiving a nonformulary drug. However, at the TRICARE Mail Order Pharmacy and the Retail Network, MN is only required for non active duty beneficiaries. Non active duty beneficiaries meeting MN criteria may submit a completed form for a reduced cost share at the TRICARE Mail Order Pharmacy or Retail Network pharmacies.

References

- DoD P&T Committee minutes: http://health.mil/PandT
- Current/future drug classes under review by the DoD P&T Committee: http://www.health.mil/About-MHS/Other-MHS-Organizations/DoD-Pharmacy-and-Therapeutics-Committee
- 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

Basal Insulin Analogs Price Comparison at MTF	
Drug	**MTF Cost/Month (Aug 2017)**
Basic Core Formulary Step-Preferred	
• glargine pen and vial (Lantus)	$ **Most Cost Effective**
Uniform Formulary Non Step Preferred	
• detemir vial (Levemir) • glargine 300 U/mL (Toujeo)	$$$ **Less Cost-Effective**
Non-Formulary Non Step-Preferred	
• detemir pen (Levemir) • degludec (Tresiba) • glargine 100 U/mL (Basaglar)	$$$$ **Least Cost-Effective**

Legend:

$ = "Most Cost-Effective" represents Rxs with the lowest cost and best clinical efficacy

$$ = "Less Cost-Effective" represents higher cost Rxs with similar clinical efficacy

$$$ = "Less Cost-Effective" represents next higher cost Rxs with similar clinical efficacy

$$$$ = "Least Cost-Effective" represents Rxs with the highest cost with similar clinical efficacy