

DUKE UNIVERSITY HEALTH SYSTEM
Department of Pharmacy
Best Practice Advisory Memo

Date: 9/18/2017
Subject: Best Practice Advisory: Levothyroxine Injection
To: DUHS Physicians and Pharmacists
From: The Center for Medication Policy

Levothyroxine Injection Cost Update:

- The cost of levothyroxine injection is now approximately \$100 per dose.
- The injection is about 250 times more expensive than the oral tablet or liquid (\$0.40/dose).

DUHS Actions:


- Beginning the evening of Thursday, September 21st, a best practice advisory (BPA) will display to prescribers ordering levothyroxine injection.
 - The BPA will show the cost difference between the injectable and oral dosage forms
 - Prescribers will have the option to order the tablet or liquid within the BPA
 - Prescribers will be prompted within the BPA to select a reason for injection use
- The formulary status of levothyroxine injection has not changed.
- If using the injection, the conversion should be approximately 1 mcg IV : 2 mcg PO.
- Prescribers ordering the 200 mcg/500 mL infusion will not receive the BPA.

Levothyroxine Injection BPA:

BestPractice Advisory - Cloudy,William

Attention (1)

Expensive Medication Warning [Provide Feedback](#)

 William has been prescribed Levothyroxine injection. This product is ~250X more expensive than enteral levothyroxine.

- Cost per dose of levothyroxine injection: ~\$100
- Cost per levothyroxine tablet: ~\$0.40


Before using levothyroxine injection, consider enteral levothyroxine formulations. The half-life of levothyroxine ranges from 3-4 days (hyperthyroidism) to 9-10 days (hypothyroidism).

If converting to levothyroxine injection, the dose should be 50% of the enteral dose (1 mcg injection:2 mcg enteral)




| Lab Results Component | Value | Date |
|-----------------------|----------|------------|
| TSH | 7.00 (H) | 08/28/2017 |

SELECT YOUR JUSTIFICATION HERE (or select an alternative order below) to prevent future pop-ups:

Remove the following orders?

| | | |
|---------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="button" value="Remove"/> | <input type="button" value="Keep"/> |  levothyroxine (SYNTHROID) 50 mcg/mL injection Intravenous, Daily, First Dose Today at 1200, For 30 days |
|---------------------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Apply the following?

| | | |
|--------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="button" value="Order"/> | <input checked="" type="button" value="Do Not Order"/> |  Thyroid Stimulating-Hormone (TSH) |
| <input type="button" value="Order"/> | <input checked="" type="button" value="Do Not Order"/> |  levothyroxine (SYNTHROID, LEVOTHROID) tablet |
| <input type="button" value="Order"/> | <input checked="" type="button" value="Do Not Order"/> |  levothyroxine (SYNTHROID, LEVOTHROID) oral suspension 25 mcg/mL |

Acknowledge Reason

| | | | |
|------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|--------------------------------------|
| <input type="button" value="NPO"/> | <input type="button" value="Symptomatic hypothyroidism"/> | <input type="button" value="Endocrine Recommendations"/> | <input type="button" value="Other"/> |
|------------------------------------|-----------------------------------------------------------|----------------------------------------------------------|--------------------------------------|

Questions / Concerns:

Center for Medication Policy - (919) 684-5125