

Wyoming Drug Utilization Review

Edited by Debra Devereaux, R.Ph., MBA

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Prior Authorization In Place For Medicaid

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Medicaid is on the verge of a new frontier: prior authorization for some medications to help ensure appropriate therapy for our patients. We at the Wyoming Drug Utilization Review Board want to keep you abreast of these changes so you can see what is and what will be changing. We will continue to report these 'prior authorization criteria' to you as they are finalized through this and subsequent newsletters.

If you would like to see the criteria before the newsletter arrives, or have any comments to help us provide the best criteria we can, please go to the DUR website located at: www.uwyo.edu/DUR. If you have questions regarding the technicalities of the prior authorization process or questions of who to contact for more information please refer to the Wyoming Medicaid Prior Authorization Program Provider Training Manual or call ACS at (866) 556-9320. ■

Prior Authorization Criteria

COX-2 Inhibitors	Proton Pump Inhibitors
rofecoxib, celecoxib, valdecoxib	rabeprazole, esomeprazole, omeprazole, pantoprazole, lansoprazole
<p>➤ Patient must be 18 years of age or older to receive prior authorization for a COX-2.</p> <p>➤ One of the following criteria required for approval:</p> <p>1. Patient has a diagnosis of familial adenomatous polyposis OR</p> <p>2. Patient has one of the following diagnoses <i>and</i> one of the following qualifications:</p> <p style="text-align: center;"><u>Diagnoses</u></p> <p>1. Osteoarthritis 2. Rheumatoid arthritis 3. Primary dysmenorrhea (covered for primary dysmenorrhea only if prescription is limited to therapy of 7 days or less) 4. Acute pain (covered for acute pain only if prescription is non-refillable and limited to therapy of 5 days or less)</p> <p style="text-align: center;"><u>Qualifications</u></p> <p>1. Medical necessity for the concomitant use of low dose aspirin, warfarin or methotrexate 2. Concomitant use of a non-COX-2 NSAID and an H-2 antagonist or proton pump inhibitor for the past three months 3. History of peptic ulcer disease or GI bleeding 4. Failure with or intolerance of a trial (as defined by provider) of any three specified multi-source NSAIDS</p>	<p>➤ Acute dosing for up to 60 days in each 12 month period does not require prior authorization.</p> <p>➤ Additional therapy beyond 60 days requires the following:</p> <p>1. One of the following diagnoses (approval will be granted for a lifetime):</p> <p>a. Barret's esophagitis b. Zollinger-Ellison Syndrome c. Pathological hypersecretory condition</p> <p>OR</p> <p>2. One of the following diagnoses after initial treatment period:</p> <p>a. Duodenal ulcer maintenance (approval granted for one 12 month period) b. Benign gastric ulcer (approval granted for one 12 month period) c. Erosive esophagitis (approval granted for one 12 month period) d. History of gastric ulcer and current NSAID therapy (approval granted for one 12 week period) e. Recurrent gastroesophageal reflux disease (approval granted for one 8 week period)</p> <p>OR</p> <p>3. Both of the following qualifications (approval granted for one 12 month period):</p> <p>a. Diagnosis of H. pylori b. Concurrent antibiotic prescription with the PPI prescription</p>

**IN
THIS
ISSUE**

Prior Authorization In Place For Medicaid

Hazards of Hypothyroidism Overtreatment

A Review of Long-Acting Daily Insulins

Hazards of Hypothyroidism Overtreatment

Annie Naramore, Pharm.D. Candidate

The therapeutic goals in hypothyroidism treatment are to restore normal thyroid hormone concentrations in tissue, minimize symptoms, prevent neurologic deficits in newborns and children, and reverse biochemical abnormalities¹. Thyroid hormone preparations are available as various commercial products in natural or synthetic forms.

Natural hormones used to prepare thyroid medications are derived from hog, beef, or sheep thyroid gland¹. Desiccated thyroid products from animal sources were previously preferred to synthetic forms because all thyroid hormones are included. However, natural preparations are not standardized and amount of hormone contained may vary significantly. In addition, it is now believed that these preparations are more likely to cause hypersensitivity reactions¹.

Synthetic levothyroxine is currently the treatment of choice for the routine management of hypothyroidism³. Preparations from different manufacturers are not considered to be bioequivalent. Therefore, switching between brands should be avoided if possible and the physician must be consulted first.

Effects of hormone supplementation are not immediate. Relief of symptoms may appear one to three weeks after dosing regimen is begun⁴. This may require frequent office visits to achieve euthyroidism. Overtreatment of hypothyroidism could result in signs and symptoms similar to hyperthyroidism such as fatigue, weight loss, heat intolerance, sweating, palpitations, and hypermenorrhea.

Chronic excessive dosage of hormone supplementation could be hazardous. Reduced bone density is a side effect that may increase the risk of fracture¹. Angina pectoris or congestive heart failure may be induced or aggravated and shock may develop. Complications such as cardiac failure and arrhythmias are also possible, which could be fatal⁴.

Dosage should be reduced or therapy discontinued if overtreatment is suspected. Supplementation can be reinitiated at lower dose when symptoms subside. In healthy individuals, normal thyroid function is usually restored in six to eight weeks after thyroid suppression⁵. ■

References:

¹ Reasner CA, Talbert RL. Thyroid Disorders. In: DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, editors. Pharmacotherapy: A Pathophysiological Approach, 5th ed. New York: McGraw-Hill; 1999. p. 1359-1376.

² Slagle MA. Medication Update. Southern Medical Journal 2002; 95(5): 520-521.

³ Thyroid Disorders. The Merck Manual [serial online] 2002 [cited 2002 September 10];[8 pages]. Available from: URL: <http://www.merck.com/pubs/mmanual/section2/chapter8/8d.htm>.

⁴ Physicians' Desk Reference. 56th edition. Montvale: Medical Economics Company; 2002.

⁵ Drug Facts and Comparisons. 2002 edition. St. Louis: Facts and Comparisons; 2002.

Drug	Trade Names	Initial Dose	Usual Dose	Comments
Desiccated thyroid	Armour thyroid, Thyroid USP, Thyroid strong, Thyral, S-P-T	30 mg QD (15 mg QD if long-standing myxedema or cardiovascular impairment present)	60-120 mg/day	Dose may be increased by 15 mg/day every 2-3 weeks until desired effect is achieved
Levothyroxine (T4, L-thyroxine)	Eltroxin, Levo-T, Levotheroid, Levoxyl, Synthroid	0.05 mg QD (≤ 0.025 mg QD if long-standing myxedema or cardiovascular impairment present)	Adjust dose as necessary; up to usual maximum of 0.2 mg/day	Dose may be increased by 0.025 mg/day every 2-3 weeks until desired effect is achieved
Liothyronine sodium (T3)	Cytomel, Triostat	25 mcg QD (5 mcg QD if myxedema, elderly, goiter, congenital hypothyroidism)	Adjust dose as necessary; up to usual maximum of 100 mcg/day	Dose may be increased by 5-10 mcg/day every 1-2 weeks until 25 mcg/day is reached, then dose may be increased by 12.5 mcg/day every 1-2 weeks until desired effect is achieved
Liotrix (T4 and T3 combination)	Thyrolar	30 mg QD (15 mg QD if long-standing myxedema or cardiovascular impairment present)	60-120 mg/day	Dose may be increased by 15 mg/day every 2-3 weeks until desired effect is achieved

Table 1. Thyroid Supplement Products Available and Dosage²

A Review of Long-Acting Daily Insulins

Chun Ting, Lai, Pharm.D. Candidate

Over the past 50 years, focus has been on the development of better short-acting insulin agents.¹ It was not until April 2000, when Aventis launched insulin glargine, that a new, *long*-acting human insulin analog for the treatment of type I and II diabetes was marketed.³

The goal of diabetes management is to mimic the flat, interprandial insulin secretion of healthy people. An ideal long-acting insulin formulation should be peakless and mimic the physiological secretion of insulin in non-diabetic subjects. The existing long-acting insulin formulations have peaks and do not provide adequate basal insulin coverage due to absorption variability.¹ For example, ultralente peaks at approximately 8 to 14 hours after injection and has an irregular subcutaneous absorption pattern. These factors result in unpredictable blood glucose fluctuations ranging from hypoglycemia to hyperglycemia.² In contrast, insulin glargine appears to overcome the unpredictable shortcomings of existing long-acting insulin formulations.^{1,2}

“The goal of diabetes management is to mimic the flat, interprandial insulin secretion of healthy people.”

Similar to ultralente, insulin glargine has duration of action of 20.5 hours.³ Unlike ultralente, insulin glargine does not have peak and absorption variability.¹ The peakless and consistent absorption effects of insulin glargine are related to its solubility properties. Insulin glargine is soluble at acidic pH but less soluble at physiologic pH.³

When injected subcutaneously, insulin glargine forms microprecipitates at the injection site. These microprecipitates of insulin glargine will slowly dissolve at a pace that provides 24 hours of peakless insulin coverage.³

Patients who are currently taking ultralente but are unable to achieve adequate glycemic control should be considered as candidates for insulin glargine. ■

Drug	Cost (AWP)^{4,5}
Ultralente 100u/ml x 10ml	\$24.10
Glargine 100u/ml x 10ml	\$45.11

References:

1. Guthrie, R. Is there a need for a better basal insulin? *Clin Diab* 2001; 19(2): 66-70.
2. Lepore M, Pampanelli S, Fanelli, C, Porcellati, F, Bartocci, L, Vincenzo AD, et al. Pharmacokinetics and pharmacodynamics of subcutaneous injection of long-acting human insulin analog glargine, nph insulin, and ultralente human insulin and continuous subcutaneous infusion of insulin lispro. *Diabetes* 2000 Dec; 49: 2142-2148.
3. Insulin glargine (Lantus), a new long-acting insulin. *Med Lett Drugs Ther* 2001 Aug 6; 43(1110): 65-66.
4. 2001 Drug Topics Redbook. Montvale, NJ. Medical Economics Company, p.348.
5. www.pharmacyonesource.com.

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