#### Thyroxine Sodium

[OELT5] Eltroxin® 50mcg/Tab ATC Code : H03AA01

中文名: 昂特欣錠 «GSK» 適應症: 甲狀腺機能減退症。 藥理分類: Thyroid Product. 用法用量: Administration:

- orally taken **on an empty stomac**h, preferably 0.5-1 hour before breakfast or the first food of the day.
- Food that decrease absorption of thyroxine (e.g., soybean infant formula, soybean flour, cotton seed meal) should not be used for administering levothyroxine.

# **Indications and dosage regimens:**

## **Hypothyroidism:**

-Pediatric Patients

For infants with congenital hypothyroidism, a suitable starting dose is 25 mcg/day, with increments of 25 mcg every 2-4 weeks until mild toxic symptoms appear. Dosage is then slightly reduced.

Levothyroxine Sodium Dosing Guidelines for Pediatric Hypothyroidism

Age	Daily Dose*
0-3 months	10-15 mcg/kg
3-6 months	8-10 mcg/kg or 25-50 mcg/kg
6-12 months	6-8 mcg/kg or 50-75 mcg
1-5 years	5-6 mcg/kg or 75-100 mcg
6-12 years	4-5 mcg/kg or 100-150 mcg
> 12 year but growth and	2-3  mcg/kg or > 150  mcg
puberty incomplete	
Growth and puberty complete	1.6-1.7 mcg/kg

<sup>\*</sup>The dose should be adjusted based on clinical response and laboratory parameters.

## -Adults:

**Initial** dose of 50-100 mcg/day may be increased by 25-50 mcg at intervals of about 4 weeks until the thyroid deficiency is corrected and a maintenance dose is established.

Maintenance dose: 100 and 200 mcg/day.

#### **Juvenile Myxedema:**

Starting dose for children > 1 yr: 2.5-5 mcg/kg/day.

## **Pituitary TSH Suppression:**

—Thyroid Cancer:

Dosages > 2 mcg/kg/day given as a single dose usually required to suppress TSH below 0.1 mU/L. However, in patients with high-risk tumors, target level for TSH suppression may be < 0.01 mU/L.

Benign Nodules or Nontoxic Multinodular Goiter:
 Suppress TSH concentration to 0.1-0.5 mU/L for nodules and to 0.5-1.0 mU/L for multinodular goiter.

不良反應: 心絞痛、心律不整、心悸、骨骼肌痛性痙攣、心搏過速、腹瀉、嘔吐、震顫、 不安、失眠、頭痛、潮紅、發汗、體重劇減、肌肉無力。

注意事項: 1.本劑禁用於甲狀腺毒症之患者。

2.本劑以早餐前服用為佳。

交互作用:

- 1. **Amiodarone**: ↓ the therapeutic effect of Thyroid Products.
- Calcium Salts: ↓ the therapeutic effect of Thyroid Products.
  Management: Separate the doses of the thyroid product and the oral calcium supplement by at least 4 hours.
- 3. **Carbamazepine**, Phenobarbital, Phenytoin, Ciprofloxacin, Imatinib, Iron Preparations, Rifampin, Sucralfate: ↓ the serum level of Thyroid Products.
- 4. **Raloxifene**: ↓ the absorption of Levothyroxine.

*Management*: separating doses of raloxifene and thyroid product by **several** hours

- 懷孕期: 1.已有許多的孕婦及正值生育年齡的婦女服用過 ELTROXIN;到目前為止,在懷孕生產過程中並未發現任何明確形式的干擾。然而,母親甲狀腺機能低落或亢進,可能對胎兒出生或健康有不利的影響。 分泌到乳汁的甲狀腺素 (thyroxine)濃度很低,但足以干擾新生兒甲狀腺機能不足症的篩檢。
  - 2. Levothyroxine has not been shown to increase the risk of congenital abnormalities or miscarriage.
  - 3. Levothyroxine is also recommended in some cases of subclinical hypothyroidism during pregnancy, and overt hypothyroidism in females with postpartum thyroiditis (ACOG 148 2015; ATA [Alexander 2017]; ES [De Groot 2012]).
- 授 乳 期: 1.少量甲狀腺素會排於母乳中,並可能足以干擾對新生兒甲狀腺官能不足症之 篩檢。
  - 2. Levothyroxine was not found to cause adverse events to the infant or mother during breastfeeding (Ito 1993).
  - 3. The World Health Organization considers levothyroxine to be compatible with breastfeeding (WHO 2002).