Contains Nonbinding Recommendations

Guidance on Liothyronine Sodium

This guidance represents the Food and Drug Administration's (FDA's) current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. You can use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, contact the Office of Generic Drugs.

Active ingredient: Liothyronine Sodium

Form/Route: Tablets/Oral

Recommended studies: 1 study

1. Type of study: Fasting
   Design: Single-dose, two-way crossover *in-vivo*
   Dose and Strength: 100 mcg (2 x 50 mcg)
   Subjects: Normal healthy males and females, general population
   Additional comments: Baseline levels of liothyronine should be measured at 3 pre-dose time points (-30 min, -15 min, 0 min). The mean of the three pre-dose samples should be subtracted from each measured post-dose concentration.

Analytes to measure (in appropriate biological fluid): Total (free+bound) liothyronine in plasma.

Bioequivalence based on (90% CI): Total (free +bound) liothyronine in plasma after baseline correction.

Waiver request of in-vivo testing: 25 mcg and 5 mcg based on (i) acceptable bioequivalence studies on the 50 mcg strength, (ii) proportional similarity of the formulations across all strengths, and (iii) acceptable in vitro dissolution testing of all strengths.

Dissolution test method and sampling times:

Please conduct comparative dissolution testing on 12 dosage units of all strengths of the test and reference products using the following USP method.