

## Guidance on Torsemide

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:** Torsemide

**Form/Route:** Tablets/Oral

**Recommended studies:** 2 studies

1. Type of study: Fasting  
Design: Single-dose, two-treatment, two-period crossover *in-vivo*  
Strength: 20 mg  
Subjects: Normal healthy males and females, general population  
Additional Comments: Due to safety concerns associated with administering Torsemide Tablets, 100 mg, to healthy subjects, *in-vivo* bioequivalence studies should be conducted on the 20 mg strength.

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2. Type of study: Fed  
Design: Single-dose, two-treatment, two-period crossover *in-vivo*  
Strength: 20 mg  
Subjects: Normal healthy males and females, general population  
Additional comments: Please see comment above.

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**Analytes to measure (in appropriate biological fluid):** Torsemide in plasma.

**Bioequivalence based on (90% CI):** Torsemide

**Waiver request of in-vivo testing:** 5 mg, 10 mg, and 100 mg, based on (i) acceptable bioequivalence studies on the 20 mg 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 note that a **Dissolution Methods Database** is available to the public at the OGD website at <http://www.fda.gov/cder/ogd/index.htm>. Please find the dissolution information for this product at this website. Please conduct comparative dissolution testing on 12 dosage units each of all strengths of the test and reference products. Specifications will be determined upon review of the application.