## Contains Nonbinding Recommendations

## **Guidance on Atenolol and Chlorthalidone**

This guidance represents the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic. It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations. To discuss an alternative approach, contact the Office of Generic Drugs.

**Active Ingredient:** Atenolol and Chlorthalidone

**Dosage Form; Route:** Tablet; oral

**Recommended Studies:** Two studies

1. Type of study: Fasting

Design: Single-dose, two-way crossover in vivo

Strength: 100 mg; 25 mg

Subject: Healthy males and nonpregnant females, general population

Additional Comments: None

2. Type of study: Fed

Design: Single-dose, two-way crossover in vivo

Strength: 100 mg; 25 mg

Subjects: Healthy males and nonpregnant females, general population

Additional Comments: None

**Analytes to measure (in appropriate biological fluid):** Atenolol in plasma and chlorthalidone in whole blood.

Bioequivalence based on (90% CI): Atenolol and chlorthalidone

Waiver request of in-vivo testing: 50 mg; 25 mg, based on (i) acceptable bioequivalence studies on the 100 mg; 25 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:** The dissolution information for this drug product can be found on the FDA-Recommended Dissolution Methods web site, available to the public at the following location: <a href="http://www.accessdata.fda.gov/scripts/cder/dissolution/">http://www.accessdata.fda.gov/scripts/cder/dissolution/</a>. 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 abbreviated new drug application (ANDA).