Contains Nonbinding Recommendations

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Draft Guidance on Hydrochlorothiazide; Metoprolol Tartrate

December 2025

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Active Ingredients: Hydrochlorothiazide; Metoprolol tartrate

Dosage Form: Tablet

Route: Oral

Strengths: 25 mg; 50 mg, 25 mg; 100 mg, and 50 mg; 100 mg

Recommended Study: One in vivo bioequivalence study with pharmacokinetic endpoints

1. Type of study: Fed
   Design: Single-dose, two-treatment, two-period, crossover in vivo
   Strength: 50 mg; 100 mg
   Subjects: Healthy males and non-pregnant, non-lactating females
   Additional comments: None

Analytes to measure: Hydrochlorothiazide and metoprolol in plasma

Bioequivalence based on (90% CI): Hydrochlorothiazide and metoprolol

Waiver request of in vivo testing: 25 mg; 50 mg and 25 mg; 100 mg strengths based on (i) an acceptable bioequivalence study on the 50 mg; 100 mg strength, (ii) acceptable in vitro dissolution testing of all strengths, and (iii) proportional similarity of the formulations across all strengths

Dissolution test method and sampling times: The dissolution information for this drug product can be found in the FDA's Dissolution Methods database, http://www.accessdata.fda.gov/scripts/cder/dissolution/. Conduct comparative dissolution testing on 12 dosage units for each of the test product and reference listed drug (RLD).[1] Specifications will be determined upon review of the abbreviated new drug application.

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[1] If the RLD is not available, refer to the most recent version of the guidance for industry *Referencing Approved Drug Products in ANDA Submissions.*