Draft Guidance on Hydrochlorothiazide; Lisinopril

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic.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: Hydrochlorothiazide; Lisinopril

Form/Route: Tablet/Oral

Recommended studies: 3 studies

1. Type of study: Fasting

Design: Single-dose, two-treatment, two-period crossover in-vivo

Strength: 25 mg/20 mg

Subjects: Normal healthy males and females, general population

Additional Comments: Female subjects enrolled in the BE studies should not be pregnant, and if

applicable, should practice abstention or contraception during the study.

2. Type of study: Fed

Design: Single-dose, two-treatment, two-period crossover in-vivo

Strength: 25 mg/20 mg

Subjects: Normal healthy males and females, general population

Additional comments: Please see comment above.

3. Type of study: Fasting

Design: Single-dose, two-treatment, two-period crossover in-vivo

Strength: 12.5 mg/20 mg

Subjects: Normal healthy males and females, general population

Additional comments: Please see comment above.

Analytes to measure: Hydrochlorothiazide and Lisinopril in plasma.

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

Waiver request of in-vivo testing: 12.5/10 mg and 12.5 mg/20 mg based on (i) acceptable bioequivalence studies on the 25 mg/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.