Contains Nonbinding Recommendations

Guidance on Glipizide; Metformin Hydrochloride

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: Glipizide; Metformin Hydrochloride

Form/Route: Tablet/Oral

Recommended studies: 2 studies

1. Type of study: Fasting
   Design: Single-dose, two-treatment, two-period crossover *in-vivo*
   Strength: 5 mg/500 mg
   Subjects: Normal healthy males and females, general population
   Additional Comments: Since the drug product causes hypoglycemia, it is recommended that subjects receive 60 mL of 20 percent glucose solution in water after each dose and every 15 minutes for 4 hours during fasting and fed bioequivalence studies.

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2. Type of study: Fed
   Design: Single-dose, two-treatment, two-period crossover *in-vivo*
   Strength: 5 mg/500 mg
   Subjects: Normal healthy males and females, general population
   Additional comments: Please see comment above.

Analytes to measure: Glipizide and metformin in plasma.

Bioequivalence based on (90% CI): Glipizide and metformin

Waiver request of in-vivo testing: 2.5 mg/250 mg and 2.5 mg/500 mg based on (i) acceptable bioequivalence studies on the 5 mg/500 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.