

Draft Guidance on Canagliflozin; Metformin Hydrochloride

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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: Canagliflozin; Metformin hydrochloride

Dosage Form; Route: Tablet; oral

Recommended Studies: Two studies

1. Type of study: Fasting
Design: Single-dose, two-treatment, two-period crossover in vivo
Strength: 150 mg; 1GM
Subjects: Normal, healthy males and nonpregnant females, general population
Additional comments:
 - 1) Because of the potential for serious adverse reactions in nursing infants from this drug product, FDA recommends excluding lactating women from the study
 - 2) To avoid hypoglycemic episodes, the drug products should be administered with 240 mL of a 20% glucose solution in water, followed by 60 mL of the glucose solution administered every 15 minutes for up to 4 hours after dosing

2. Type of study: Fed
Design: Single-dose, two-treatment, two-period crossover in vivo
Strength: 150 mg; 1GM
Subjects: Normal, healthy males and nonpregnant females, general population
Additional comments: Same as above

Analytes to measure (in appropriate biological fluid): Canagliflozin and metformin in plasma

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

Waiver request of in vivo testing: 50 mg/500 mg, 50 mg/1GM, and 150 mg/500 mg based on (i) acceptable bioequivalence studies on the 150 mg/1GM strength, (ii) proportionally similar formulation 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: <http://www.accessdata.fda.gov/scripts/cder/dissolution/>. 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).