

Draft Guidance on Alogliptin Benzoate; Metformin Hydrochloride

October 2024

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Active Ingredients: Alogliptin benzoate; Metformin hydrochloride

Dosage Form: Tablet

Route: Oral

Strengths: EQ 12.5 mg Base; 500 mg, EQ 12.5 mg Base; 1 gm

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: EQ 12.5 mg Base; 1 gm
Subjects: Healthy males and non-pregnant, non-lactating females
Additional comments: Females of reproductive potential should use effective contraception during the study. The drug product 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. Monitor blood glucose concentrations and signs and symptoms of hypoglycemia during the study. Implement appropriate hypoglycemia management protocol.

Analytes to measure: Alogliptin and metformin in plasma

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

Waiver request of in vivo testing: EQ 12.5 mg Base; 500 mg strength based on (i) acceptable bioequivalence study on the EQ 12.5 mg Base; 1 gm strength, (ii) acceptable in vitro dissolution testing of both strengths, and (iii) proportional similarity of the formulations across both 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 both strengths of the test product and reference listed drug (RLD).¹ Specifications will be determined upon review of the abbreviated new drug application.

Document History: Recommended July 2014; Revised October 2024

Unique Agency Identifier: PSG_203414

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