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Draft Guidance on Amlodipine Besylate; Celecoxib

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This guidance, which interprets the Agency's regulations on bioequivalence at 21 CFR part 320, provides product-specific recommendations on, among other things, the design of bioequivalence studies to support abbreviated new drug applications (ANDAs) for the referenced drug product. FDA is publishing this guidance to further facilitate generic drug product availability and to assist the generic pharmaceutical industry with identifying the most appropriate methodology for developing drugs and generating evidence needed to support ANDA approval for generic versions of this product.

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This is a new draft product-specific guidance for industry on generic amlodipine besylate; celecoxib.

Active Ingredients: Amlodipine besylate; Celecoxib

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: EQ 10 mg Base; 200 mg
   Subjects: Males and non-pregnant, non-lactating females, general population
   Additional comments: Exclude geriatric subjects and subjects with a prior history of gastric ulcer and bleeding as well as allergic reaction from nonsteroidal anti-inflammatory drugs and sulfonamides. Ensure an adequate washout period between treatments in the crossover study due to the long elimination half-life of amlodipine. Alternatively, a parallel study design may be considered. Exclude CYP2C9 poor metabolizers (i.e., CYP2C9*3/*3).

2. Type of study: Fed
Design: Single-dose, two- treatment, two-period crossover in vivo
Strength: EQ 10 mg Base; 200 mg
Subjects: Males and non-pregnant, non-lactating females, general population
Additional comments: See comments above.

Analytes to measure: Amlodipine and celecoxib in plasma

Bioequivalence based on (90% CI): Amlodipine and celecoxib

Waiver request of in vivo testing: EQ 2.5 mg Base; 200 mg and EQ 5 mg Base; 200 mg based on (i) acceptable bioequivalence studies on the EQ 10 mg Base; 200 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: 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 all strengths of the test and reference products. Specifications will be determined upon evaluation of the abbreviated new drug application.

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