*Contains Nonbinding Recommendations*

**Draft Guidance on Isosorbide Dinitrate**

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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:** Isosorbide dinitrate

**Dosage Form; Route:** Tablet; oral

**Recommended studies:** Two studies

1. Type of study: Fasting
   Design: Single-dose, two-way crossover *in-vivo*
   Strength: 40 mg
   Subjects: Healthy males and non-pregnant, non-lactating females
   Additional Comments: None

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2. Type of study: Fed
   Design: Single-dose, two-way crossover *in-vivo*
   Strength: 40 mg
   Subjects: Healthy males and non-pregnant, non-lactating females
   Additional comments: None

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**Analytes to measure (in appropriate biological fluid):** Isosorbide Dinitrate, Isosorbide-5-mononitrate and Isosorbide-2-mononitrate in plasma

Submit data on isosorbide dinitrate's active metabolites (isosorbide-5-mononitrate and isosorbide-2-mononitrate) as supportive evidence of comparable therapeutic outcome. For the metabolite, the following data should be submitted: individual and mean concentrations, individual and mean pharmacokinetic parameters, and geometric means and ratios of means for AUC and Cmax.

**Bioequivalence based on (90% CI)**: Isosorbide Dinitrate

**Waiver request of in-vivo testing:** 5 mg based on (i) acceptable bioequivalence studies on the 40 mg strength, (ii) proportional similarity 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 website 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).