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Draft Guidance on Ethinyl Estradiol; Norethindrone Acetate

October 2024

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Active Ingredients: Ethinyl estradiol; Norethindrone acetate

Dosage Form: Tablet

Route: Oral

Strengths: 0.0025 mg; 0.5 mg, 0.005 mg; 1 mg

Recommended Study: One in vivo bioequivalence study with pharmacokinetic endpoints

1. Type of study: Fasting
   Design: Single-dose, two-treatment, two-period crossover in vivo
   Strength: 0.005 mg; 1 mg
   Subjects: Healthy non-pregnant, non-lactating females
   Additional comments: None

Analytes to measure: Ethinyl estradiol and norethindrone in plasma

Bioequivalence based on (90% CI): Ethinyl estradiol and norethindrone

Waiver request of in vivo testing: 0.0025 mg; 0.5 mg strength based on (i) acceptable bioequivalence study on the 0.005 mg; 1 mg strength, (ii) acceptable in vitro dissolution testing of both strengths, and (iii) proportional similarity of the formulations between 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.

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[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.*