

Contains Nonbinding Recommendations

Draft – Not for Implementation

Draft Guidance on Ethinyl Estradiol; Norethindrone Acetate

October 2024

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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

In general, FDA's guidance documents do not establish legally enforceable responsibilities. Instead, guidances describe the Agency's current thinking on a topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word *should* in Agency guidances means that something is suggested or recommended, but not required.

Active Ingredients: Ethinyl estradiol; Norethindrone acetate

Dosage Form: Tablet, chewable

Route: Oral

Strengths: 0.01 mg; 1 mg, 0.01 mg; N/A, N/A; N/A

Recommended Studies: Two in vivo bioequivalence studies with pharmacokinetic endpoints

1. Type of study: Fasting
Design: Single-dose, two-treatment, two-period crossover in vivo
Strength: 0.01 mg; 1 mg
Subjects: Healthy non-pregnant, non-lactating females
Additional comments: The tablet should be chewed, then swallowed with water.
2. Type of study: Fasting
Design: Single-dose, two-treatment, two-period crossover in vivo
Strength: 0.01mg Ethinyl estradiol
Subjects: Healthy non-pregnant, non-lactating females
Additional comments: See comment above.

Analytes to measure: Ethinyl Estradiol and norethindrone in plasma

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

Waiver request of in vivo testing: Not applicable

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 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*.