

Draft Guidance on Ethinyl Estradiol and Levonorgestrel

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. You can use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, contact the Office of Generic Drugs.

Active ingredient: Ethinyl Estradiol and Levonorgestrel

Form/Route: Tablets/Oral

Recommended studies: 2 studies

1. Type of study: Fasting
Design: Single-dose, two-treatment, two-period crossover *in-vivo*
Strength: 0.03 mg/0.15 mg tablet of ethinyl estradiol and levonorgestrel
Subjects: Normal healthy males and females, general population.
Additional Comments:

2. Type of study: Fasting
Design: Single-dose, two-treatment, two-period crossover *in-vivo*
Strength: 0.01 mg tablet of ethinyl estradiol
Subjects: Normal healthy males and females, general population.
Additional Comments:

Analytes to measure (in appropriate biological fluid): Ethinyl estradiol and levonorgestrel in plasma for the combination tablets. Only ethinyl estradiol for the single component tablet.

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

Waiver request of in-vivo testing:

Bioequivalence studies conducted on Seasonique[®] (ethinyl estradiol and levonorgestrel) Tablets, 0.03 mg/0.15 mg, may be referenced to support a request for a waiver of evidence of *in vivo* bioequivalence for Seasonale[®] (ethinyl estradiol and levonorgestrel) Tablets, 0.03 mg/0.15 mg. Please submit separate applications for each RLD.

Dissolution test method and sampling times:

Please note that a **Dissolution Methods Database** is available to the public at the OGD website at <http://www.fda.gov/cder/ogd/index.htm>. Please find the dissolution information for this product at this website. Please 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 application.