*Contains Nonbinding Recommendations*

**Draft Guidance on Carbidopa; Entacapone; Levodopa**

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic.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:** Carbidopa; Entacapone; Levodopa

**Form/Route:** Tablets/Oral

**Recommended studies:** 2 studies

1. Type of study: Fasting
   Design: Single-dose, two-way crossover *in-vivo*
   Strength: (37.5 mg; 200 mg; 150 mg) Carbidopa; Entacapone; Levodopa
   Subjects: Normal healthy males and females, general population. Females should not be pregnant, and if applicable, should practice abstention or contraception during the study.
   Additional Comments:

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2. Type of study: Fasting
   Design: Single-dose, two-way crossover *in-vivo*
   Strength: (12.5 mg; 200 mg; 50 mg) Carbidopa; Entacapone; Levodopa
   Subjects: Normal healthy males and females, general population. Females should not be pregnant, and if applicable, should practice abstention or contraception during the study.
   Additional Comments:

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**Analytes to measure (in appropriate biological fluid):** Carbidopa, Entacapone and Levodopa in plasma

**Bioequivalence based on (90% CI)**: Carbidopa, Entacapone and Levodopa

**Waiver request of in-vivo testing:** (25 mg; 200 mg; 100 mg) Carbidopa, Entacapone and Levodopa tablets, based on (i) acceptable bioequivalence study on the 37.5 mg; 200 mg; 150 mg tablet, (ii) formulation proportionality across all strengths, and (iii) acceptable in vitro dissolution testing of all strengths.

**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.