Draft Guidance on Bupropion Hydrochloride

Contains Nonbinding Recommendations

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic.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

<table>
<thead>
<tr>
<th>Active Ingredient:</th>
<th>Bupropion Hydrochloride</th>
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</thead>
<tbody>
<tr>
<td>Form/Route:</td>
<td>Tablet/Oral</td>
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<tr>
<td>Recommended Studies:</td>
<td>2 studies</td>
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</tbody>
</table>

1. Type of study: Fasting
   - Design: Single-dose, two-way crossover in-vivo
   - Strength: 100 mg
   - Subjects: Healthy males and nonpregnant females, general population.

2. Type of study: Fed
   - Design: Single-dose, two-way crossover in-vivo
   - Strength: 100 mg
   - Subjects: Healthy males and nonpregnant females, general population.
   - Additional Comments: Please refer to the Amantadine Hydrochloride Tablet Draft Guidance for additional information regarding fed studies.

Analytes to measure (in appropriate biological fluid): Bupropion and its active metabolites, hydroxybupropion, threohydrobupropion and erythrohydrobupropion, in plasma.

Please submit the metabolite data as supportive evidence of comparable therapeutic outcome. For the metabolites, 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): Bupropion

Waiver request of in-vivo testing: Bupropion Hydrochloride Tablet, 75 mg based on (i) acceptable bioequivalence studies on the 100 mg strength, (ii) acceptable in-vitro dissolution testing of all strengths, and (iii) proportional similarity of the formulations across all strengths. Please refer to the Mirtazapine Tablet Draft Guidance for additional information regarding waivers of in-vivo testing.

Recommended Feb 2011; Revised Mar 2013
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.accessdata.fda.gov/scripts/cder/dissolution/. 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.