Contains Nonbinding Recommendations

Draft Guidance on Loratadine/Pseudoephedrine Sulfate

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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

Active Ingredient: Loratadine; Pseudoephedrine sulfate

Dosage Form; Route: Extended release tablet; Oral

Recommended Studies: Two studies

1. Type of study: Fasting
   Design: Single-dose, two-treatment, two-period, crossover in vivo
   Strength: 10 mg/240 mg
   Subjects: Males and non-pregnant, non-lactating females, general population
   Additional comments: None

---

2. Type of study: Fed
   Design: Single-dose, two-treatment, two-period, crossover in vivo
   Strength: 10 mg/240 mg
   Subjects: Males and non-pregnant, non-lactating females, general population
   Additional comments: None

Analytes to measure (in appropriate biological fluid): Loratadine and its active metabolite, descarboethoxyloratadine, and pseudoephedrine in plasma

Bioequivalence based on (90% CI): Loratadine and pseudoephedrine metabolite data should be submitted as supportive evidence of comparable therapeutic outcome. These data should include individual and mean concentrations, individual and mean pharmacokinetic parameters, and geometric means and ratios of means for AUC and Cmax.

Additional strengths: Not applicable

Dissolution test method and sampling times: The dissolution information for this drug product can be found on the FDA-Recommended Dissolution Methods web site, available to the public at the following location: http://www.accessdata.fda.gov/scripts/cder/dissolution/. 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 abbreviated new drug application (ANDA).

In addition to the method above, for modified release products, dissolution profiles on 12 dosage units of test and reference products should be generated in at least three dissolution media (pH 1.2, 4.5, 6.8 buffer) should be submitted in the application. Agitation speeds may have to be increased if appropriate. It is acceptable to add a small amount of surfactant, if necessary. Include early sampling times of 1, 2, and 4 hours and continue every 2 hours until at least 80% of the drug is released, to provide assurance against premature release of drug (dose dumping) from the formulation.