Contains Nonbinding Recommendations

Draft Guidance on Potassium Chloride

This draft guidance, once finalized, will represent the Food and Drug Administration’s (FDA’s) current thinking on this topic.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

Dosage Form; Route: Extended-release tablet; oral

Recommended Studies: One study

Type of study: Fasting
Design: Single-dose, two-way crossover in vivo
Strength: 4 x 20 mEq tablets (80 mEq dose)
Subjects: Normal healthy males and nonpregnant females, general population
Additional comments: Please see specific recommendations regarding the fasting study in the draft guidance on potassium chloride extended-release capsules

Analyte to measure: Potassium in urine

Bioequivalence based on (90% CI): Baseline-adjusted potassium

Waiver request of in vivo testing: 10 mEq based on (i) acceptable bioequivalence (BE) studies on the 20 mEq strength, (ii) acceptable in vitro dissolution testing of both strengths, and (iii) proportional similarity of the formulations of both strengths

Dissolution test method and sampling times: The dissolution information for this drug product can be found on the FDA-Recommended Dissolution Methods website 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 each of test and reference products generated using U.S Pharmacopoeia (USP) Apparatus I at 100 rpm and/or Apparatus II at 50 rpm in at least three dissolution media (pH 1.2, 4.5, and 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.

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