Contains Nonbinding Recommendations

Draft Guidance on Calcium Acetate

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic.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

Form/Route: Tablets/Oral

Recommended studies: 1 study

Type of study: In vitro Phosphate Binding
Design: The study should be conducted by incubating test (T) and reference (R) products with at least eight different phosphate concentrations for each product. The highest phosphate concentration should be selected to achieve complete phosphate precipitation (i.e., maximum phosphate binding) capacity and a meaningful phosphate binding profile. The mean phosphate binding profile for the test and reference products should be determined, and the similarity factor (f2) metric may be used to compare the mean profiles. The mean of the maximum phosphate binding for test and reference products (T/R binding ratio) should be compared. The binding study should be replicated for 12 units each of the T and R products.
Strength: Eq to 169 mg calcium
Subjects: Not Applicable
Additional Comments: You are encourage to submit a protocol prior to initiating the study.

Analytes to measure: Free calcium and free phosphate in the supernatant should be measured using a validated analytical method.

Bioequivalence based on (90% CI): T/R binding ratio within ± 10% (0.9 to 1.1)

Waiver request of in-vivo testing: Not Applicable

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.

In addition to the method above, please conduct dissolution profiles on 12 dosage units each of the test and reference products using USP Apparatus II at 50 rpm in the following dissolution media: 0.1 N HCl, pH 4.5 Acetate Buffer and pH 6.8 Borate Buffer.