Draft Guidance on Baloxavir Marboxil

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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

Dosage Form; Route: Tablet; oral

Recommended Studies: Two studies

1. Type of study: Fasting
   Design: Single-dose, two-treatment, two-period crossover in vivo
   Strength: 40 mg
   Subjects: Males and non-pregnant, non-lactating females, general population
   Additional comments: Ensure adequate washout periods between treatments in the crossover studies due to baloxavir’s long terminal elimination half-life. A parallel study design may be used due to the drug’s long half-life. For long half-life drug products with low intra-subject variability in distribution and clearance, an area under the plasma concentration time curve (AUC) truncated to 72 hours may be used in place of AUC$_{0-1}$ or AUC$_{0-\infty}$. For either a crossover or parallel study, sample collection time should be adequate to ensure completion of gastrointestinal transit of the drug product and absorption of the drug substance. Collect sufficient blood samples in the bioequivalence studies to adequately characterize the peak concentration and time to reach peak concentration.

2. Type of study: Fed
   Design: Single-dose, two-treatment, two-period crossover in vivo
   Strength: 40 mg
   Subjects: Males and non-pregnant, non-lactating females, general population
   Additional comments: See comments above

Analyte to measure (in appropriate biological fluid): Baloxavir in plasma

Bioequivalence based on (90% CI): Baloxavir

Waiver request of in vivo testing: 20 mg based on (i) acceptable bioequivalence studies on the 40 mg strength, (ii) proportionally similar formulation across all strengths, and (iii) acceptable in vitro dissolution testing of all strengths
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.