

Contains Nonbinding Recommendations

Draft Guidance on Morphine Sulfate

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic.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

Form/Route: Tablet/Oral

Recommended studies: 2 studies

1. Type of study: Fasting
Design: Single-dose, two-way crossover *in-vivo*
Strength: 30 mg
Subjects: Healthy males and non-pregnant females, general population.
Additional Comments: Please use a narcotic antagonist such as naltrexone. Please consult a physician who is an expert in the administration of opioids for an appropriate dose of narcotic antagonist.

2. Type of study: Fed
Design: Single-dose, two-way crossover *in-vivo*
Strength: 30 mg
Subjects: Healthy males and non-pregnant females, general population.
Additional Comments: Please see comments above.

Analytes to measure (in appropriate biological fluid): Morphine and Morphine-6-Glucuronide in plasma.

Bioequivalence based on (90% CI): Morphine

Waiver request of *in-vivo* testing: 15 mg strength based on (i) acceptable bioequivalence studies on the 30 mg strength, (ii) acceptable in vitro dissolution testing for all strengths, and (iii) proportional similarity in the formulations across all strengths.

Dissolution test method and sampling times:

Please note that **Dissolution Method 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.