

Guidance on Hydroxychloroquine Sulfate

This guidance represents 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: Hydroxychloroquine sulfate

Dosage Form; Route: Tablet; oral

Recommended Studies: Two options: Biopharmaceutics Classification System (BCS)-based biowaiver or in vivo study

I. BCS Class 3-based biowaiver option:

A waiver request of in vivo testing for this product may be considered provided that the appropriate documentation regarding high solubility, very rapid dissolution,¹ and the test product formulation is qualitatively the same and quantitatively very similar as detailed in the Guidance for Industry: *Waiver of In Vivo Bioavailability and Bioequivalence for Immediate-Release Solid Oral Dosage Forms Based on the Biopharmaceutics Classification System* is submitted in the application. A decision regarding the acceptability of the waiver request will be made upon assessing the data submitted in the application.

II. In vivo bioequivalence study option:

1. Type of study: Fasting
Design: Single-dose, two- treatment, randomized, parallel in vivo
Strength: 200 mg
Subjects: Males and non-pregnant, non-lactating females, general population
Additional comments: None

2. Type of study: Fed
Design: Single-dose, two- treatment, randomized, parallel in vivo
Strength: 200 mg
Subjects: Males and non-pregnant, non-lactating females, general population
Additional comments: None

Analyte to measure (in appropriate biological fluid): Hydroxychloroquine in whole blood

¹Refer to Guidance for Industry: *Dissolution Testing and Acceptance Criteria for Immediate-Release Solid Oral Dosage Form Drug Products Containing High Solubility Drug Substances*. Applicants may submit comparative dissolution data between test and reference products and proposed test product formulations to FDA via a controlled correspondence to obtain feedback on the applicability of a BCS-based biowaiver request. Because the Reference Listed Drug labeling indicates that the fraction absorbed is approximately 74%, potential applicants may propose alternative dissolution comparisons to the very rapid dissolution recommendation in FDA's guidance.

Bioequivalence based on (90% CI): Hydroxychloroquine

Waiver request of in vivo testing: 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 for each of the test and reference products. Specifications will be determined upon review of the abbreviated new drug application.