

Guidance on Quinapril Hydrochloride

This guidance represents 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: Quinapril Hydrochloride

Form/Route: Tablets/Oral

Recommended studies: 2 studies

1. Type of study: Fasting

Design: Single-dose, two-way, crossover *in-vivo*

Strength: 40 mg

Subjects: Normal healthy males and females, general population

Additional Comments: Pregnant women should be excluded from participation in bioequivalence studies with ACE inhibitors.

2. Type of study: Fed

Design: Single-dose, two-way, crossover *in-vivo*

Strength: 40 mg

Subjects: Normal healthy males and females, general population

Additional comments: Pregnant women should be excluded from participation in bioequivalence studies with ACE inhibitors.

Analytes to measure: Quinapril and the metabolite, Quinaprilat in plasma.

Bioequivalence based on (90% CI): Quinapril

Please submit the metabolite data as supportive evidence of comparable therapeutic outcome. For the metabolite, the following data should be submitted: individual and mean concentrations, individual and mean pharmacokinetic parameters, and geometric means and ratios of means for AUC and Cmax.

Waiver request of *in-vivo* testing: 5 mg, 10 mg, and 20 mg based on (i) acceptable bioequivalence studies on the 40 mg strength, (ii) proportionally similar across all strengths, and (iii) acceptable *in vitro* dissolution testing of all strengths.

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.