

*Contains Nonbinding Recommendations*  
*Draft – Not for Implementation*  
**Draft Guidance on Osimertinib Mesylate**  
**February 2022**

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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

This guidance, which interprets the Agency’s regulations on bioequivalence at 21 CFR part 320, provides product-specific recommendations on, among other things, the design of bioequivalence studies to support abbreviated new drug applications (ANDAs) for the referenced drug product. FDA is publishing this guidance to further facilitate generic drug product availability and to assist the generic pharmaceutical industry with identifying the most appropriate methodology for developing drugs and generating evidence needed to support ANDA approval for generic versions of this product.

The contents of this document do not have the force and effect of law and are not meant to bind the public in any way, unless specifically incorporated into a contract. This document is intended only to provide clarity to the public regarding existing requirements under the law. FDA guidance documents, including this guidance, should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word should in FDA guidances means that something is suggested or recommended, but not required.

In October 2017, FDA issued a draft product-specific guidance for industry on generic osimertinib mesylate. We are now issuing revised draft guidance for industry that replaces the previously issued guidance.

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**Active Ingredient:** Osimertinib mesylate

**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: EQ 80 mg Base  
Subjects: Healthy males and healthy females not of reproductive potential  
Additional comments: Ensure an adequate washout period between treatments in the crossover study due to the long elimination half-life of osimertinib. Alternatively, a parallel study design may be considered. Instruct males with female partners of reproductive potential to use effective contraception during the study and for 4 months after the last dose.

2. Type of study: Fed  
Design: Single-dose, two-treatment, two-period crossover in vivo  
Strength: EQ 80 mg Base  
Subjects: Healthy males and healthy females not of reproductive potential  
Additional comments: See comments above.

**Analyte to measure:** Osimertinib in plasma

**Bioequivalence based on (90% CI):** Osimertinib

**Waiver request of in vivo testing:** EQ 40 mg Base strength based on (i) acceptable bioequivalence studies on the EQ 80 mg Base strength, (ii) acceptable in vitro dissolution testing of both strengths, and (iii) proportional similarity in the formulations between both strengths

**Dissolution test method and sampling times:** The dissolution information for this drug product can be found in the FDA's Dissolution Methods database, <http://www.accessdata.fda.gov/scripts/cder/dissolution/>. Conduct comparative dissolution testing on 12 dosage units for each of both strengths of the test and reference products. Specifications will be determined upon evaluation of the abbreviated new drug application.

**Product-specific testing conditions for in vitro feeding tube studies:** The approved labeling for the reference product states that the product may be administered via a nasogastric (NG) tube. Conduct the in vitro feeding tube studies including comparative recovery testing and sedimentation volume and redispersibility testing. For general procedures of in vitro feeding tube studies, refer to the most recent version of the FDA guidance for industry on *Oral Drug Products Administered Via Enteral Feeding Tube: In Vitro Testing and Labeling Recommendations*.<sup>a</sup>

Testing tube: NG tube (8 French)

Testing strength: EQ 80 mg Base

Dispersion medium: EQ 80 mg Base strength in 50 mL water with pH >7

Incubation times: 0 and 15 minutes

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**Revision History:** Recommended October 2017; Revised February 2022

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<sup>a</sup> For the most recent version of a guidance, check the FDA guidance web page at <https://www.fda.gov/regulatory-information/search-fda-guidance-documents>.