This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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 September 2020, FDA issued a draft product-specific guidance for industry on generic cannabidiol. We are now issuing revised draft guidance for industry that replaces the previously issued guidance.

**Active Ingredient:** Cannabidiol

**Dosage Form; Route:** Solution; oral

**Strength:** 100 mg/mL

**Recommended Studies:** Request for waiver of in vivo bioequivalence study

**Waiver option:**
To qualify for a waiver of the in vivo bioequivalence study requirement under 21 CFR 320.22(b)(3), generic versions of cannabidiol oral solution (100 mg/mL) must contain the same active drug ingredient in the same concentration and dosage form as the reference listed drug (RLD) and contain no inactive ingredient or other change in formulation from the RLD that may significantly affect systemic availability.
**Additional comments:** Tetrahydrocannabinol is controlled in the drug substance with a limit of no more than 0.10% w/w. If the active pharmaceutical ingredient is from a botanical raw material (BRM) source, the following criteria are recommended:

1. **The same plant species:** The BRM (cannabis) used to manufacture the proposed cannabidiol should be collected from the same plant species, *Cannabis sativa* L. The species *Cannabis sativa* L. should be correctly identified and authenticated using appropriate analytical methods (e.g., macroscopic/microscopic and/or DNA bar-coding methods). Due to the many cultivars within this species, identification and authentication of plant species should be conducted at the cultivar(s) level if the potential cultivar(s) will be used as a natural source of the BRM.

2. **BRM assessment:** The plant parts (e.g., leaves and flowers) used as the BRM should be defined. The BRM should be collected following established good agricultural and collection practices procedures to minimize variations in BRM and eventually ensure the batch-to-batch consistency of the drug substance. Refer to Guidance for Industry: *Botanical Drug Development* for the Agency’s current thinking on BRM quality control and refer to Guidance for Industry: *Cannabis and Cannabis-Derived Compounds: Quality Considerations for Clinical Research* for additional information.

**Revision History:** Recommended September 2020; Revised March 2021

**Unique Agency Identifier:** PSG_210365