

Two dissolution profiles are considered similar when the f_2 value is ≥ 50 . To allow the use of mean data, the coefficient of variation should not be more than 20% at the earlier time points (e.g., 15 minutes), and should not be more than 10% at other time points. Only one measurement should be considered after 85% dissolution of both products. In addition, when both test and reference products dissolve 85% or more of the label amount of the drug in 15 minutes using all three dissolution media recommended above, the profile comparison with an f_2 test is unnecessary.

Biowaivers Based on BCS

This guidance is applicable for BA/BE waivers (biowaivers) based on BCS, for BCS class 1 and class 3 IR solid oral dosage forms.

For BCS class 1 drug products, the following should be demonstrated:

The drug substance is highly soluble

The drug substance is highly permeable

The drug product (test and reference) is rapidly dissolving, and

The product does not contain any excipients that will affect the rate or extent of absorption of the drug

For BCS class 3 drug products, the following should be demonstrated:

The drug substance is highly soluble

The drug product (test and reference) is very rapidly dissolving, and

The test product formulation is qualitatively the same and quantitatively very similar

Additional Considerations for Requesting a Biowaiver

When requesting a BCS-based biowaiver for in vivo BA/BE studies for IR solid oral dosage forms, sponsors/applicants should note that the following factors can affect their request or the documentation of their request.

Excipients

BCS class 1 drug products: Excipients can sometimes affect the rate and extent of drug absorption. In general, using excipients that are currently in FDA-approved IR solid oral dosage forms will not affect the rate or extent of absorption of a highly soluble and highly permeable drug substance that is formulated in a rapidly dissolving IR product. To support a biowaiver request, the quantity of excipients in the IR drug product should be consistent with the intended function (e.g., lubricant). When new excipients or atypically large amounts of commonly used excipients are included in an IR solid dosage form, additional information documenting the absence of an impact on BA of the drug may be requested by the Agency. Such information can