



REPUBLIC OF LEBANON
MINISTRY OF PUBLIC HEALTH

الجمهورية اللبنانية
وزارة الصحة العامة



Checklist for Bioequivalence Biowaiver Request



February 2022

Before submitting your request, please read well the criteria and requirements document related to BE biowaiver published on the MOPH website.

To submit your application for a BE biowaiver request, please make sure that you attach all the following required documents/information.

	Required Documents	Attachment #
1.	Letter (signed and dated) clearly explaining your request	
2.	Information related to test product: a. Name of test product b. Pharmaceutical form c. Dosage d. Fabricant and country of fabrication	
3.	Information related to reference product: a. Name of reference product b. Pharmaceutical form c. Dosage d. Fabricant and country of fabrication	
4.	Document showing that the drug is biowaived in other countries	
5.	BCS classification of the active ingredient Attach documents/references to prove BCS classification of the active ingredient (attach data supporting high Solubility and high permeability). <i>Note: Only applications for BCS class I are subjected to biowaiver.</i>	
6.	Composition of inactive ingredients: a. Attach a list of all excipients present in test and reference products. b. Provide a comparison between excipients (nature and amount) present in both test and reference products.	
7.	References showing that all inactive ingredients have no effect on the absorption of the active molecule.	
8.	Data on the <i>in vitro</i> dissolution profile of the test and reference immediate release “highest dose” oral drug product: a. Provide data obtained using 3 different media (pH 1.2, pH 4.5, pH 6.8) b. Technique used: Paddle rotating at 50 rpm OR basket rotating at 100 rpm c. Description of the chemical analytical method d. Sampling time: 10, 15, 20, 30, 45, and 60 minutes e. Number of samples: 12 within each pH condition f. Present data in a tabular and graphical form h. Calculate f1 and f2 values i. Test and reference products should show 85% dissolution within 15 minutes or faster.	
	Data on <u>solubility</u> of the test and reference immediate release “highest dose” oral drug product:	

<p>9.</p>	<p>a. Solubility testing in 250 ml water at pH 1-7.5 at 37 °C. b. A minimum of 3 determinations of solubility is required in each pH condition c. Description of the method for solubility testing d. Chemical analysis of active ingredients and degradation products should be presented e. Number of drug samples to be tested: 12 within each pH condition f. Condition for acceptance: solubility in 250 ml of water or less over a pH range of 1-7.5 at 37 °C</p>	
<p>10.</p>	<p>Data on <u>permeability</u> of active ingredient of the test and reference immediate release “highest dose” oral drug product:</p> <p>a. Choice and description of method used to test intestinal absorption: - Human studies with oral administration and intravenous administration as a reference. - Intestinal perfusion studies in humans. - <i>in vitro</i> permeability studies on excised human intestinal strips. - <i>in vivo</i> or <i>in vitro</i> intestinal permeability studies on experimental animals. - Permeability studies on monolayer cultured intestinal cells. b. Presentation of data on the test and reference product c. Number of drug samples to be tested: 12 d. Condition for acceptance: 90% of the active ingredient is absorbed OR 90% of the administered oral dose appears in the urine</p>	