Medicines Control Authority of Zimbabwe

Form: EVF 05

BIOPHARMACEUTICS CLASSIFICATION SYSTEM (BCS) BASED BIOWAIVER APPLICATION FORM

This application form is designed to facilitate information exchange between the Applicant and the MCAZ if the Applicant seeks for waiver of bioequivalence studies, based on the Biopharmaceutics Classification System (BCS).

The list of APIs eligible for a BCS-based biowaiver is in Appendix I of the “Guideline on waiver of in vivo bioequivalence requirements for immediate-release solid oral dosage forms”. It is, therefore, not necessary to provide data to support the BCS classification of the respective API(s) in the application i.e. data supporting the drug substance solubility or permeability class

General Instructions:

- Please review all the instructions thoroughly and carefully prior to completing the Application Form.
- Provide as much detailed and accurate information as possible.
- Please enter the data and information directly following the shaded areas.
- Please enclose the required documentation in full and state in the relevant sections of the Application Form the exact location (Annex number) of the appended documents. For example, in section 2.5 indicate in which Annex the Certificate of Analysis can be found.
- The appended electronic documents should be clearly identified with their file names, which should include the product name and Annex number.
- Before submitting the completed Application Form, ensure that you have provided all requested information and enclosed all requested documents.

The signed paper version of this Biowaiver Application Form together with Annexes (and their electronic copies in Microsoft Word) should be included to the bioequivalence part of the submitted dossier.
Administrative data

1. INN of active ingredient(s)  
   < Please enter information here >  

2. Dosage form and strength  
   < Please enter information here >  

3. Application number  
   < Please enter information here >  

4. Name and address of applicant  
   < Please enter information here >  

5. Name and address of manufacturer (s) of finished product  
   < Please enter information here >  

6. Name and address of the laboratory or Contract Research Organisation(s) where the BCS-based biowaiver dissolution studies were conducted.  
   < Please enter information here >  

I, the undersigned, certify, that the information provided in this application and the attached documents is correct and true  

Signed on behalf of  
<company>  

______________________ (Date)  

________________________________________ (Signature)  

________________________________________ (Name and title)
1. Test product

1.1 Tabulation of the composition of the formulation(s) proposed for marketing and those used for comparative dissolution studies

- Please state the location of the master formulae in the quality part of the submitted dossier.
- Tabulate the composition of each product strength using the table below.
- For solid oral dosage forms the table should contain all the ingredients in tablet core or contents of a capsule and the film coating/hard capsule, if any. The recommended format for presentation of the formulation or schedule of ingredients of the FPP in section 4.11 of the MCAZ “Guidelines on submission of documentation for registration of multi-source (generic) pharmaceutical products (FPPS)” should be used.
- Biowaiver batches should be at least of pilot scale (10% of production scale or 100,000 capsules or tablets whichever is greater) and manufacturing method should be the same as for production scale.

**Please note:** If the formulation proposed for marketing and those used for comparative dissolution studies are not identical, copies of this table should be filled in for each formulation with clear identification in which study the respective formulation was used.

<table>
<thead>
<tr>
<th>Composition of the batches used for comparative dissolution studies, primary stability and production FPP batches</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Batch number</td>
</tr>
<tr>
<td>Batch size</td>
</tr>
<tr>
<td>Date of manufacture</td>
</tr>
<tr>
<td>Ingredients (Approved name)</td>
</tr>
<tr>
<td>Mg</td>
</tr>
</tbody>
</table>

**Core tablet / capsule contents (Please delete / change which does not apply)**

- API 1
- API 2
- API 3
- Please add / delete as many rows as necessary
- Excipient 1
- Excipient 2
- Excipient 3
- Excipient 4
- Please add / delete as many rows as necessary

**Subtotal 1**

**Film coat / capsule shell (Please delete / change which does not apply)**

- Proprietary film-coating mixture*
- Please add / delete as many rows as necessary

**Subtotal 2**

**Grand total**

**Equivalence of compositions or justified differences**

* All components (……………..) of the proprietary mixture are described in the ……… Pharmacopoeia.
1.2 Potency (measured content) of test product as a percentage of label claim as per validated assay method
This information should be cross-referenced to the location of the Certificate of Analysis (CoA) in the submitted dossier.

<< Please enter information here >>
2. Comparator product

2.1. Comparator product
Please enclose a copy of product labeling (summary of product characteristics), as authorized in country of purchase, and translation into English, if appropriate.

2.2. Name and manufacturer of the comparator product and official address
< Please enter information here >

2.3. Qualitative (and quantitative, if available) information on the composition of the comparator product
Please tabulate the composition of the comparator product based on available information and state the source of this information.

<table>
<thead>
<tr>
<th>Composition of the comparator product used in dissolution studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch number</td>
</tr>
<tr>
<td>Expiry date</td>
</tr>
<tr>
<td>Comments, if any</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Unit dose (mg)</th>
<th>Unit dose (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.4. Purchase, shipment and storage of the comparator product
Please attach relevant copies of documents (e.g. receipts) proving the stated conditions.

<< Please enter information here >>

2.5. Potency (measured content) of the comparator product as a percentage of label claim, as measured by the same laboratory under the same conditions as the test product.
This information should be cross-referenced to the location of the Certificate of Analysis (CoA) in the submitted dossier.

<< Please enter information here >>
3. Comparison of test and comparator products

3.1. Formulation

3.1.1 Identify any excipients present in either product that are known to impact on *in vivo* absorption processes
A literature-based summary of the mechanism by which these effects are known to occur should be included and relevant full discussion enclosed, if applicable.

<< Please enter information here >>

3.1.2 Identify all qualitative (and quantitative, if available) differences between the compositions of the test and comparator products
The data obtained and methods used for the determination of the quantitative composition of the comparator product as required by the guidance documents should be summarized here for assessment.

<< Please enter information here >>

3.1.3 Provide a detailed comment on the impact of any differences between the compositions of the test and comparator products with respect to drug release and *in vivo* absorption

<< Please enter information here >>

3.2. Comparative *in vitro* dissolution
Information regarding the comparative dissolution studies should be included below to provide adequate evidence supporting the biowaiver request. Comparative dissolution data will be reviewed during the assessment of the Quality part of the dossier.
Please state the location of:
- the dissolution study protocol(s) in the dossier
- the dissolution study report(s) in the dossier
- the analytical method validation report in the dossier

<< Please enter information here >>
3.3. Summary of the dissolution conditions and method described in the study report(s)
Summary provided below should include the composition, temperature, volume, and method of de-aeration of the dissolution media, the type of apparatus employed, the agitation speed(s) employed, the number of units employed, the method of sample collection including sampling times, sample handling, and sample storage. Deviations from the sampling protocol should also be reported.

3.3.1. Dissolution media: Composition, temperature, volume, and method of de-aeration
<< Please enter information here >>

3.3.2. Type of apparatus and agitation speed(s) employed
<< Please enter information here >>

3.3.3. Number of units employed e.g. 6 / 12 etc
<< Please enter information here >>

3.3.4. Sample collection: method of collection, sampling times, sample handling and storage
<< Please enter information here >>

3.3.5. Deviations from sampling protocol
<< Please enter information here >>

3.4. Summarize the results of the dissolution study(s)
Please provide a tabulated summary of individual and mean results with %CV, graphic summary, and any calculations used to determine the similarity of profiles for each set of experimental conditions.

<< Please enter information here >>

3.5. Summarize conclusions taken from dissolution study(s)
Please provide a summary statement of the studies performed.
4. Quality assurance

4.1. Monitoring, Auditing, Inspections
Provide a list of all monitoring and auditing reports of the study, and of recent inspections of study sites by regulatory agencies. State locations in the submission of the respective reports for each of study sites e.g., analytical laboratory, laboratory where dissolution studies were performed.

<< Please enter information here >>