

National Agency for Food & Drug Administration & Control (NAFDAC)

Registration & Regulatory Affairs (R & R) Directorate

QUALITY INFORMATION SUMMARY (QIS)

<Dossier reference number: e.g. AB0001>

FOREWORD

The QIS template should be completed to provide a condensed summary of the key quality information for product dossiers (PDs) containing APIs of synthetic or semi-synthetic origin and their corresponding products that are filed for registration with the National Agency for Food and Drug Administration and Control (NAFDAC). This QIS template has been adopted from the World Health Organization Prequalification of Medicines Programme QIS template

The QIS serves as an official reference document during the course of GMP inspections, variation assessments and renewal assessments as performed by NAFDAC. The QIS is a condensed version of the Quality Overall Summary – Product Dossier (QOS-PD) and represents the final, agreed upon key information from the PD review (inter alia identification of the manufacturer(s), API/FPP specifications, stability conclusions and relevant commitments).

The QIS template is structured to permit the rapid assembly of the QIS by copying requisite information from the corresponding portions of the QOS-PD filed with the original PD. It is acknowledged that the numbering of the sections may not be entirely sequential. Those sections not considered necessary to be included in the QIS have been removed (e.g. 2.3.S.5 Reference Standards or Materials) and the remaining sections have retained their numbering to be consistent with the original PD.

For original PDs, the QIS should be provided in Word format at the time of PD submission. The QIS should be revised and submitted with the change history (see table at the end of the template) each time additional data is provided during the assessment process. If no revision is necessary due to no change in the information, a statement should be made to this effect in the covering letter. For variations, the QIS should be completed in its entirety (regardless of the proposed change), it should include information on all strengths, with any changes highlighted and it should be provided at the time of filing.

When completing the QIS template, this covering foreword should be deleted.

QUALITY INFORMATION SUMMARY (QIS)

INTRODUCTION

(a) Summary of product information:

| Non-proprietary name(s) of the | |
|---|-------------|
| finished pharmaceutical | |
| product(s) (FPP) | |
| Proprietary name(s) of the | |
| finished pharmaceutical | |
| product(s) (FPP) | |
| International non-proprietary | |
| name(s) of the active | |
| pharmaceutical ingredient(s) | |
| (API(s)), including form (salt, | |
| hydrate, polymorph) | |
| Applicant name and address | |
| Dosage form | |
| Reference Number(s) | |
| Strength(s) | |
| Route of administration | |
| Proposed indication(s) | |
| | |
| Primary contact person | Title: |
| responsible for this application ¹ | First name: |
| | I . |

¹ Please note that the contact listed in this form will be the primary contact for email and mail communication for this specific application.

| | Family Name: |
|--------------------------------|---------------------|
| Contact person's job title | |
| Contact pers | on's postal address |
| Unit | |
| Building/PO Box number | |
| Road/Street | |
| Plant/Zone | |
| Village/suburb | |
| Town/City | |
| District and Mandal | |
| Province/State | |
| Postal code | |
| Country | |
| Contact person's email address | |
| Contact person's phone number | |

(b) Administrative Summary:

| Applicant's date of preparation or revision of the QIS | |
|--|-------------------|
| Internal version and/or date of | (NAFDAC use only) |
| acceptance | |

Related dossiers (e.g. FPP(s) with the same API(s) submitted to the Prequalification Team: medicines (PQTm) by the applicant):

| Reference | Progualified | API, strength, | API manufacturer |
|-----------|--------------------|-------------------|------------------|
| number | Prequalified (Y/N) | dosage form (e.g. | |
| assigned | (1/14) | Abacavir (as | |

| | by | sulphate) 300 mg | (including address if |
|---|--------|------------------|-----------------------|
| | NAFDAC | tablets) | same supplier as |
| | | | current dossier) |
| ĺ | | | |
| | | | |

2.3. S DRUG SUBSTANCE (or ACTIVE PHARMACEUTICAL INGREDIENT (API)) (NAME, MANUFACTURER)

Indicate which option applies for the submission of API information: <check one only>

| Name | e of API: | |
|-------------|--|--|
| Name of API | | |
| manu | ıfacturer: | |
| | Confirmation of AP | I prequalification document |
| | Certificate of suital | bility to the European Pharmacopoeia (CEP) |
| 0 | Active pharmaceutical ingredient master file (APIMF) procedure: APIMF number assigned by NAFDAC (if known):; version number(s) including amendments (and/or date(s)) of the open part:; version number(s) including amendments (and/or date(s)) of the restricted part: | |
| | Full details in the F Document version | number/identifier of current module 3.2.S: |

2.3. S.2 Manufacture (name, manufacturer)

2.3. S.2.1 Manufacturer(s) (name, manufacturer)

(a) Name, address and responsibility (e.g. fabrication, packaging, labelling, testing, storage) of each manufacturer, including contractors and each proposed production site or facility involved in these activities:

| Name and address (including block(s)/unit(s)) | Responsibility | API-PQ number /APIMF/CEP number (if applicable) | Letter of access provided? |
|---|----------------|---|----------------------------|
| | | | |
| | | | |
| | | | |

2.3. S.2.3 Control of Materials (name, manufacturer) – for

API option 4 only (a) Name of starting material:

- (b) Name and manufacturing site address of starting material manufacturer(s):
- 2.3. S.4 Control of the API (name, manufacturer)
- 2.3. S.4.1 Specification (name, manufacturer)
 - (a) API specifications of the FPP manufacturer:

| Standard (e.g. Ph.Int., | | |
|-------------------------|----------------------|--|
| house) | | |
| Specification reference | e number and version | |
| Test | Acceptance criteria | Analytical procedure (Type/Source/Version) |
| Description | | |
| Identification | | |
| Impurities | | |

| Assay | |
|-------|--|
| etc. | |
| | |
| | |

2.3. S.6 Container Closure System (name, manufacturer)

- (a) Description of the container closure system(s) for the storage and shipment of the API:
- 2.3. S.7 Stability (name, manufacturer)
- 2.3. S.7.1 Stability Summary and Conclusions (name, manufacturer)
- (c) Proposed storage conditions and re-test period (or shelf-life, as appropriate):

| Container closure | Storage statement | Re-test period* |
|-------------------|-------------------|-----------------|
| system | | |
| | | |
| | | |

^{*} indicate if a shelf-life is proposed in lieu of a re-test period (e.g. in the case of labile APIs)

2.3. P DRUG PRODUCT (or FINISHED PHARMACEUTICAL PRODUCT (FPP))

2.3. P.1 Description and Composition of the FPP

- (a) **Description of the FPP (in signed specifications):**
- (b) **Composition of the FPP:**
 - (i) Composition, i.e. list of all components of the FPP and their amounts on a per unit basis and percentage basis (including individual components of mixtures prepared in-house (e.g. coatings) and overages, if any):

| Component and | Function | n Strength (label claim) | | | | | |
|---|-----------------|--------------------------|-----------|-----------|------------|-------------|-----------|
| quality standard | | | | | | | |
| (and grade, if | | Quant. | % | Quant. | % | Quantity | % |
| applicable) | | per | | per | | per unit | |
| | | unit or | | unit | | or per | |
| | | per mL | | or per | | mL | |
| | | | | mL | | | |
| <complete app<="" td="" with=""><td>propriate title</td><td>es e.g. Co</td><td>re tablet</td><td>(Layer 1,</td><td>Layer 2, e</td><td>etc. as app</td><td>licable),</td></complete> | propriate title | es e.g. Co | re tablet | (Layer 1, | Layer 2, e | etc. as app | licable), |
| Contents of capsule | , Powder for | injection | > | | | | |
| | | | | | | | |
| | | | | | | | |
| Subtotal 1 | | | | | | | |
| <complete ap<="" td="" with=""><td>propriate titl</td><td>e e.g. Filn</td><td>n-coating</td><td>></td><td></td><td></td><td></td></complete> | propriate titl | e e.g. Filn | n-coating | > | | | |
| | | | | | | | |
| | | | | | | | |
| Subtotal 2 | | | | | | | |
| Total | | | | | | | |

- (ii) Composition of all components purchased as mixtures (e.g. colorants, coatings, capsule shells, imprinting inks):
- (c) Description of accompanying reconstitution diluent(s), if applicable:

2.3. P.2.2.1 Formulation Development

- (b) Information on primary (submission, registration, and exhibit) batches including comparative bioavailability or bio waiver, stability, commercial:
 - (i) Summary of batch numbers:

| Batch number(s) of the FPPs used in | |
|-------------------------------------|--|
|-------------------------------------|--|

| Dia annia la constitución de la | <e.g. a12345="" batch="" bioequivalence=""></e.g.> | | |
|---|--|--|--|
| Bioequivalence or bio waiver | <e.g. batch="" bio="" waiver="" x12345=""></e.g.> | | |
| For proportional strength bio | | | |
| waiver: the bioequivalence batch | | | |
| of the reference strength | | | |
| Dissolution profile studies | | | |
| Stability studies (primary batches) | | | |
| <pre><packaging configuration="" i=""></packaging></pre> | | | |
| <pre>< packaging configuration II></pre> | | | |
| <add as="" as<="" delete="" many="" rows="" th=""><th></th></add> | | | |
| necessary> | | | |
| Stability studies (production batches) | | | |
| <pre>< packaging configuration I></pre> | | | |
| < packaging configuration II> | | | |
| (Add/delete as many rows as | | | |
| necessary) | | | |
| Validation studies (primary batches) | | | |
| <pre> < packaging configuration I></pre> | | | |
| <pre>< packaging configuration II></pre> | | | |
| (Add/delete as many rows as | | | |
| necessary) | | | |
| Validation studies (at least the | | | |
| first three consecutive | | | |
| production batches) or | | | |
| code(s)/version(s) for process | | | |
| validation protocol(s) | | | |

Summary of formulations and discussion of any differences:

| Component | | Relevant batches | | | | | | |
|--|--|------------------|--|-----------|---|----------|------------------------------------|---------|
| and quality standard (e.g. NF, BP, | Compai bioavail or bio v | ability | Stabil | ity | Process validation | on | Comme (2.3.P | |
| Ph.Eur, in- house) | <batch n<="" th=""><th>os. and</th><th><batch< th=""><th></th><th><batch< th=""><th></th><th><batch< th=""><th></th></batch<></th></batch<></th></batch<></th></batch> | os. and | <batch< th=""><th></th><th><batch< th=""><th></th><th><batch< th=""><th></th></batch<></th></batch<></th></batch<> | | <batch< th=""><th></th><th><batch< th=""><th></th></batch<></th></batch<> | | <batch< th=""><th></th></batch<> | |
| | Theor. quantity per batch | % | Theor. quantity per batch | % | Theor. quantity per batch | % | Theor. quantity per batch | % |
| <complete cap<="" contents="" of="" td="" with=""><td></td><td></td><td></td><td>ablet (La</td><td>ayer 1, Lay</td><td>er 2, et</td><td>c. as applic</td><td>cable),</td></complete> | | | | ablet (La | ayer 1, Lay | er 2, et | c. as applic | cable), |
| | | | | | | | | |
| Subtotal 1 | | | | | | | | |
| <complete td="" with<=""><td colspan="3">h appropriate title e.g. Film-coating ></td></complete> | h appropriate title e.g. Film-coating > | | | | | | | |
| | | | | | | | | |
| Subtotal 2 | | | | | | | | |
| Total | | | | | | | | |

2.3. P.3 Manufacture

2.3. P.3.1 Manufacturer(s)

(b) Name, address and responsibility (e.g. fabrication, packaging, labelling, testing) of each manufacturer, including contractors and each proposed production site or facility involved in manufacturing and testing:

| Name and address (include block(s)/unit(s)) | Responsibility |
|---|----------------|
| | |
| | |
| | |
| | |

2.3. P.3.2 Batch Formula

Largest intended commercial batch size:

Other intended commercial batch sizes:

<Information on all intended commercial batch sizes should be in the QIS>

(a) List of all components of the FPP to be used in the manufacturing process and their amounts on a per batch basis (including components of mixtures prepared in-house (e.g. coatings) and overages, if any):

| Strength (label claim) | | | |
|-----------------------------------|--------------|--------------|--------------|
| Master production | | | |
| document reference | | | |
| number and/or version | | | |
| Proposed commercial batch size(s) | | | |
| (e.g. number of dosage units) | | | |
| Component and quality | Quantity per | Quantity per | Quantity per |
| standard (and grade, if | batch (e.g. | batch (e.g. | batch (e.g. |
| applicable) | kg/batch) | kg/batch) | kg/batch) |

<complete with appropriate titles e.g. Core tablet (Layer 1, Layer 2, etc. as applicable), Contents of capsule, Powder for injection>

| Subtotal 1 | | | | |
|---|--|--|--|--|
| <complete appropriate="" e.g.="" film-coating="" title="" with=""></complete> | | | | |
| | | | | |
| | | | | |
| Subtotal 2 | | | | |
| Total | | | | |

2.3. P.3.3 Description of Manufacturing Process and

Process Controls (a) Flow diagram of the manufacturing process:

(c) Narrative description of the manufacturing process, including equipment type and working capacity, process parameters:

2.3. P.3.4 Controls of Critical Steps and Intermediates

(a) Summary of controls performed at the critical steps of the manufacturing process and on isolated intermediates:

| Step (e.g. granulation, compression, coating) | Controls (parameters/limits/frequency of testing) |
|---|---|
| | |
| | |
| | |

Proposed/validated holding periods for intermediates (including bulk product):

2.3. P.3.5 Process Validation and/or Evaluation

(a) Summary of the process validation and/or evaluation studies conducted and/or a summary of the proposed validation protocol for the critical steps or critical assays used in the manufacturing process (e.g. protocol number, parameters, results):

Document code(s) for the process validation protocol(s) and/or report(s) (including reference number/version/date):

2.3. P.5 Control of FPP

2.3. P.5.1 Specification(s)

(a) Specification(s) for the FPP:

| Standard (e.g. Ph.Ir house) | nt., BP, USP, in- | | |
|--|-------------------------------------|---|--|
| Specification reference number and version | | | |
| Test | Acceptance criteria (release) | Acceptance criteria (shelf- life) | Analytical procedure (type/source/version) |
| Description Identification Impurities Assay etc. | | | |
| | | | |

2.3. P.7 Container Closure System

(a) Description of the container closure systems, including unit count or fill size, container size or volume:

| Description (including materials of construction) | Strength | Unit count or fill size (e.g. 60s, 100s etc.) | Container size (E.g. 5 ml, 100 ml etc.) |
|---|----------|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

2.3. P.8 Stability

2.3. P.8.1 Stability Summary and Conclusions

(d) Proposed storage statement and shelf-life (and in-use storage conditions and in-use

Period, if applicable):

| Container closure | Storage statement | Shelf-life |
|-------------------|-------------------|------------|
| system | | |
| | | |
| | | |

2.3. P.8.2 Post-approval Stability Protocol and Stability Commitment

(a) Stability protocol for Primary stability batches (e.g. storage conditions (including tolerances), batch numbers and batch sizes, tests and acceptance criteria, testing frequency, container closure system(s):

| Parameter | Details |
|---------------------------|--|
| Storage condition(s) (°C, | |
| % RH) | |
| Batch number(s) / batch | <pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre> |
| size(s) | |
| Tests and acceptance | Description |
| criteria | Moisture |
| | Impurities |
| | Assay |
| | etc. |
| | |
| Testing frequency | |
| Container closure | |
| system(s) | |
| | |

(b) Stability protocol for Commitment batches (e.g. storage conditions (including tolerances), batch numbers (if known) and batch sizes, tests and acceptance criteria, testing frequency, container closure system(s)):

| Parameter | Details | |
|-----------------------------|--|--|
| Storage condition(s) (°C, % | | |
| RH) | | |
| Batch number(s) / batch | <not batches="" each<="" in="" less="" production="" th="" than="" three=""></not> | |
| size(s) | container closure system> | |
| Tests and acceptance | Description | |
| criteria | Moisture | |

| | Impurities | |
|-----------------------------|------------|--|
| | Assay | |
| | etc. | |
| Testing frequency | | |
| Container closure system(s) | | |
| | | |

(c) Stability protocol for Ongoing Batches (e.g. storage conditions (including tolerances), number of batches per strength and batch sizes, tests and acceptance criteria, testing frequency, container closure system(s)):

| Parameter | Details | |
|-----------------------------|---|--|
| Storage condition(s) (°C, % | | |
| RH) | | |
| Batch size(s), annual | <at (unless="" batch="" least="" none<="" one="" per="" production="" th="" year=""></at> | |
| allocation | is produced that year) in each container closure | |
| | system > | |
| Tests and acceptance | Description | |
| criteria | Moisture | |
| | Impurities | |
| | Assay | |
| | etc. | |
| Testing frequency | | |
| Container closure system(s) | | |
| Parameter | Details | |
| | | |

2.3. P.8.3 Stability Data

(c) Bracketing and matrixing design for commitment and/or continuing (i.e. ongoing) batches, if applicable:

WRITTEN COMMITMENTS OF THE MANUFACTURER - FOR NAFDAC USE

API

If applicable (primary stability study commitment):

The Applicant (or API manufacturer) undertook in writing (date of letter of commitment) to continue long-term testing of <INN of API> for a period of time sufficient to cover the whole provisional re-test period (period ending month/year) and to report any significant changes or out-of-specification results immediately to NAFDAC for the

| studios): | |
|--|--|
| packing materia | s> If applicable (commitment stability |
| <batch numbers<="" td=""><td>, manufacturing dates, batch size, primary</td></batch> | , manufacturing dates, batch size, primary |
| batches : | |
| following | |

Since stability data on three production scale batches were not provided with the application, the remaining number of production scale batches should be put on long-term stability testing. Any significant changes or out of specification results should be reported immediately to NAFDAC. The approved stability protocol should be used for

Commitment batches.

API option 2 - CEP

The Applicant provided a commitment in writing (date of letter of commitment) to inform NAFDAC in the event that the CEP is revised or withdrawn, and that revisions to the CEP will be handled as per variation 5 (Annex 3, TRS 981).

Note that revisions or withdrawal will require additional consideration of the API data requirements to support the

dossier.

API option 3 – full details in the PD (ongoing stability study commitment)

The Applicant undertook in writing (date of letter of commitment) a commitment regarding ongoing stability studies. Unless otherwise justified, at least one batch per year of the product will be included in the stability programme (unless none is produced during that year). The stability protocol will be that which was approved for primary batches (or the protocol was submitted for assessment). Out-of-specification results or significant atypical trends will be investigated. Any confirmed significant change or out-of-specification result will be reported immediately to NAFDAC. The possible impact on batches on the market will be considered in consultation with NAFDAC

inspectors.

FPP

If applicable (primary stability study commitment):

The Applicant undertook in writing (date of letter of commitment) to continue long-term testing of < FPP reference number, trade name (INN of API), strength, pharmaceutical form> for a period of time sufficient to cover the whole provisional shelf-life (period ending month/year) and to report any out-of-specification results or significant

changes immediately to NAFDAC for the

following batches:

<Batch numbers, manufacturing dates, batch size, primary

packing materials > **If applicable (commitment stability**

studies):

Since stability data on three production scale batches was not provided with the application, the Applicant undertook in writing, (date of letter of commitment) to put the remaining number <e.g. additional two (2)> production scale batches of < FPP reference number, trade name

(INN of API), strength, pharmaceutical form, primary packing material> on long-term stability testing. Any out-of-specification results or significant changes during the study will immediately be reported to NAFDAC. The approved stability protocol will be used for

commitment

batches.

If applicable (when the proposed largest commercial batch size is 200 000 units (x units) or less)

The Applicant undertook in writing (date of letter of commitment) to place the first three batches of any production size larger than x units on stability. The stability protocol will be that which was approved for primary batches (or the protocol was submitted for assessment). Out-of-specification results or significant atypical trends will be

investigated. Any confirmed significant change or out-of-specification result will be reported immediately to NAFDAC.

Ongoing stability study commitment

The Applicant undertook in writing (date of letter of commitment) a commitment regarding ongoing stability studies. Unless otherwise justified, at least one batch per year of the product manufactured in every primary packaging type will be included in the stability programme (unless none is produced during that year). The stability protocol will be that which was approved for primary batches (or the protocol was submitted and found acceptable). Out-of-specification results or significant atypical trends will be investigated. Any confirmed significant change or out-of-specification result will be reported immediately to NAFDAC. The possible impact on batches on the market will be considered in consultation with NAFDAC inspectors.

If applicable (validation of production batches)

Validation data on production scale batches of not less than three (3) consecutive batches of <FPP reference number, trade name (INN of API), strength, pharmaceutical form, primary packing material> was not provided with the application. Therefore, the Applicant submitted a

written commitment (date of letter of commitment) that three consecutive production batches would be prospectively validated and a validation report —in accordance with the details of the validation protocol provided in the dossier— would be made available as soon as possible for evaluation by assessors or for verification by the NAFDAC inspection team.

Change History

Date of preparation of original QIS:

| Date of revised version | Section (e.g. S.2.1) | Revision |
|-------------------------|----------------------------|----------|
| | | |
| | | |
| | | |