

## Annex IV: 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	
Application Number	
Strength	
Route of administration	
Proposed indication(s)	
Local Technical Representative (Agency)	
LTR Contact person details	
Local Technical Representative (LTR) contact person	Surname: First Name:
Physical address details	
Town/City	
Postal code	
Contact person's email address	
Contact person's phone number	
FPP manufacturer Qualified Person	Surname: First Name:
FPP manufacturer Qualified person's contact details (including Physical address)	
Unit /block	
Road/Street	
Plant	
Village/suburb	
Town/City	
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	
Version and/or date of acceptance	<i>(official use only)</i>

Related dossiers (e.g. FPP(s) with the same API(s) submitted to TMDA by the applicant):

Application number ( )	Registration status (Y/N)	API, strength, dosage form (eg. Irinotecan (as chloride) 20mg per ml Solution)	API manufacturer (including address if same manufacturer as current dossier)

### 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 of API:		
Name of API manufacturer:		
<input type="checkbox"/>	Certificate of suitability to the European Pharmacopoeia (CEP) Option 1.	
<input type="checkbox"/>	Confirmation of API prequalification document: Option 2	
<input type="checkbox"/>	API approval number _____. Option 3a.	
<input type="checkbox"/>	Active pharmaceutical ingredient master file (EAC APIMF) procedure: APIMF number assigned by TMDA (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: : _____. Option 3b.	
<input type="checkbox"/>	Full details in the PD Open part DMF version number _____ Restricted part DMF version number _____ Identifier of current module 3.2.S: _____ Option 4.	

#### 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	CEP number/ WHOAPI-PQ number /WHO APIMF/ TMDA registration	Letter of access provided?

		No./ Approved APIMF/ if applicable)	

**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., Ph.Eur., BP, USP, in-house)		
Specification reference number & version effective date		
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 system	Storage statement	Re-test period*

\* 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))**

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

Name of API:	
<b>Name of API manufacturer:</b>	
<input type="checkbox"/>	Full details
<input type="checkbox"/>	WHO collaborative procedure
<input type="checkbox"/>	SRA Abridged procedure
<input type="checkbox"/>	EAC Mutual Recognition
<input type="checkbox"/>	EU Article 58 procedure

### **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 quality standard (and grade, if applicable)	Function	Strength (label claim)					
		Quant. per unit or per mL	%	Quant. per unit or per mL	%	Quantity per unit or per mL	%
<complete with appropriate titles e.g. Core tablet (Layer 1, Layer 2, etc. as applicable), Contents of capsule, Powder for injection>							
Subtotal 1							
<complete with appropriate title e.g. Film-coating >							
Subtotal 2							
Total							

(ii) **Composition of all components purchased as mixtures (e.g. colourants, 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, exhibit) batches including comparative bioavailability or biowaiver, stability, commercial:**

(i) **Summary of batch numbers:**

Batch number(s) of the FPPs used in
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<b>Bioequivalence</b>	<e.g. bioequivalence batch A12345>.		
<b>Biowaiver</b>	<e.g. biowaiver batch X12345>		
<b>For proportional strength biowaiver: the bioequivalence batch of the reference strength</b>			
<b>Dissolution profile studies</b>			
<b>Stability studies (primary batches)</b>			
<packaging configuration I>			
< packaging configuration II>			
<Add/delete as many rows as necessary>			
<b>Stability studies (production batches)</b>			
< packaging configuration I>			
< packaging configuration II>			
(Add/delete as many rows as necessary)			
<b>Validation studies (primary batches)</b>			
< packaging configuration I>			
< packaging configuration II>			
(Add/delete as many rows as necessary)			
<b>Validation studies (at least the first three consecutive production batches) version(s) for process validation protocol(s)</b>			

Summary of formulations and discussion of any differences:

<b>Component and quality standard (e.g. NF, BP, Ph.Eur, in-house)</b>	<b>Relevant batches</b>							
	<b>Comparative bioavailability or biowaiver</b>		<b>Stability</b>		<b>Process validation</b>		<b>Commercial (2.3.P.1)</b>	
	<b>&lt;Batch nos. and sizes&gt;</b>		<b>&lt;Batch nos. and sizes&gt;</b>		<b>&lt;Batch nos. and sizes&gt;</b>		<b>&lt;Batch nos. and sizes&gt;</b>	
	<b>Theor. quantity per batch</b>	<b>%</b>	<b>Theor. quantity per batch</b>	<b>%</b>	<b>Theor. quantity per batch</b>	<b>%</b>	<b>Theor. quantity per batch</b>	<b>%</b>
<complete with appropriate titles e.g. Core tablet (Layer 1, Layer 2, etc. as applicable), Contents of capsule, Powder for injection>								
Subtotal 1								
<complete with appropriate title e.g. Film-coating >								

Component and quality standard (e.g. NF, BP, Ph.Eur, in-house)	Relevant batches							
	Comparative bioavailability or biowaiver		Stability		Process validation		Commercial (2.3.P.1)	
	<Batch nos. and sizes>		<Batch nos. and sizes>		<Batch nos. and sizes>		<Batch nos. and sizes>	
	Theor. quantity per batch	%	Theor. quantity per batch	%	Theor. quantity per batch	%	Theor. quantity per batch	%
Subtotal 2								
Total								

### 2.3.P.3 Manufacture

#### 2.3.P.3.1 Manufacturer(s)

(a) 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 standard (and grade, if applicable)	Quantity per batch (e.g. kg/batch)	Quantity per batch (e.g. kg/batch)	Quantity per batch (e.g. 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 with appropriate title e.g. Film-coating >			
Subtotal 2			
Total			

**2.3.P.3.3 Description of Manufacturing Process and Process Controls**

- (a) Flow diagram of the manufacturing process:
- (b) 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.Int., BP, USP, in-house)			
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

(c) Proposed storage statement and shelf-life (and in-use storage conditions and in-use period, if applicable):

Container closure system	Storage statement	Shelf-life

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 size(s)	<primary batches>	
Tests and acceptance criteria	Description	
	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 size(s)	<not less than three production batches in each container closure system>	
Tests and acceptance criteria	Description	
	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 allocation	<at least one production batch per year (unless none is produced that year) in each container closure system >	
Tests and acceptance criteria	Description	
	Moisture	
	Impurities	
	Assay	
	etc.	
Testing frequency		
Container closure system(s)		

### 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 TMDA 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 TMDA 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 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 TMDA. The approved stability protocol should be used for commitment batches.

##### **API option 1 - CEP**

The Applicant provided a commitment in writing (date of letter of commitment) to inform TMDA in the event that the CEP is revised or withdrawn, and that revisions to the CEP will be handled as per variation guidelines. Note that revisions or withdrawal will require additional consideration of the API data requirements to support the dossier.

##### **API option 2 - WHOAPI-CPQ**

The Applicant provided a commitment in writing (date of letter of commitment) to inform TMDA in the event that the WHOAPI-CPQ is revised or withdrawn, and that revisions to the WHOAPI-CPQ will be handled as per variation TMDA Variation guidelines. Note that revisions or withdrawal will require additional consideration of the API data requirements to support the dossier.

##### **API option 4 - 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 TMDA. The possible impact on batches on the market will be considered in consultation with GMP inspection.

### **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 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 TMDA. 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 TMDA.

#### **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 TMDA. The

possible impact on batches on the market will be considered in consultation with GMP inspection.

**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 GMP inspection.

**Change History**

Date of preparation of original QIS:

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