QUALITY OVERALL SUMMARY-(QOS)

General Instructions

Quality overall summary (QOS) template should be completed for pharmaceutical products containing active substances of synthetic or semi-synthetic origin and their corresponding VMPs by the applicant

All sections and fields in the QOS template that would be applicable should be completed.

It is understood that certain sections and fields may not apply and should be indicated as such by reporting "not applicable" in the appropriate area with an accompanying explanatory note.

The use of tables to summarize the information is encouraged, where possible. The tables included in the template may need to be expanded or duplicated (e.g. for multiple strengths), as necessary.

These tables are included as illustrative examples of how to summarize information. Other approaches to summarize the information can be used if they fulfill the same purpose.

Please state the exact location (Annex number) of any appended documents in the relevant sections of the form and hyperlink to that location.

See sections 1.5, 3 and 4 of "**Guidelines on technical requirements for registration of veterinary pharmaceutical products (VMP) in SADC:** quality part" for general and detailed instructions on the completion of this template

Should you have any questions regarding this form, please contact the SADC MS involved in the Veterinary Medicines Zazibona.

(a) Summary of product information:

Non-proprietary name of the finished pharmaceutical product (VMP)	
Proprietary name of the finished pharmaceutical product (VMP)	
International non-proprietary name(s) of the Active substance(s) (active substance(s)), including form (salt, hydrate, polymorph)	
Applicant name and address	
Applicant reference number (If already issued by Veterinary Medicines Zazibona)	

Dosage form	

Reference Number(s)			
Strength(s)			
Route of administration			
Target Species			
Proposed indication(s)			
Withdrawal period			
Contact information	Name Phone Fax: Email:		

(a) Other Introductory information:

Related dossiers (e.g. VMP(s) with the same active substance(s) submitted to the Veterinary Medicines Zazibonaby the applicant):

Reference number (eg SADC/VMP/0012)	**Registered (Y/N)**	**Active substance, strength, dosage form** (eg. oxytetracycline (as Hydrochloride) 20% w/v injectable solution	**Active substance manufacturer** (including address)

Identify available literature references for the active substance and VMP:

Publication(s)	**Most recent edition/volume in which active substance/VMP appears**	**Most recent edition/volume consulted**
ACTIVE SUBSTANCE status in pharmacopoeia and forum:		
Ph.Eur.		
BP		
USP		

Others		
VMP status in pharmacopoeia and forum:		
Ph.Eur.		
BP		
USP		

BP Veterinary codex		
Others		
Other reference texts (e.g. public access reports):		

STATUS OF GMP OF MANUFACTURING FACILITIES OF VMP (Veterinary Medicines Zazibona Use Only)
Compliance to GMP , marketing authorization and Certificate of pharmaceutical product(should be provided in Module 1) <insert inspection observations, comments, etc.>
ASSESSMENT OF LABELLING AND SAMPLES (Veterinary Medicines Zazibona Use Only)
Discussion/comments on the quality components of:
Prescribing information <insert assessment observations, comments, etc.>
Labelling (outer and inner labels) <insert assessment observations, comments, etc.>
Samples (e.g. VMP, device) <insert assessment observations, comments, etc.>

2.3.S Active Substance

Complete the following table for the option that applies for the submission of activesubstance information:

Name of active substance:	
Name of active substance manufacturer:	

□	Certificate of suitability to the European Pharmacopoeia (CEP): • is a written commitment provided that the applicant will inform Veterinary Medicines Zazibona region in the event that the CEP is withdrawn and has acknowledged that withdrawal of the CEP will require additional consideration of the active substance data requirements to support the dossier: o □ yes, □ no; • A copy of the most current CEP (with annexes) and written commitment should be provided in Module 1. • The declaration of access should be filled out by the CEP holder on behalf of the VMP manufacturer or applicant. • Summaries of the relevant information should be provided under the appropriate sections (e.g. 3.2.S.1.3, 3.2.S.3.1, 3.2.S.4.1 through 3.2.S.4.4, S.6 and 3.2.S.7; see Quality guideline).
□	Drug master file (DMF) procedure: • DMF version number (and/or date) of the open part:_____; version number (and/or date) of the closed part:_____; • a copy of the letter of access should be provided in Module 1; and • Summaries of the relevant information from the Open part should be provided under the appropriate sections; see Section 3.2.S in the Quality guideline.
□	Full details in the PD: • Summaries of the full information should be provided under the appropriate sections; see Section 3.2.S in the Quality guideline.

2.3. S.1 General Information

Nomenclature

(a) International Non-proprietary name (INN):
(b) Compendial name, if relevant:
(c) Chemical name(s):
(d) Company or laboratory code:
(e) Other non-proprietary name(s) (e.g. national name, USAN, BAN):
(f) Chemical Abstracts Service (CAS) registry number:

Structure

(a) Structural formula, including relative and absolute stereochemistry:
(b) Molecular formula:
(c) Relative molecular mass:

General Properties

(a) Physical description (e.g. appearance, colour, physical state):
(b) Solubilities**:** In common solvents:
(c) Quantitative aqueous pH solubility profile

Medium (e.g.Physiological pH ranges in tagert animal(s)	Solubility (mg/ml)

(d) Physical form (e.g. polymorphic form(s), solvate, and hydrate): Polymorphic form:
Solvate:
Hydrate:

(e) Other:

Property	
pH	
pK	
Partition coefficients	
Melting/boiling points	

Specific optical rotation (specify solvent)	
Refractive index (liquids)	
Hygroscopicity	
UV absorption maxima/molar absorptivity	
Other	

2.3. S.2 Manufacture

Manufacturer(s)

(a) Name, address and responsibility (e.g. fabrication, packaging, labelling, testing, and 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	Active substance Master File/CEP number (if applicable)

(b) Manufacturing authorization for the production of active substance(s) and, where available, certificate of GMP compliance (GMP information should be provided in Module 1):

S.2.2 Description of Manufacturing Process and Process Controls

(a) Flow diagram of the synthesis process (es):
(b) Brief narrative description of the manufacturing process (es):
(c) Alternate processes and explanation of their use:
(d) Reprocessing steps and justification:

Control of Starting Materials

(a) Summary of the quality and controls of the starting materials used in the manufacture of the active substance:

Step/starting material	Test(s)/method(s)	Acceptance criteria

(b) Name and manufacturing site address of starting material manufacturer(s):

(c) Where the active substance(s) and the starting materials and reagents used to manufacture the active substance(s) are without risk of transmitting agents of animal spongiform encephalopathies, a letter of attestation

confirming this can be found in:

Controls of Critical Steps and Intermediates of the active substance

Summary of the controls performed at critical steps of the manufacturing processand on intermediates:

Step/materials	Test(s)/method(s)	Acceptance criteria

2.3. S.2.5 Process Validation and/or Assessment

Description of process validation and/or assessment studies (e.g. for aseptic processing and sterilization):

2.3. S.2.6 Manufacturing Process Development

Description and discussion of the significant changes made to the manufacturing process and/or manufacturing site of the active substance used in producing comparative bioavailability or biowaiver, stability, scale-up, pilot and, if available, production scale batches:

Characterisation

Elucidation of Structure and other Characteristics

(a) List of studies performed (e.g. IR, UV, NMR, MS, elemental analysis) and conclusion from the studies (e.g. whether results support the proposed structure):
(b) Discussion on the potential for isomerism and identification of stereochemistry (e.g. geometric isomerism, number of chiral centres and configurations) of the active substance batch (es) used in comparative bioavailability or biowaiver studies:
(c) Summary of studies performed to identify potential polymorphic forms (including solvates):
(d) Summary of studies performed to identify the particle size distribution of the active substance:
(e) Other characteristics:

Impurities

(a) Identification of potential and actual impurities arising from the synthesis, manufacture and/or degradation:

(i) List of active substance-related impurities (e.g. starting materials, by-products, intermediates, chiral impurities, degradation products), including chemical name, structure and origin:

Active substance-related impurity (chemical name or descriptor)	Structure	Origin

Refer to VICH GL(R)10: Impurities in New Veterinary Drug Substances.

(ii) List of process-related impurities (e.g. residual solvents, reagents), including compound names and step used in synthesis:

Process-related impurity (compound name)	Step used in synthesis

Refer to VICH GL18: Impurities: Residual solvents in Active Substances and Excipients.

(b) Basis for setting the acceptance criteria for impurities:

(i) Maximum daily dose (i.e. the amount of active substance administered per day) for the active substance, corresponding to VICH/ICH Reporting/Identification/Qualification Thresholds for the active substance-related impurities and the concentration limits (ppm) for the process-related impurities (e.g. residual solvents):

Maximum daily dose for the active substance:	**<x mg/day>**	
Test	**Parameter**	**VICH/ICH threshold or concentration limit**
Active substance-related impurities	Reporting Threshold	
	Identification Threshold	
	Qualification Threshold	
Process-related impurities	<solvent 1>	
	<solvent 2>, etc.	

(ii) Data on observed impurities for relevant batches (e.g. comparative bioavailability or biowaiver, stability batches):

Impurity (active substance-related and process-related)	**Acceptance Criteria**	**Results (include batch number* and use**)**		

* include strength, if reporting impurity levels found in the VMP (e.g. for comparative studies)

** e.g. comparative bioavailability or biowaiver studies, stability

** Justification of proposed acceptance criteria for impurities:

2.3. S.4 Control of the Active substance

S.4.1 Specification

(a) Active substance specifications of the VMP manufacturer:

Standard (e.g. Ph.Int., Ph.Eur., BP, USP, House)		
Specification reference number and version		
Test	**Acceptance criteria**	**Analytical procedure (Type/Source/Version)**
Description		
Identification		
Impurities		
Assay		
etc.		

2.3. S.4.2 Analytical Procedures

Summary of the analytical procedures (e.g. key method parameters, conditions, system suitability testing):

See annex I of module 3 for summaries of the analytical procedures and validationinformation

2.3. S.4.3 Validation of Analytical Procedures

Summary of the validation information (e.g. validation parameters and results):

See annex I of module 3 for summaries of the analytical procedures and validationinformation

Batch Analyses

(a) Description of the batches:

Batch number	**Batch size**	**Date and site of production**	**Use (e.g. comparative bioavailability or biowaiver, stability)**

(b) Summary of batch analyses release results of the VMP manufacturer forrelevant batches (e.g. comparative bioavailability or biowaiver, stability):

Test	Acceptance Criteria	Results		
		<batch x>	<batch y>	etc.
Description				
Identification				
Impurities				
Assay				
etc.				

(c) Summary of analytical procedures and validation information for those procedures not previously summarized in 2.3.S.4.2 and 2.3.S.4.3 (e.g. historical analytical procedures):

2.3. S.4.5 Justification of Specification

Justification of the active substance specification (e.g. evolution of tests, analytical procedures and acceptance criteria, differences from officially recognized compendial standard(s)):

S.5.1 Reference Standards or Materials

(a) Source (including lot number) of primary reference standards or reference materials (e.g. Ph.Eur, BP, in-house):

(b) Characterization and assessment of non-official (e.g. not from an officially recognized pharmacopoeia) primary reference standards or reference materials (e.g. elucidation of structure, certificate of analysis):

(c) Description of the process controls of the secondary reference standard (comparative certificate of analysis and IR spectra against primary standard) :

S.6 Container Closure System

(a) Description of the container closure system(s) for the shipment and storage of the active substance (including the identity of materials of construction of each primary packaging component and a brief summary of the specifications):

Packaging component	Materials of construction	Specifications (list parameters e.g. identification (IR))

(b) Other information on the container closure system(s) (e.g. suitability studies):

2.3.S.7 Stability

S.7.1 Stability Summary and Conclusions

(a) Summary of stress testing (e.g. heat, humidity, oxidation, photolysis, acid/base): and results:

Stress condition	Treatment	Results (e.g. including discussion whether mass balance is observed)
Heat		
Humidity		
Oxidation		
Photolysis		
Acid		
Base		
Other		

(b) Summary of accelerated and long-term testing parameters (e.g. studiesconducted):

Storage condition (◦C, % RH)	Batch number	Batch size	Container closure system	Completed (and proposed) testing intervals

Summary of the stability results observed for the above accelerated and long-term studies:

Test	Results
Description	
Moisture	
Impurities	
Assay	
etc.	

(c) Proposed storage statement and re-test period (or shelf-life, as appropriate):

Container closure system	Storage statement	Re-test period*

2.3. S.7.3 Stability Data

Refer to VICH GL3(R): Stability Testing of New Veterinary Drug Substances and Medicinal Products.

Refer to VICH GL5: Stability Testing; Photostability testing of New drug substances and Products.

Refer to VICH GL8: Stability Testing for Medicated Premixes.

Refer to VICH GL45: Bracketing and matrixing designs for Stability Testing of New Veterinary Drug Substances and Medicinal Products.

Refer to VICH GL58: Stability Testing of New Veterinary Drug Substances and Medicinal Products in Climatic Zones III and IV.

2.3. P VETERINARY MEDICINAL PRODUCT (VMP)

P.1Description and Composition of the VMP

(a) Description of the VMP:

(b) Composition of the VMP**:**

(i) Composition, i.e. list of all components of the VMP 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	**%**	**Quant. per unit**	**%**	**Quantity per unit**	**%**
<complete with appropriate title e.g. Core tablet, 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):

- Description of accompanying reconstitution diluent(s), if applicable:
- Type of container closure system used for the VMP andaccompanying reconstitution diluent, if applicable**:**

Pharmaceutical Development

Components of the VMP

2.3. P.2.1.1 Active substance

Discussion of the:

(i) Compatibility of the active substance(s) with excipients listed in 2.3.P.1:
(ii) Key physicochemical characteristics (e.g. water content, solubility, particle size distribution, polymorphic or solid state form) of the active substance(s) that can influence the performance of the VMP:
(iii) For fixed-dose combinations, compatibility of active substances with each

other:

Excipients

(a) Discussion of the choice of excipients listed in 2.3.P.1 (e.g. their concentrations, their characteristics that can influence the VMP performance):

2.3. P.2.2 Veterinary pharmaceutical product

P.2.2.1 Formulation Development

(a) Summary describing the development of the VMP (e.g. route of administration, usage, optimization of the process parameters and formulation, etc.):

(b) Information on primary batches including comparative bioavailability or biowaiver, stability, commercial:

(i) Summary of batch numbers:

Batch number(s) of the VMPs used in			
Bioequivalence or biowaiver			
Dissolution profile studies			
Stability studies (primary batches)			
‹			
Stability studies (production batches)			
Validation studies (primary batches) if available			
Validation studies (at least the first three consecutive production batches) or code(s)/version(s) for process validation protocol(s)			

(ii) Summary of formulations and discussion of any differences:

Component and quality standard (e.g. BP, Ph.Eur, in-house)	**Relevant Batches**		
	Stability	**Process validation**	**Commercial (2.3.P.1)**
	<Batch nos. and sizes>	**<Batch nos. and sizes>**	**<Batch nos. and sizes>**

	Theor. quantity per batch	%	Theor. quantity per batch	%	Theor. quantity per batch	%
Subtotal 1						
Subtotal 2						
Total						

(c) Description of batches used in the comparative in vitro studies (e.g. dissolution) and in the in vivo studies (e.g. comparative bioavailability or biowaiver), including strength, batch number, type of study and reference to the data (volume, page):

(d) Summary of results for comparative in vitro studies (e.g. dissolution):

(e) Summary of any information on in vitro-in vivo correlation (IVIVC) studies (with cross-reference to the studies in Module 5):

(f) For scored tablets, provide the rationale/justification for scoring:

2.3. P.2.2.2 Overages

Justification of overages in the formulation(s) described in 2.3.P.1:

2.3.P.2.2.3 Physicochemical and Biological Properties

Discussion of the parameters relevant to the performance of the VMP (e.g. pH, ionic strength, dissolution, particle size distribution, polymorphism, rheological properties):

Manufacturing Process Development

(a) Discussion of the development of the manufacturing process of the VMP (e.g. optimization of the process, selection of the method of sterilization):

(b) Discussion of the differences in the manufacturing process (es) for the batches used in the comparative bioavailability or biowaiver studies and the process described in 2.3.P.3.3:

Container Closure System

(a) Discussion of the suitability of the container closure system (described in 2.3.P.7) used for the storage, transportation (shipping) and use of the VMP (e.g. choice of materials, protection from moisture and light, compatibility of the materials with the VMP):

(b) For a device accompanying a multi-dose container, a summary of the study results demonstrating the reproducibility of the device (e.g. consistent deliveryof the intended volume):

Microbiological Attributes

Discussion of microbiological attributes of the VMP (e.g. preservative effectivenessstudies):

2.3. P.2.6 Compatibility

Discussion of the compatibility of the VMP (e.g. with reconstitution diluent(s) or dosage devices, co-administered VMPs):

2.3. P.3 Manufacture

Manufacturer(s)

Name, address and responsibility (e.g. fabrication, packaging, labelling, and 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

Batch Formula

List of all components of the VMP to be used in the manufacturing process and their amounts on a per batch basis (including individual 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	**Quantity per dosage unit (e.g. mg/ml**	**Quantity per batch (e.g. kg/batch)**	**Function of ingredients**
<complete with appropriate title e.g. Core tablet, Contents of capsule, Powder for injection>			
Subtotal 1			
<complete with appropriate title e.g. Film-coating >			
Subtotal 2			

Total			

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:
(c) Justification of reprocessing of materials where applicable:

Controls of Critical Steps and Intermediates

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

Critical steps: Tests and acceptance criteria (with justification including experimental data) performed at critical steps identified in 3.2.S.2.2 of the manufacturing process to ensure that the process is controlled should be provided.

Intermediates: Information on the quality and control of intermediates isolated during the process should be provided.

The critical steps should be identified. These can be among others: steps where significant impurities are removed or introduced, steps introducing an essential molecular structural element such as a chiral centre or resulting in a major chemical transformation, steps having an impact on solid state properties and homogeneity of the API that may be relevant for use in solid dosage forms.

Specifications for isolated intermediates should be provided and should include tests and acceptance criteria for identity, purity and assay, where applicable.

Step (e.g. granulation, compression, coating, sterilization)	**Controls**

Process Validation and/or Assessment

It is expected that the manufacturing processes for all APIs are properly controlled. If the API is prepared as sterile, a complete description should be provided for aseptic processing and/or sterilization methods. The controls used to maintain the sterility of the API during storage and transportation should also be provided. Alternate processes should be justified and described.

Process validation and/or evaluation studies for aseptic processing and sterilization should be included.

Summary of the process validation and/or assessment studies conducted (including

product quality review(s) where relevant) and/or a summary of the proposed process validation protocol for the critical steps or critical assays used in the manufacturing process (e.g. protocol number, parameters, and results):

2.3. P.4 Control of Excipients

Specifications

Summary of the specifications for officially recognized compendia excipients which include supplementary tests not included in the officially recognized compendial monograph(s):

Analytical Procedures

Summary of the analytical procedures for supplementary tests:

Validation of Analytical Procedures

Summary of the validation information for the analytical procedures for supplementary tests (where applicable):

Justification of Specifications

Justification of the specifications (e.g. evolution of tests, analytical procedures and acceptance criteria, exclusion of certain tests, differences from officially recognized compendial standard(s)):

Excipients of Human or Animal Origin

(a) For VMPs using excipients without risk of transmitting agents of animal spongiform encephalopathies, a letter of attestation confirming this can be found in:

(b) CEP(s) demonstrating TSE-compliance can be found in:

Batch analysis of the excipients

Summary of batch analyses for each excipient

Novel Excipients

For excipients not described in a pharmacopoeia, the specification and routine tests should be summarised. Where the excipient is used for the first time in medicinal product full data must be provided in the quality guideline module 3 on nomenclature, description, manufacture, quality control during manufacture etc. (asfor an Active Substance),

2.3. P.6 Control of VMP

2.3. P.6.1 Specification(s)

Specification(s) for the VMP:

Standard (e.g. BP, Ph Eur, 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.			

Refer to VICH GL39: Test Procedures and Acceptance Criteria for New Veterinary Drug Substances and New Medicinal Products: Chemical Substances + Decision Trees.

2.3. P.6.2 Analytical Procedures

Summary of the analytical procedures (e.g. key method parameters, conditions ,system suitability testing):

See annex I of module 3 for summaries of the analytical procedures and validationinformation
Refer to VICH GL1: Validation of Analytical Procedures: Definition and Terminology

2.3. P.6.3 Validations of Analytical Procedures

Summary of the validation information (e.g. validation parameters and results):

See annex I of module 3 for summaries of the analytical procedures and validationinformation

Refer to VICH GL2: Validation of Analytical Procedures: Methodology.

P.6.4 Batch Analyses

(a) Description of the batches:

Strength and batch number	Batch size	Date and site of production	Use (e.g. comparative bioavailability or biowaiver, stability)

(b) Summary of batch analyses release results for relevant batches (e.g.

comparative bioavailability or biowaiver, stability):

Test	Acceptance criteria	Results		
		<batch x>	<batch y>	etc.
Description				
Identification				
Impurities				
Assay				
etc.				

(c) Summary of analytical procedures and validation information for those procedures not previously summarized in 2.3.P.6.2 and 2.3.P.6.3 (e.g. historical analytical procedures):

P.6.5 Characterisation of Impurities

(a) Identification of potential and actual impurities:

Degradation product (chemical name ordescriptor)	Structure	Origin

Process-related impurity (compound name)	Step used in the VMP manufacturing process

(b) Basis for setting the acceptance criteria for impurities:

(i) Maximum daily dose (i.e. The amount of active substance administered per day) for the active substance, corresponding VICH Reporting/Identification/Qualification Thresholds for the degradation products in the VMP and the concentration limits (ppm) for the process-related impurities (e.g. residual solvents):

Maximum daily dose for the active substance:	<x mg/day>	
Test	**Parameter**	**VICH threshold or concentration limit**
Degradation product	Reporting Threshold	
	Identification Threshold	
	Qualification Threshold	
Process-related impurities	<solvent 1>	
	<solvent 2>, etc.	

(ii) Data on observed impurities for relevant batches (e.g. comparative bioavailability or biowaiver):

Impurity (degradation product and process-related)	**Acceptance criteria**	**Results**		
		<batch no., strength, use>		

Refer to VICH GL(R) 11: Impurities in New Veterinary Medicinal Products.

Refer to VICH GL18: Impurities: Residual solvents in New Veterinary Medicinal Products.

(iii) Justification of proposed acceptance criteria for impurities:

2.3. P.6.6 Justification of Specification(s)

Justification of the VMP specification(s) (e.g. evolution of tests, analytical procedures and acceptance criteria, differences from officially recognized compendial standard(s)):

P.7 Reference Standards or Materials

(a) Source (including lot number) of primary reference standards or referencematerials (e.g. BP, in-house) not discussed in 3.S.1.5

(b) Characterization and assessment of non-official (e.g. not from an officially recognized pharmacopoeia) primary reference standards or reference materials (e.g. elucidation of structure, certificate of analysis) not discussed in3.S.1.5:

(c) Description of the process controls of the secondary reference standard (comparative certificate of analysis and IR spectra against primary standard)not discussed in 3.S.1.5:

P.8 Container Closure System

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

Description (including materialsof construction)	**Unit count or fill size**	**Container size**

(b) Summary of specifications of each primary and functional secondary (e.g. foilpouches) packaging components:

Packaging component	Specifications (list parameters e.g. identification (IR))
HDPE bottle	
PP cap	
Induction sealed liners	
Blister films (PVC, etc)	
Aluminum foil backing	
etc.	

(c) Other information on the container closure system(s):

2.3. P.9 Stability

P.9.1 Stability Summary and Conclusions

(a) Summary of stress testing and results (e.g. photostability studies, cyclic studies, freeze-thaw studies):

(b) Summary of accelerated and long-term testing parameters (e.g. studies conducted):

Storage conditions(◦C, % RH)	Strength and batch number	Batch size	Container closure system	Completed (and proposed) test intervals

Summary of the stability results observed for the above accelerated and long-term studies:

Test	Results
Description	
Moisture	
Impurities	
Assay	
etc.	

(e) Summary of in use stability studies

Storage conditions(◦C, % RH)	batch number	Batch size	Container closure system	Completed (and proposed) test intervals

Storage conditions(◦C, % RH)	batch number	Batch size	Container closure system	Completed (and proposed) test intervals

Summary of in use stability results observed for the above stability studies:

Test	Results
Description	
Moisture	
Impurities	
Assay	
etc.	

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

Container closure system	Storage statement	Shelf-life

P.9.2 Stability Data

(a) The actual stability results should be provided in Module 3.
(b) Summary of analytical procedures and validation information for those procedures not previously summarized in 2.3.P.5 (e.g. analytical proceduresused only for stability studies):
(c) Bracketing and Matrixing design and justification for ongoing stability batches, if applicable

Refer to VICH GL3(R): Stability Testing of New Veterinary Drug Substances and Medicinal Products.

Refer to VICH GL5: Stability Testing; Photostability testing of New drug substances and Products.

Refer to VICH GL8: Stability Testing for Medicated Premixes.

Refer to VICH GL45: Bracketing and matrixing designs for Stability Testing of New Veterinary Drug Substances and Medicinal Products.

Refer to VICH GL58: Stability Testing of New Veterinary Drug Substances and Medicinal Products in Climatic Zones III and IV.

ANNEX VI: PRODUCT QUALITY REVIEW REQUIREMENTS FOR ESTABLISHED MULTISOURCE PRODUCTS

For an established generic product a product quality review may satisfy the requirements of Sections 3.2.P.2.2.1 (a), 3.2.P.2.3 (a) and 3.2.P.3.5 of the PD and QOS- PD.
A product quality review should be submitted with the objective of verifying the consistency of the quality of the VMP and its manufacturing process.

Rejected batches should not be included in the analysis but must be reported separately together with the reports of failure investigations, as indicated below.
Reviews should be conducted with not less than 10 consecutive batches manufactured over the period of the last 12 months, or, where 10 batches were not manufactured in the last 12 months, not less than 25 consecutive batches manufactured over the period of the last 36 months and should include at least:

1. A review of starting and primary packaging materials used in the VMP, especially those from new sources.

2. A tabulated review and statistical analysis of quality control and in-process control results.

3. A review of all batches that failed to meet established specification(s).

4. A review of all critical deviations or non-conformances and related investigations.

5. A review of all changes carried out to the processes or analytical methods.

6. A review of the results of the stability-monitoring programme.

7. A review of all quality-related returns, complaints and recalls, including export- only medicinal products.

8. A review of the adequacy of previous corrective actions.

9. A list of validated analytical and manufacturing procedures and theirrevalidation dates.

Notes
Reviews must include data from all batches manufactured during the review period.

Data should be presented in tabular or graphical form (i.e. charts or graphs), when applicable