HEALTH SCIENCES AUTHORITY

REGULATORY GUIDANCE

NOV 2025

PREPARATION OF A QUALITY SYSTEM DOSSIER

HSA
Health Sciences Authority

1 INTRODUCTION

Quality System Dossier (QSD) is a collation and collection of documents which contains information associated with the quality system of the pharmaceutical manufacturing operations carried out at the named overseas manufacturing site and any closely integrated operations at adjacent and nearby buildings.

QSD should be submitted by the manufacturer of Therapeutic Products (TP) and Cell Therapy and Gene Therapy (CTGTP) products to supplement the information provided in the application form requesting an overseas GMP inspection. The information contained in the QSD should be comprehensive enough to provide an overview of the manufacturing site and its quality system to facilitate our assessment of the manufacturer's inspection readiness prior to the arrangement of an on-site inspection.

2 DEFINITIONS / ABBREVIATIONS

AHU	Air Handling Unit
APS	Aseptic Process Simulation
BMR	Batch Manufacturing Record
BPR	Batch Packaging Record
CTGTP	Cell, Tissue and Gene Therapy Products
GC	Gas Chromatography
GMP	Good Manufacturing Practice
HEPA	High Efficiency Particulate Air
HPLC	High Performance Liquid Chromatography
HSA	Health Sciences Authority, Singapore
HVAC	Heating, Ventilation and Air Conditioning
IQ	Installation Qualification
LAF	Laminar Air Flow
LAL	Limulus Amoebocyte Lysate
LVP	Large Volume Parenteral
OQ	Operation Qualification
OOS	Out of Specification
OOT	Out of Trend
PAT	Process Analytical Technology
PIC/S	Pharmaceutical Inspection Co-operation Scheme
PLC	Programmable Logic Control
PQ	Performance Qualification
PQR	Product Quality Report
PUW	Purified Water
QA	Quality Assurance
QC	Quality Control
QMS	Quality Management System
QRM	Quality Risk Management

QSD	Quality System Dossier
RABS	Restricted Access Barrier System
SOP	Standard Operating Procedure
SVP	Small Volume Parenteral
TP	Therapeutic Product
TSE	Transmitting animal Spongiform Encephalopathy
VMP	Validation Master Plan
WFI	Water for Injection

3 PURPOSE

The aim of this Guidance Notes is to provide guidance to overseas manufacturer of TP and CTGTP to facilitate the submission of a Quality System Dossier (QSD).

4 SCOPE

This Guidance Notes is applicable to manufacturers of TP and CTGTP located outside of Singapore, whose products are registered or intended for registration in Singapore but have not been previously inspected and certified by a PIC/S member authority.

5 QUALITY SYSTEM DOSSIER (QSD)

5.1 GENERAL REQUIREMENTS FOR THE ORGANISATION OF QSD

5.1.1 All documents submitted as part of the QSD should be in English language and referenced to the corresponding sections stated in this Guidance Notes.

5.1.2 Soft copy of the required documents may be submitted using specified electronic storage media, e.g. CD-ROM or other web-sharing platforms that can be accessible by HSA.

5.1.3 Scanned documents should be clear and their details readily legible.

5.1.4 Floor plans, drawings, layout, flow-chart or schematics should be presented in a reasonably clear and legible format.

5.1.5 The completed application form and the QSD should be submitted together with the product registration application.

5.1.6 HSA reserves the right to request for other supporting documents.

5.1.7 Where applicable, provide all relevant information and documents associated with the product to be registered.

6 GENERAL INFORMATION ON COMPANY, MANUFACTURING SITE AND QUALITY MANAGEMENT SYSTEM (QMS)

6.1 COMPANY / ORGANIZATION INFORMATION

Information on the company / organization and its related sites, particularly, any information that is relevant for the understanding of the manufacturing operations. The following information should be included:

6.1.1 Company name and official address of the manufacturing site.

6.1.2 Corresponding / Mailing address (if different from site address).

6.1.3 Identification number of the site as e.g., GPS details, D-U-N-S (Data Universal Numbering System) Number (a unique identification number provided by Dun & Bradstreet) or any other geographic location system of the manufacturing site.

6.1.4 Name, designation and contact details of person(s) as the single point of contact.

6.1.5 Contact details (telephone and email) of key personnel (i.e. Quality Assurance and Production) from the manufacturing site, including 24-hour contact telephone number in the case of product defects or recalls.

6.1.6 Additional warehouse / store address(es) (if different from the site address) including any off-site warehouse(s) used to store starting materials (raw materials), packaging materials, intermediate bulk products and/or finished products.

6.1.7 Brief history of the company since its formation.

6.1.8 Information on whether any other company located in the same manufacturing site (i.e. different company name(s) but having the same site address).

6.2 GENERAL SITE INFORMATION

6.2.1 Description of the site, including the following:

i. Location
ii. Size - land area occupied by the entire manufacturing site
iii. Different buildings and their respective floor areas (e.g. Warehouse, Admin building, Production building, Quality Control Laboratory, Wastewater treatment plant, etc.)
iv. Type of building

6.2.2 The total build-up area, floor area of each floor, floor area of each segregated areas or rooms including production areas, warehouse, quality control laboratories, weighing (dispensing) room, sampling room, changing room and other functional areas.

6.2.3 Description of the immediate environment of the site (describe the surrounding area / industry).

6.2.4 Aerial View / Overview of Manufacturing Site showing the Main Buildings with its surrounding area. Please enclose a location map and photograph(s).

6.2.5 List of GMP inspections of the site within the last 5 years, including your own national authority and/or any foreign Competent Authority. Please include dates, name/country of the Competent Authority who performed the inspection, purpose of inspection (i.e., pre-approval, routine, unannounced, etc.) and the scope of activities/products/dosage forms covered during the inspection.

6.2.6 Provide the latest document (valid manufacturer's licence or manufacturing authorisation) issued by the country's Competent Authority. Specify the period of validity of licence. Any conditions and/or restrictions should also be stated. If the Competent Authority does not issue manufacturing authorisations, this should also be stated.

6.2.7 List the manufacturing activities performed on the site for the different categories of products. E.g. Veterinary products, human medicinal products, non-pharmaceutical products (e.g. food, cosmetic products, health supplements), active ingredients, traditional medicines (herbal medicinal products), investigational medicinal products, etc.

6.2.8 Please specify whether the product is fully manufactured, partially manufactured and/or packaged under a contractual agreement with another company, either as a contract giver and/or contract acceptor.

6.2.9 Type of products manufactured (as described at Appendix I) on the site. Please provide the following lists:

(a) List of dosage forms manufactured on the site,
(b) List of products manufactured on the site, and
(c) List of products other than TP and CTGTP, that are manufactured on the site.

Please include both the product names and brand names and consider one brand as one product.

Please state the designed production capacity and annual production volume of each product.

Please specify which buildings/workshops/lines are used in the manufacturing of the respective products. Please indicate clearly which buildings/workshops/lines will be used to manufacture the proposed product(s) in the product registration application(s) submitted to HSA.

6.2.10 Information on how toxic, hazardous substances and highly sensitizing substance are handled (e.g. in dedicated facilities or on a campaign basis).

6.3 QUALITY MANAGEMENT SYSTEM (QMS)

6.3.1 Brief description of the Quality Management System (QMS) of the manufacturer and reference to the standards used.

6.3.2 Responsibilities related to the maintenance of quality system including senior management.

6.3.3 Please provide a list of other licences, permits and/or certificates issued to the company by any agency, authority, accreditation body or conformity assessment body within the country or overseas. i.e. Information of activities for which the site is accredited and/or certified, including dates and contents/ scope of accreditations, names of accreditation bodies.

6.4 RELEASE PROCEDURE OF FINISHED PRODUCTS

6.4.1 Detailed description of qualification requirements (education and work experience) of the Authorised Person(s) / Qualified Person(s) responsible for batch certification and releasing procedures.

6.4.2 General description of batch certification and releasing procedure.

6.4.3 Role of Authorised Person / Qualified Person in quarantine and release of finished products and in assessment of compliance with the Marketing Authorisation.

6.4.4 The arrangements between Authorised Persons / Qualified Persons when several Authorised Persons / Qualified Persons are involved.

6.4.5 Statement on whether the control strategy employs Process Analytical Technology (PAT) and/or Real Time Release or Parametric Release.

Please enclose the following documents:

6.4.6 Written procedures

6.4.6.1 Batch certification and release

6.5 MANAGEMENT OF SUPPLIERS AND CONTRACTORS

6.5.1 A brief summary of the establishment/knowledge of supply chain and the external audit program.

6.5.2 Brief description of the qualification system of contractors, manufacturers of active ingredients and other critical materials suppliers.

6.5.3 Measures taken to ensure that products manufactured are compliant with TSE (Transmitting animal spongiform encephalopathy) guidelines.

6.5.4 Measures adopted where counterfeit/falsified products, bulk products (e.g., unpacked tablets), active ingredients or excipients are suspected or identified.

Please enclose the following documents:

6.5.5 Written procedures

6.5.5.1 Procurement of starting materials including raw materials, packaging materials, intermediate and bulk products

6.5.5.2 Qualification and approval of suppliers.

6.5.5.3 Receipt, quarantine, sampling, QC testing, storage and release of starting materials including raw materials, packaging materials, intermediate, bulk products as well as finished products.

6.5.6 Supporting documents

6.5.6.1 Inventory record of a critical starting material

6.5.6.2 List of critical materials (including raw materials and packaging materials), their approved suppliers and date of supplier approval. Please provide the name and address of the manufacturer and/or supplier of the materials supplied. Please also indicate the manufacturing processes that the critical materials are used in.

6.5.6.3 A completed copy of supplier qualification and re-qualification (if any) record of a critical material.

6.6 QUALITY RISK MANAGEMENT (QRM)

6.6.1 Brief description of QRM methodologies used by the manufacturer.

Please enclose the following documents:

6.6.2 Written procedures

6.6.2.1 SOP on QRM or any other document(s) in connection to QRM.

6.6.2 Supporting documents

6.6.2.1 An example on application of QRM (if any).

6.7 PRODUCT QUALITY REVIEWS (PQR)

6.7.1 Brief description of methodologies used

Please enclose the following documents:

6.7.2 Written procedures

6.7.2.1 SOP on PQR or a policy document related to PQR

6.7.3 Supporting documents

6.7.3.1 Records of PQR (one typical product per dosage form)

7 PERSONNEL

7.1 ORGANISATION / KEY PERSONNEL

7.1.1 Please provide an updated detailed organisation chart down to production operators and laboratory technicians level incorporating names and designation of staff in the following departments: Warehouse, Production,

QA, QC, Technical/Engineering Support, and Sales/Distribution departments.

7.1.2 Please state the total number of head count (overall) employed and working at the manufacturing site. Number of employees (i.e. head counts including all part-time / full-time, temporary / contract service workers) engaged in each of the following functional departments: quality assurance, production, quality control, storage & distribution, technical and engineering support services.

7.1.3 Operating hours and number of working shifts.

7.1.4 Job description, qualification and experience of key personnel including Head of Production and Head of QA/QC.

7.2 PERSONNEL HYGIENE AND TRAINING

7.2.1 Personnel hygiene requirements, including gowning.

7.2.2 Pre-employment and periodic medical / health examinations policies.

7.2.3 GMP training programme for production, QC/QA, warehousing personnel.

Please enclose the following documents:

7.2.4 Written procedures

- 7.2.4.1 Gowning procedure (for Clean Rooms and Environmentally Controlled Areas)
- 7.2.4.2 Personal Hygiene
- 7.2.4.3 Pre- and Post- Employment Health Examination
- 7.2.4.4 GMP Training Programme for manufacturing and QC/QA laboratory personnel, including initial and continuous training.

7.2.5 Supporting documents

- 7.2.5.1 Training schedule
- 7.2.5.2 Health examination schedule
- 7.2.5.3 Job descriptions of head of production and head of QA/QC
- 7.2.5.4 A Health Examination Record for a production personnel (personal particulars may be redacted).
- 7.2.5.5 GMP Training Records of an operator, a production supervisor, head of production and head of QA/QC.

7.2.6 Recent photographs of the following areas

7.2.6.1 Changing rooms.

8 PREMISES, UTILITIES AND EQUIPMENT

8.1 PREMISES

8.1.1 Short description of plant; size of the site and list of buildings. If the production for different markets, i.e. for local, EU, USA, etc. takes place in different buildings on the site, the buildings should be listed with destined markets identified (if this has not been described above in Section 6.2)

8.1.2 Floor layout plans and description of manufacturing areas with indication of scale and annotate each plan with name.

8.1.2.1 A floor layout plan highlighting all production areas, warehouses, laboratories, weighing (dispensing) room, sampling room and other functional areas including the floor area of each segregated areas (rooms).

8.1.2.2 A floor layout plan indicating locations of all the production equipment, and utilities including location of water treatment plant, air receiver/dryer, chiller, AHU or HVAC system.

8.1.2.3 A floor layout plan indicating clean / non-cleaned areas or controlled / non-controlled areas.

8.1.2.4 A floor plan of the warehouse indicating the following areas:

i. storage areas for different categories of materials including raw materials, packaging materials such as containers, printed packaging materials such as labels, product inserts and unit boxes, intermediate bulk and finished products
ii. receiving bay
iii. dispatch bay
iv. quarantine areas
v. rejected area
vi. recalled or returned materials or product areas
vii. storage area for storing highly active or sensitizing materials or products
viii. storage area for storing highly toxic, hazard and/or sensitizing materials or products

ix. storage area for storing highly flammable materials or products
x. Cold chain (2°C to 8°C) storage room and/or room dedicated for materials or products required specific storage condition (If any)

8.1.3 Storage conditions including temperature and relative humidity and their acceptance criteria.

8.1.4 Nature of construction and finishes of the walls, floor, ceiling, door and window. This should include all processing areas, packaging areas and critical storage areas.

8.1.5 Maintenance of premises and fittings (description of planned preventive maintenance programmes; breakdown and repair activities and their documentation).

Please enclose the following documents:

8.1.6 Written Procedures

8.1.6.1 Cleaning of premises (warehouse, production area / packaging areas).

8.1.6.2 Pest Control programme (inclusive of location mapping of baits in the warehouses, Controlled Non-Classified Areas, etc.).

8.1.6.3 Microbiological (environmental) monitoring programme for manufacturing and primary packaging areas.

8.1.6.4 Temperature and relative humidity monitoring (for production, warehouse/ storage area).

8.1.6.5 Arrangements for the handling of starting materials, packaging materials, bulk and finished products including sampling, quarantine, release and storage, including material flow diagram.

8.1.6.6 Handling/ storage of highly active materials, flammables, corrosives and other hazardous substances.

8.1.7 Supporting documents

8.1.7.1 Pest control programme schedule

8.1.7.2 Microbiological (Environmental) monitoring programme schedule.

8.1.7.3 Storage condition (temperature & humidity) mapping of warehouse and cold rooms (storage areas).

8.1.7.4 Number and location of temperature measuring/monitoring devices or temperature recording sensors in warehouse, production areas and/or primary assembly area(s).

8.1.7.5 Latest cleaning record for premise (e.g. warehouse and production area).

8.1.7.6 Latest pest control record.

8.1.7.7 Latest monthly temperature and relative humidity monitoring record of warehouse and cold room

8.1.7.8 Latest annual/quarterly trend report of water monitoring and microbiological (environmental) monitoring of manufacturing areas.

8.1.8 Recent photographs of the following areas

8.1.8.1 Receiving area for incoming materials.

8.1.8.2 Storage area for raw materials, packaging materials, printed materials such as labels, finished products.

8.1.8.3 Quarantine area for starting materials and finished product.

8.1.8.4 Storage area for highly active materials, flammables, corrosives and other hazardous substances.

8.1.8.5 Reject area

8.1.8.6 Returned goods area

8.2 UTILITIES

8.2.1 HEATING, VENTILATION & AIR CONDITIONING (HVAC) SYSTEMS

8.2.1.1 State the airflow design criteria, indicate the specification of the air supply, temperature, humidity, pressure differentials, air change rate, single pass or recirculation (%).

8.2.1.2 State the filter design and efficiency (e.g. Bag 99% efficiency, HEPA 99.997% efficiency) and the number of filters. Details of any alarms on the HVAC system should be provided.

Details should be given for critical areas with potential risks of airborne contamination. This includes sterile product areas or areas for processing powders, granulation and tableting.

8.2.1.3 Describe the mechanism of air monitoring system and its documentation and enclose the following documents:

i. Number of AHU(s), supplying to which area(s) / room(s) and their capacities.
ii. A floor layout plan indicating location and number of HEPA filters.
iii. An airflow diagram / drawing of the manufacturing facility. Indicating the air supply from AHU(s) and return air, pressure differentials between adjoining areas.
iv. A floor layout plan indicating, if applicable, air classification of the rooms/areas (according to air classification stipulated in Annex 1 of the PIC/S Guide To GMP For Medicinal Products) used for manufacture and packaging operations including weighing (dispensing) room, changing room(s) and sampling room.

8.2.2 WATER TREATMENT / PURIFICATION SYSTEM / PURE STEAM

8.2.2.1 Description of the water quality, water purification systems, including cleaning, maintenance, sanitation, monitoring of quality of water and its documentation.

8.2.2.2 Please enclose schematic drawings of the water purification system including the location of the valves, direction of flow, sampling points and the following information:

i. Material of construction
ii. Types of valves used
iii. Type of pipe works
iv. Filters
v. UV Sterilizers
vi. Pressure Gauges

8.2.2.3 State the usage of pure steam (if any) and indicate the purpose in the processes.

8.2.3 GASES

8.2.3.1 State the different gases (e.g. Nitrogen, compressed air, etc.) used in Production / QC Lab. Indicate the processes which these gases are used and whether there is any product contact with these gases.

Please enclose the following documents:

8.2.4 Written Procedures

8.2.4.1 Maintenance & cleaning of HVAC systems

8.2.4.2 Maintenance, cleaning and sanitation of water purification (e.g. PUW, WFI) systems.

8.2.4.3 Monitoring/testing of water quality including the type and frequency of test.

8.2.5 Supporting documents

8.2.5.1 Annual or quarterly trend report for critical utilities

8.3 EQUIPMENT

8.3.1 Description of major production equipment. If the equipment has additional devices, these should be recorded e.g. automatic weighing machines with a printer; a labeller incorporating a bar code reader for the label; a lot number and expiry date over printer; a freeze drier equipped with a steam sterilization facility.

8.3.2 Description of cleaning and sanitation methods of product contact surfaces (i.e. manual cleaning, Clean-in-Place, etc.) of equipment.

8.3.3 Description of major Quality Control laboratory equipment such as pH meters, chromatographic equipment GC, HPLC with computer systems, particle size analysers. Please also indicate the software (if any) used in each system.

8.3.4 Description of equipment used in the Microbiology laboratory, such as incubators (temperature ranges), facilities for LAL testing, membrane filtration, sterility testing etc.

8.3.5 Information on the use of computerised systems, microprocessors, PLC etc. in the premise.

8.3.6 Maintenance programmes (including planned preventive maintenance and break down maintenance) for equipment.

8.3.7 Calibration programme for measuring equipment and recording instrument.

8.3.8 Means/Methods for tracking scheduling of calibration.

Please enclose the following documents:

8.3.9 Written procedures

8.3.9.1 Maintenance of manufacturing equipment.
8.3.9.2 Cleaning of manufacturing equipment.
8.3.9.3 Cleaning of production vessel and connecting pipes.
8.3.9.4 Calibration of weighing balances and other measuring/ monitoring equipment.

8.3.10 Supporting documents

8.3.10.1 Calibration record of a weighing balance.
8.3.10.2 Cleaning record of a major manufacturing equipment.
8.3.10.3 A list of critical manufacturing equipment with number of units, capacity and age.
8.3.10.4 A list of packaging equipment with number of units and age.
8.3.10.5 A list of quality control instrument with number of units and age.
8.3.10.6 A list of weighing balances with range and accuracy.
8.3.10.7 A list of computer software systems.
8.3.10.8 Calibration and/or maintenance schedule of weighing balances and other measuring / monitoring equipment.
8.3.10.9 Calibration and/or maintenance of production and quality control equipment.

9 DOCUMENTATION

9.1 DOCUMENT MANAGEMENT SYSTEM

9.1.1 Description of documentation control system (i.e. electronic, manual, hybrid).

Please enclose the following documents:

9.1.2 Written procedures

9.1.2.1 Standard operating procedure of documentation system.
9.1.2.2 Document control procedure (including the design, preparation, approval, revision distribution and retention of documents), including management of electronic records.
9.1.2.3 Document change control procedure.
9.1.2.4 Control, storage and the period of retention for documents (including master documents and batch related documents).
9.1.2.5 Deviation management
9.1.2.6 Handling of laboratory investigations, including OOT, OOS.
9.1.2.7 Change control management

9.1.3 Supporting documents

9.1.3.1 Document flow (From design, generation including prepare, review and distribute, till stored or archived).

9.1.3.2 List of SOP and forms, with the effective date and version indicated.

9.1.3.3 List of deviations (last 24 months). Please indicate the date of initiation, description of deviation, initial criticality, final criticality, batches impacted, root cause, CAPA and closure date.

9.1.3.4 List of laboratory investigations (last 24 months). Please indicate the date of initiation, description of OOS/OOT, classification, batches impacted, root cause and closure date.

9.1.3.5 List of change controls (last 24 months). Please indicate the date of initiation, change classification, description of change, status of change, implementation and closure date.

9.1.3.6 Latest specifications for:

i. A raw material (active ingredient)
ii. A raw material (excipient)
iii. A packaging material [e.g. container (vial) etc.]
iv. A printed packaging material (e.g. label, product insert etc.)
v. A finished product

9.1.3.7 A manufacturing deviation record that has been closed out.

9.1.3.8 An OOS investigation record that has been closed out.

9.1.3.9 A change control record that has been closed out.

10 PRODUCTION

10.1 PRODUCTION OPERATIONS

10.1.1 Describe the production operations using flow charts specifying critical production and in-process control parameters. Indicate the equipment train/line used in each process step and specify if any equipment is shared with other products.

10.1.2 Describe other operations being carried out at the site with the existing facilities and specify the types of pharmaceutical products.

10.1.3 If penicillin / cephalosporin, cytotoxic or radioactive substances are handled, provide details on the handling of these products.

10.1.4 Describe how products are identified during production and how in-process control and storage are organized.

10.1.5 When only packaging is undertaken, describe specifically the operations related to labelling, filling etc. Describe the nature of containers used e.g. sachets, tamper proof glass containers, etc.

10.1.6 Arrangements for the handling of rejected materials and products.

Please enclose the following documents:

10.1.7 Written procedures

- 10.1.7.1 Control and issuance of approved raw materials (from warehouse to production).
- 10.1.7.2 Control and issuance of approved packaging materials (from warehouse to production) and coded/printed labels for packaging operation.
- 10.1.7.3 Control and handling of raw material dispensing (weighing).
- 10.1.7.4 Control measures to prevent contamination, cross contamination, adulteration and mix-up.
- 10.1.7.5 Preparation, approval and handling of master formula, batch manufacturing (processing) records (BMR) and batch packaging records (BPR).
- 10.1.7.6 Batch numbering system

10.1.8 Supporting documents

- 10.1.8.1 A list of raw materials used and indicate which materials are used for production of the product concerned.
- 10.1.8.2 A list of packaging materials used (including containers, caps, stoppers, labels, product inserts, unit boxes and outer cartons etc.).
- 10.1.8.3 Material flow (i.e. movement of materials from receiving of incoming starting materials at the receiving bay, release from store to production, movement of intermediate bulk and finished products from production to warehouse, storage and dispatch for distribution) (Not required if already provided in 8.1.6.5).
- 10.1.8.4 Personnel flow
- 10.1.8.5 Waste flow (i.e. movement and disposal of waste materials).
- 10.1.8.6 Master production log (last 24 months). Please indicate product name, batch number, batch size, date of manufacturing, expiry date, batch disposition status, date of disposition and associated deviations/ change controls.
- 10.1.8.7 A complete set of batch manufacturing records.
- 10.1.8.8 A complete set of batch packaging records.

10.1.8.9 Maintenance and usage record of a major production equipment (i.e. equipment log).

10.1.9 Recent photographs of the following areas

10.1.9.1 Sampling/ dispensing area
10.1.9.2 Gowning area
10.1.9.3 Weighing area
10.1.9.4 Production area (including all critical processing areas)
10.1.9.5 Filling area/primary packaging area/secondary packaging area

10.2 PROCESS VALIDATION / QUALIFICATION

10.2.1 Describe the company's general policy for validation / qualification programme for clean room, laminar flow hood, critical production equipment and critical quality control instrument, and their revalidation. The validation programme should include the arrangements of cleaning, process, analytical method, water system, container closure, computerized systems validation etc.

10.2.2 Arrangements for reprocessing or rework.

Please enclose the following documents:

10.2.3 Written procedures

10.2.3.1 Batch re-processing/re-working

10.2.4 Supporting documents

10.2.4.1 Validation Master Plan (VMP).
10.2.4.2 Qualification protocol of clean room and/or LAF booth (if any).
10.2.4.3 Aseptic validation protocol (if any).
10.2.4.4 IQ, OQ and PQ protocol of a critical production equipment
10.2.4.5 IQ, OQ and PQ protocol of a critical quality control instrument equipped with computerised system/software.
10.2.4.6 Cleaning Validation Protocol of a critical production equipment.
10.2.4.7 Computer system validation protocol of a typical software used in production and/or QC laboratory or warehouse.
10.2.4.8 Validation protocol of a container closure system (if any).
10.2.4.9 Validation protocol of water purification system.
10.2.4.10 Process Validation Protocol (One example per dosage form registered).
10.2.4.11 Analytical Method Validation Protocol (if any).

10.2.4.12 Clean Room qualification / re-qualification Protocol (if any).
10.2.4.13 Autoclave qualification / re-qualification Protocol (if any).
10.2.4.14 Lyophilizer qualification / re-qualification Protocol (if any).

11 QUALITY CONTROL (QC)

11.1 QUALITY CONTROL ACTIVITIES

11.1.1 Describe the responsibilities of QC and the activities conducted by the QC department, including elements of QC system e.g. test methods, analytical testing, packaging component testing, biological and microbiological testing.

Please enclose the following documents:

11.1.2 Written procedures
- 11.1.2.1 Quarantine and release of raw materials, packaging materials, intermediate bulk and finished products.
- 11.1.2.2 Preparation, approval and issuance of status labels including ‘quarantine’, ‘sampled’, ‘passed’ or ‘released’, ‘rejected’, ‘cleaned’, ‘not in use’ etc.
- 11.1.2.3 Control of re-test of raw materials.
- 11.1.2.4 Handling and disposal of rejected incoming / production raw materials, packaging materials, intermediate bulk product and finished products.
- 11.1.2.5 Procurement, storage, handling and use of reference standards and laboratory reagents.
- 11.1.2.6 Storage and handling of retention samples including raw materials, packaging materials and finished products.
- 11.1.2.7 Sampling method and sampling plan of raw materials, packaging materials, intermediate bulk and finished products.
- 11.1.2.8 On-going stability testing programme.

11.1.3 Supporting documents
- 11.1.3.1 A list of reagents
- 11.1.3.2 A list of reference standards
- 11.1.3.3 Product/equipment status labels:
  - i. A sample of “quarantine” label
  - ii. A sample of “sampled” label
  - iii. A sample of “passed/approved/released” label
  - iv. A sample of “rejected” label
  - v. A sample of “cleaned” label

11.1.3.4 Stability study schedule
11.1.3.5 A completed copy of QC testing/analytical record.
11.1.3.6 A completed copy of incoming raw material receiving check list.

11.1.4 Recent photographs of the following areas
11.1.4.1 Photographs showing different areas of QC laboratories.

12 OUTSOURCED ACTIVITIES

12.1 CONTRACT MANUFACTURE AND ANALYSIS

12.1.1 Description of the methods in which the GMP compliance of a contract manufacture / assembly or contract analysis (contract testing laboratory), contract acceptor is assessed.

12.1.2 Details of the technical contract including the scope and responsibility between the contract giver and acceptor and the way in which the GMP compliance, or compliance with other appropriate standards, is assessed to ensure product compliance with the Marketing Authorisation / Product Licence.

12.1.3 The selected standards should be assessed for the suitability of its application. The type of products manufactured by the contract acceptor should also be specified.

12.1.4 Use of outside scientific, analytical or other technical assistance in relation to manufacture and analysis.

12.1.5 List of contract manufacturers and laboratories including the addresses and contact information and flow charts of supply-chains for outsourced manufacturing and Quality Control activities, e.g. sterilization of primary packaging material for aseptic processes, testing of starting raw-materials etc.

12.1.6 Brief overview of the responsibility sharing between the contract giver and acceptor with respect to compliance with the Marketing Authorization.

Please enclose the following documents:

12.1.7 Written procedures

12.1.7.1 Contract manufacturing and analysis (Use of external, scientific, analytical or other technical assistance in relation to manufacture and analysis).

12.1.7.2 Qualification / approval of a contract acceptor.

12.1.8 Supporting documents

12.1.8.1 A list of contract manufacturers / assemblers / contract testing laboratories engaged with scopes of the contract(s) i.e. For each external service provider, please provide the Name, Address, Telephone no., Fax no and briefly outline the service provided. For each external contract manufacturer, please also provide short description of its quality system, quality policy and audit programme (self-inspection or audit by external organization undertaken).

12.1.8.2 A supplier audit report of a contract acceptor.

12.1.8.3 A contract agreement with contract acceptor.

13 DISTRIBUTION, COMPLAINTS AND PRODUCT RECALLS

13.1 DISTRIBUTION

13.1.1 Description on arrangements and recording system for distribution.

Please enclose the following documents:

13.1.2 Written procedures

13.1.2.1 Distribution/Export of finished products including security and safety of shipment, ex-factory to end user (both local market and overseas market).

13.1.2.2 Mode of delivery, shipment and storage condition.

13.1.3 Supporting documents

13.1.3.1 A sample of sales (distribution) record of a typical finished product.

13.2 COMPLAINTS, PRODUCT DEFECTS AND RECALLS

13.2.1 Brief description of the systems used for handling complaints, product defects and recalls.

Please enclose the following documents:

13.2.2 Written procedures

13.2.2.1 Handling of product complaints

13.2.2.2 Handling of returned goods

13.2.2.3 Handling of product recalls

13.2.3 Supporting documents

13.2.3.1 A product complaint record that has been closed out

13.2.3.2 A copy of a returned goods record (if any)

13.2.3.3 A copy of a product recall record, or a mock product recall report

14 SELF INSPECTIONS

14.1 GENERAL REQUIREMENTS

14.1.1 Description on the self-inspection system including the composition of self-inspection team, frequency and scope in conducting self- inspection.

Please enclose the following documents:

14.1.2 Written procedures

14.1.2.1 Self-inspection programme

14.1.3 Supporting documents

14.1.3.1 Self-inspection schedule

14.1.3.2 A completed record of the most recent self-inspection

15 MANUFACTURE OF STERILE THERAPEUTIC PRODUCTS OR CTGTP

Additional information should be provided to illustrate contamination control strategies used to minimise risks of microbiological contamination, and of particulate and pyrogen contamination. Quality Assurance is particularly important, and this type of manufacture must strictly follow carefully established and validated methods of preparation and procedure. Sole reliance for sterility or other quality aspects must not be placed on any terminal process or finished product test. This information can be incorporated into relevant sections of the QSD.

15.1 ADDITIONAL REQUIREMENTS

15.1.1 The company's Contamination Control Strategies in accordance with PIC/S PART 1 Annex 1 (If any)

15.1.2 Clean rooms and clean air devices classification overview, including the routine monitoring of clean rooms and clean air devices during operation and the monitoring locations based on a formal risk analysis study and the results obtained during the classification of rooms and/or clean air devices.

15.1.3 Information on the type of process equipment such as biosafety cabinets, isolators, blow/fill/seal units or Restricted Access Barriers System (RABS) used in the manufacturing of the product (if any). Please also provide information on the sterilization cycle (e.g. wet heat, vaporize hydrogen peroxide) as well as the aseptic process preparation, where applicable.

15.1.4 Latest summary of Media fill or Aseptic Process Simulation (APS) runs performed by the company. Please also provide the overview of the APS programme and its qualification summary.

15.1.5 Personnel training on aseptic gowning qualification and requalification.

15.1.6 Sanitation programme for clean areas describing the type of disinfectant used, the frequency of cleaning and the strategy for decommissioning and recommissioning of clean rooms.

15.1.7 Description of location and type of filter used e.g. filter through a sterile filter of nominal pore size of 0.22 micron (or less), (if the process is a filtration method for sterilisation in the final container), including the hold time studies for the bulk products and the bioburden monitoring strategy prior to aseptic filtration.

15.1.8 Provide an overview of the filling process - how the glass containers (e.g. vials) are prepared prior entry to the filling lines, preparation of aseptic connections etc.

15.1.9 Provide an overview of the vial capping process. Indicate whether it is an aseptic process using sterilised caps or as a clean process outside the aseptic core (If applicable).

15.1.10 Describe the visual checks, indicating whether filled containers of parenteral products are inspected individually for extraneous contamination or other defects.

15.1.11 Any other relevant information pertaining to the aseptic programme deployed by the company on site.

16 APPENDIX TO THIS GUIDANCE NOTE

Appendix I: TYPE OF PRODUCTS MANUFACTURED
Appendix II: LIST OF DOCUMENTS REQUIRED FOR SUBMISSION

17 REFERENCE DOCUMENTS

GUIDE-MQA-20: Guidance Notes on GMP Conformity Assessment of an Overseas Manufacturer

END OF DOCUMENT

APPENDIX I: TYPE OF PRODUCTS MANUFACTURED

A. Sterile products

A.1 Liquid dosage forms (large volume solutions, including LVP and rinsing solutions)

A.1.1 Aseptically prepared
A.1.2 Terminally sterilized

A.2 Liquid dosage forms (small volume solutions, including SVP and eye drops)

A.2.1 Aseptically prepared
A.2.2 Terminally sterilized

A.3 Semi-solid dosage forms

A.4 Solid dosage forms

A.4.1 Solid fill
A.4.2 Freeze-dried

B. Non-sterile products

B.1 Liquid dosage forms

B.2 Semi-solid dosage forms

B.3 Solid dosage forms

B.3.1 Unit dose form (e.g. tablets, capsules, suppositories, pessaries)
B.3.2 Multi dose form (e.g. powders, granules)

C. Biological products

C.1 Vaccines

C.2 Sera

C.3 Blood products

C.4 Others (describe) (Example: monoclonal antibodies, mAb)

D. Specifically toxic and hazardous substances

D.1 Penicillins

D.2 Cephalosporins

D.3 Hormones

D.4 Cytostatics

D.5 Others (describe)

E. Packaging only

E.1 Liquid dosage forms

E.2 Semi solid dosage forms

E.3 Solid dosage forms

F. Contract manufacturing (kind of products)

Company reported upon is:

F.1 Acceptor

F.2 Giver

G. Drugs for clinical trials

H. Others
Including products not subjected to registration/licensing by the Competent Authorities (e.g. veterinary products, cosmetics, health/dietary supplements, etc).

APPENDIX II: LIST OF DOCUMENTS REQUIRED FOR SUBMISSION

Please refer to the respective sections for the details to be submitted in each document listed below.

Section	Procedures	Supporting docs	Photographs
6.4 Release Procedure of Finished Products	• Batch certification and release	• None	None
6.5 Management of Suppliers and contractors	• Procurement of starting materials • Supplier qualification • Management, sampling and testing of incoming materials	• Inventory record of a critical starting material • List of critical materials, incl. raw materials and packaging materials • Supplier qualification and re-qualification record of a critical material	None
6.6 Quality Risk Management	• Quality Risk Management (QRM)	• An example of application of QRM (if any)	None
6.7 Product Quality Reviews	• Product Quality Review (PQR)	• PQR records	None
7.2 Personnel Hygiene and Training	• Gowning • Personal Hygiene • Health Examination • GMP Training programme	• Training schedule • Health examination schedule • Job descriptions of Production and QA/QC Head • Training records: - Operator - Production Supervisor - Production Head - QA/QC Head	• Changing rooms

Section	Procedures	Supporting docs	Photographs
8.1 Premises	• Premise cleaning • Pest control programme • Environmental monitoring programme • Temperature and relative humidity monitoring • Management of starting materials, bulk and finished product • Handling/storage of dangerous materials: - Highly active materials - Flammables - Corrosives - Other hazardous substances	• Pest control schedule • Environmental monitoring schedule • Temperature/humidity mapping of warehouse and cold rooms • Location of temperature monitoring devices in warehouse, production area and/or assembly areas • Latest premise cleaning record • Latest pest control record • Latest monthly temperature and humidity monitoring record • Latest annual/quarterly trend report of water monitoring & environmental monitoring	• Receiving area for incoming materials • Storage areas: - Raw materials - Packaging materials - Printed materials - Finished product • Quarantine areas: - Starting materials - Finished product • Storage area for dangerous materials • Reject area • Returned goods area
8.2 Utilities	• Maintenance & cleaning of HVAC systems • Maintenance, cleaning and sanitation of water purification systems • Water monitoring and testing programme	• Annual or quarterly trend report for critical utilities	None
8.3 Equipment	• Maintenance of manufacturing equipment • Cleaning of manufacturing equipment • Cleaning of production vessels and connecting pipes • Calibration of weighing balances and other measuring/ monitoring equipment	• Calibration record of weighing balance • Cleaning record of a major manufacturing equipment • List of critical manufacturing equipment • List of packaging equipment • List of QC equipment • List of weighing balances	None

Section	Procedures	Supporting docs	Photographs
		• List of computer software systems • Calibration/ maintenance schedule of weighing balances and other measuring/monitoring equipment • Calibration/ maintenance of production and quality control equipment	
9.1 Document Management System	• Documentation system • Document control • Document change control • Storage and retention of documents • Deviation management • Handling of laboratory investigations • Change control management	• Document lifecycle flow (creation to archival/ destruction) • List of SOP and forms • List of deviations • List of laboratory investigations • List of change controls • Latest specifications for: - Active ingredient - Excipient - Packaging material - Printed packaging material - Finished product • Manufacturing deviation record • Laboratory investigation record • Change control record	None
10.1 Production Operations	• Control and issuance of approved raw materials • Control and issuance of approved packaging materials and printed labels • Dispensing of raw material • Cross contamination controls • Management and approval of Batch Manufacturing Records and Batch Packaging Records	• List of raw materials used • List of packaging materials used • Material flow • Personnel flow • Waste flow • Master production log • Batch manufacturing record • Batch packaging record • Maintenance and usage record of a major production equipment	• Sampling/ dispensing area • Gowning area • Weighing area • Production area (all critical processing areas) • Filling area/ primary packaging area/ secondary packaging area

Section	Procedures	Supporting docs	Photographs
	• Batch numbering system		
10.2 Process Validation/ Qualification	• Batch re-processing/ re-work	• Validation master plan • Qualification protocol of clean room and/ or LAF booth • Aseptic validation protocol • IQ, OQ, PQ protocol of a critical production equipment • IQ, OQ, PQ protocol of a critical quality control instrument, equipped with computerised system/software • Cleaning validation protocol of a critical production equipment • Computer system validation protocol • Validation protocol of a container closure system • Validation protocol of water purification system • Process validation protocol • Analytical method validation protocol • Clean room qualification/ re-qualification protocol • Autoclave qualification/ re-qualification protocol • Lyophilizer qualification / re-qualification protocol	None

Section	Procedures	Supporting docs	Photographs
11.1 Quality Control Activities	• Quarantine and release of raw materials, packaging materials, bulk intermediates and finished products • Management of status labels (e.g. quarantine, sampled, released, rejected, etc) • Re-testing of raw materials • Management of rejected incoming/ production materials • Management of reference standards and laboratory reagents • Management of retention samples • Sampling procedure and sampling plan of incoming materials • On-going stability testing programme	• List of reagents used • List of reference standards used • Product/equipment status labels: - "Quarantine" label - "Sampled" label - "Passed/approved/released" label - "Rejected" label - "Cleaned" label • Stability study schedule • QC testing record • Incoming raw material receiving checklist	• QC laboratories
12.1 Contract Manufacture and Analysis	• Contract manufacturing and contract testing • Qualification/ approval of contract acceptor	• List of contract acceptors/givers • Supplier audit report of a contract acceptor • Contract agreement with a contract acceptor	None

Section	Procedures	Supporting docs	Photographs
13.1 Distribution	• Distribution of finished products • Mode of delivery, shipment and storage condition	• Distribution record of a finished product	None
13.2 Complaints, Product Defects and Recalls	• Handling of product complaints • Handling of returned goods • Handling of product recalls	• Product complaint record • Returned goods record • Product recall record or mock product recall report	None
14.1 Self-Inspections	• Self-inspection programme	• Self-inspection schedule • Self-inspection record	None

HEALTH SCIENCES AUTHORITY

www.hsa.gov.sg

Contact Information:

For further information, please contact:

GMP Inspectorate Division
Integrated Health Regulation Group
Health Sciences Authority

11 Biopolis Way #11-01 Helios
Singapore 138667
Website: www.hsa.gov.sg

For feedback, please go to:
https://www.hsa.gov.sg/contact-us

HSA Health Sciences Authority

Note: This is an administrative update to the nomenclature on 01 November 2026.
The document content and technical requirements remain unchanged.