(สำเนา)

ประกาศกองควบคุมยา

เรื่อง การยื่นคำขอขึ้นทะเบียนตำรับยาใหม่ (New Drugs) กรณีเปลี่ยนแปลงแหล่งผลิตยาสำเร็จรูป

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ตามประกาศสำนักงานคณะกรรมการอาหารและยา เรื่อง การขึ้นทะเบียนตำรับยาตามข้อตกลง ASEAN Harmonization Product on Pharmaceutical Registration ลงวันที่ 26 ธันวาคม 2551 ให้การขึ้นทะเบียนตำรับยาใหม่ ยาสามัญใหม่ ยาสามัญ และยาชีววัตถุ ตั้งแต่วันที่ 1 มกราคม 2552 เป็นต้นไป ให้ยื่นคำขอขึ้นทะเบียนตำรับยาแบบ ASEAN Harmonization เพียงแบบเดียว โดยให้ยื่นคำขอตามคู่มือ/หลักเกณฑ์ รวมทั้งข้อกำหนด รายละเอียดปรากฏตามประกาศฯ ทั้งนี้ไม่รวมถึงการยื่นคำขอขึ้นทะเบียนใหม่ในกรณีการเปลี่ยนแปลงแหล่งผลิตโดยต้องเป็นไปตามหลักเกณฑ์ที่กองควบคุมยาประกาศกำหนดนั้น

กองควบคุมยาเห็นควรกำหนดหลักเกณฑ์สำหรับการยื่นคำขอขึ้นทะเบียนตำรับยาใหม่ (New Drugs) กรณีเปลี่ยนแปลงแหล่งผลิตยาสำเร็จรูป ดังต่อไปนี้

1. คำขอขึ้นทะเบียนตำรับยาใหม่ (New Drugs) ที่เข้าข่ายหลักเกณฑ์นี้ ต้องมีคุณสมบัติดังนี้

เป็นคำขอขึ้นทะเบียนตำรับยานำหรือสั่งฯ ซึ่งอ้างอิงทะเบียนตำรับยานำหรือสั่งฯของตนเองโดยเปลี่ยนแปลงเฉพาะผู้ผลิตต่างประเทศซึ่งผลิตยาสำเร็จรูป

2. ในการยื่นคำขอขึ้นทะเบียนตำรับยาให้ยื่นเอกสารดังต่อไปนี้

2.1 **<u>ส่วนที่1 (Part1)</u>** เอกสารข้อมูลทั่วไปและข้อมูลของผลิตภัณฑ์ (ADMINISTRATIVE DATA AND PRODUCT INFORMATION) ใช้ตามคู่มือ/หลักเกณฑ์การขึ้นทะเบียนตำรับยาใหม่ (New Drugs) แบบ ASEAN Harmonization

2.2 **<u>ส่วนที่ 2 (Part 2)</u>** เอกสารหลักฐานแสดงข้อมูลคุณภาพของยา (QUALITY DOCUMENT) ให้ยื่นข้อมูลตามรายละเอียดที่ปรากฏในเอกสาร “ ข้อกำหนดและเอกสารที่ต้องยื่นในการขึ้นทะเบียนตำรับยาใหม่ (New Drugs) แบบ ASEAN HARMONIZATION กรณีเปลี่ยนแปลงแหล่งผลิตยาสำเร็จรูป” แนบท้ายประกาศ

2.3 กรณีที่ผู้ยื่นคำขอรับรองว่าเอกสารกำกับยามีข้อความเหมือนทะเบียนตำรับยาเดิมทุกประการ ผู้ยื่นคำขอ**<u>ไม่ต้องยื่น</u>**เอกสารในส่วนที่ 3 (Part 3) เอกสารหลักฐานแสดงข้อมูลที่ไม่ใช่การศึกษาทางคลินิก (NONCLINICAL DOCUMENT) และ ส่วนที่ 4 (Part 4) เอกสารหลักฐานแสดงข้อมูลการศึกษาทางคลินิก (CLINICAL DOCUMENT)

2.4 กรณีที่ข้อความในเอกสารกำกับยาไม่เหมือนทะเบียนตำรับยาเดิม ผู้ยื่นคำขอต้องยื่นเอกสารในส่วนที่ 3 (Part 3) เอกสารหลักฐานแสดงข้อมูลที่ไม่ใช่การศึกษาทางคลินิก (NONCLINICAL DOCUMENT) และ ส่วนที่ 4 (Part 4) เอกสารหลักฐานแสดงข้อมูลการศึกษาทางคลินิก (CLINICAL DOCUMENT) ตามคู่มือ/หลักเกณฑ์การขึ้นทะเบียนตำรับยาใหม่ (New Drugs) แบบ ASEAN Harmonization และข้อกำหนดและเอกสารที่ต้องยื่นในการขึ้นทะเบียนตำรับยาใหม่(New Drugs) แบบ ASEAN Harmonization จำแนกตามประเภทยาใหม่

ทั้งนี้ ตั้งแต่บัดนี้เป็นต้นไป

จึงประกาศให้ทราบโดยทั่วกัน

ประกาศ ณ วันที่ 24 เมษายน พ.ศ. 2552

(ลงชื่อ) วินิต อัศวกิจวิรี

(นายวินิต อัศวกิจวิรี)

ผู้อำนวยการกองควบคุมยา

ข้อกำหนดในการขึ้นทะเบียนตำรับยาใหม่ (New Drugs) แบบ ASEAN HARMONIZATION กรณีเปลี่ยนแปลงแหล่งผลิตยาสำเร็จรูป

ข้อมูลด้าน Quality

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
S	DRUG SUBSTANCE			
S1	General Information			
	1.1 Nomenclature	- International non-proprietary name (INN) - Compendial name if relevent - Registry number of chemical abstract service (CAS) - Laboratory code(if applicable) - Chemical name (s)	√	
	1.2 Structure	- Structural formula, including relative and absolute stereochemistry, the molecular formula, and the relative molecular mass.	√	
	1.3 General Properties	- Physicochemical characteristics and other relevant properties.	√	
S2	Manufacture			
	2.1 Manufacturer (s)	Name and address of the manufacturer (s).	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.2 Description of Manufacturing Process and Process Controls	- The description of the drug substance manufacturing process and process control that represents the applicant's commitment for the manufacture of the drug substances.	√	
	2.3 Control of Materials	- Starting materials, solvents, reagents, catalysts, and any other materials used in the manufacture of the drugs substance indicating where each material is used in the process. Tests and acceptance criteria of these materials.		
	2.4 Controls of Critical Steps and Intermediates	- Critical steps : Tests and acceptance criteria, with justification including experimental data, performed at critical step of the manufacturing process to ensure that the process is controlled. - Intermediates : Specifications and analytical procedure, if any, for intermediates isolated during the process.		

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.5 Process Validation and/or Evaluation	- Process validation and/or evaluation studies for aseptic processing and sterilization.		
	2.6 Manufacturing Process Development	- Description and discussion of significant changes made to the manufacturing process and/or manufacturing site of the drug substance used in producing non-clinical, scale-up, pilot and if available, production scale batches. - The development history of the manufacturing process as described in S2.2.		
S3	Characterisation			
	3.1 Elucidation of Structure and other characteristics	- Confirmation of structure based on e.g. synthetic route and spectral analyses. - Compendial requirements or appropriate information from the manufacturer		
	3.2 Impurities	- Summary of impurities monitored or tested for during and after manufacture of drug substance	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		Compendial requirements or appropriate information from the manufacturer		
S4	Control of Drug Substance			
	4.1 Specification	- Detailed specification, tests and acceptance criteria. Compendial specification or appropriate information from the manufacturer	√	
	4.2 Analytical Procedures	- The analytical procedures used for testing of drug substance. Compendial methods or appropriate information from the manufacturer	√	
	4.3 Validation of Analytical Procedures	- Analytical validation information, including experimental data for the analytical procedures used for testing the drug substance Non-compendial methods	√	
	4.4 Batch Analyses	- Description of batches and results of the analysis to establish the specification	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	4.5 Justification of specification	- Justification for drug substance specification		
S5	Reference Standards or Materials	- Information on the reference standards or reference materials used for testing of the drug substance. Compendial reference standard.	√	
S6	Container Closure System	- Descriptions of the container closure systems.		
S7	Stability	- Stability report. - Literature data.		
P	DRUG PRODUCT			
P1	Description and Composition	- Description - Dosage form and characteristics. - Accompanying reconstitution diluent (s) if any. Type of container and closure used for the	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		dosage form and reconstitution diluent (s), if - applicable. Composition Name, quantity stated in metric weight or measures, function and quality standard reference.		
P2	Pharmaceutical Development			
	2.1 Information on Development Studies	- Data on the development studies conducted to establish that the dosage form, formulation, manufacturing process, container closure system, microbiological attributes and usage instruction are appropriate for the purpose specified in the application.		
	2.2 Components of the Drug Product	- Active ingredient - Justification of the compatibility of the active ingredient with excipients listed in P1 - In case of combination products, justification		

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		of the compatibility of active ingredients with each other. - Literature data. - Excipients - Justification of the choice of excipients listed in P1, which may influence the drug product performance.		
	2.3 Finished Product	- Formulation Development A brief summary describing the development of the finished product, (taking into consideration the proposed route of administration and usage for NCE). - Overages Justification of any overage in the formulation (s) described in P1. - Physicochemical Properties Parameters relevant to the performance of the finished product e.g pH, dissolution.		

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.4 Manufacturing Process Development	- Selection and optimisation of the manufacturing process - Differences between the manufacturing process (es) used to produce pivotal clinical batches and the process described in P.3.2, if applicable		
	2.5 Container Closure System	- Suitability of the container closure system used for the storage, transportation (shipping) and use of the finished product.		
	2.6 Microbiological Attributes	- Microbiological attributes of the dosage form, where appropriate		
	2.7 Compatibility	- Compatibility of the finished product with reconstitution diluent (s) or dosage devices. - Literature data		
P3	Manufacture			
	3.1 Batch Formula	- Name and quantities of all ingredients	√	
	3.2 Manufacturing Process and Process Control	- Description of manufacturing process and process control	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	3.3 Control of Critical Steps and Intermediates	- Tests and acceptance criteria	√	
	3.4 Process Validation and/or Evaluation	- Description, documentation, and results of the validation and/or evaluation studies for critical steps or critical assays used in the manufacturing process.	√	
P4	Control of excipients			
	4.1 Specifications	- Specifications for excipients Compendial requirements or appropriate information from the manufacturer	√	
	4.2 Analytical Procedures	- Analytical procedures used for testing excipients where appropriate. Compendial requirements or appropriate information from the manufacturer	√	
	4.3 Excipient of Human or Animal Origin	- Information regarding sources and or adventitious agents. Compendial requirements or appropriate information from the manufacturer	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	4.4 Novel Excipients	- For excipient (s) used for the first time in a finished product or by a new route of administration, full details of manufacture, characterization and controls, with cross reference to supporting safety data (non-clinical or clinical)		
P5	Control of Finished Product			
	5.1 Specification	- The specification (s) for the finished product.	√	
	5.2 Analytical Procedures	- Analytical procedures used for testing the finished product	√	
	5.3 Validation of Analytical Procedures	- Information including experimental data, for the analytical procedure used for testing the finished product Non-compendial method - Verification of compendial method applicability-precision & accuracy	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	5.4 Batch Analyses	- Description and test results of all relevant batches.	√	
	5.5 Characterisation of Impurities	- Information on the characterisation of impurities Compendial requirements or appropriate information from the manufacturer	√	
	5.6 Justification of Specification(s)	- Justification of the proposed finished product specification (s). Compendial requirements or appropriate information from the manufacturer		
P6	Reference Standards or Materials	- Information on the reference standards or reference materials used for testing of the finished product. Compendial requirements or appropriate information from the manufacturer	√	
P7	Container Closure System	- Specification and control of primary and secondary packaging material, type of packaging and the package size, details of	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		packaging inclusion (e.g. desiccant, etc)		
P8	Stability	- Stability report : data demonstrating that product is stable through its proposed shelf life. Commitment on post approval stability monitoring	√	
P9	Product Interchangeability Equivalence evidence	- In Vitro Comparative dissolution study as required	√	
		- In Vivo Bioequivalence study as required		

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

เอกสารที่ต้องยื่นในการขึ้นทะเบียนตำรับยาใหม่ (New Drugs) แบบ ASEAN HARMONIZATION กรณีเปลี่ยนแปลงแหล่งผลิตยาสำเร็จรูป

ข้อมูลด้าน Quality

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	Section A. Table of content		√	
S	Section B. Quality Overall Summary DRUG SUBSTANCE			
S1	General Information			
	1.1 Nomenclature	- International non-proprietary name (INN) - Compendial name if relevent - Registry number of chemical abstract service (CAS) - Laboratory code(if applicable) - Chemical name (s)	√	
	1.2 Structure	- Structural formula, including relative and absolute stereochemistry, the molecular formula, and the relative molecular mass.	√	
	1.3 General Properties	- Physicochemical characteristics and other relevant properties.	√	
S2	Manufacture			
	2.1 Manufacturer (s)	Name and address of the manufacturer (s).	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.2 Description of Manufacturing Process and Process Controls	- The description of the drug substance manufacturing process and process control that represents the applicant's commitment for the manufacture of the drug substances.	√	
	2.3 Control of Materials	- Starting materials, solvents, reagents, catalysts, and any other materials used in the manufacture of the drugs substance indicating where each material is used in the process. Tests and acceptance criteria of these materials.		
	2.4 Controls of Critical Steps and Intermediates	- Critical steps : Tests and acceptance criteria, with justification including experimental data, performed at critical step of the manufacturing process to ensure that the process is controlled. - Intermediates : Specifications and analytical procedure, if any, for intermediates isolated during the process.		
	2.5 Process Validation and/or Evaluation	- Process validation and/or evaluation studies for aseptic processing and sterilization.		
	2.6 Manufacturing Process Development	- Description and discussion of significant		

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		changes made to the manufacturing process and/or manufacturing site of the drug substance used in producing non-clinical, scale-up, pilot and if available, production scale batches. - The development history of the manufacturing process as described in S2.2.		
S3	Characterisation			
	3.1 Elucidation of Structure and other characteristics	- Confirmation of structure based on e.g. synthetic route and spectral analyses. - Compendial requirements or appropriate information from the manufacturer		
	3.2 Impurities	- Summary of impurities monitored or tested for during and after manufacture of drug substance Compendial requirements or appropriate information from the manufacturer	√	
S4	Control of Drug Substance			
	4.1 Specification	- Detailed specification, tests and acceptance criteria.	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		Compendial specification or appropriate information from the manufacturer		
	4.2 Analytical Procedures	- The analytical procedures used for testing of drug substance. Compendial methods or appropriate information from the manufacturer	√	
	4.3 Validation of Analytical Procedures	- Analytical validation information, including experimental data for the analytical procedures used for testing the drug substance Non-compendial methods	√	
	4.4 Batch Analyses	- Description of batches and results of the analysis to establish the specification	√	
	4.5 Justification of specification	- Justification for drug substance specification		
S5	Reference Standards or Materials	- Information on the reference standards or reference materials used for testing of the drug substance.	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		Compendial reference standard.		
S6	Container Closure System	- Descriptions of the container closure systems.		
S7	Stability	- Stability report. - Literature data.		
P	DRUG PRODUCT			
P1	Description and Composition	- Description - Dosage form and characteristics. - Accompanying reconstitution diluent (s) if any. - Type of container and closure used for the dosage form and reconstitution diluent (s), if applicable. Composition Name, quantity stated in metric weight or measures, function and quality standard reference.	√	
P2	Pharmaceutical Development			

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.1 Information on Development Studies	- Data on the development studies conducted to establish that the dosage form, formulation, manufacturing process, container closure system, microbiological attributes and usage instruction are appropriate for the purpose specified in the application.		
	2.2 Components of the Drug Product	- Active ingredient - Justification of the compatibility of the active ingredient with excipients listed in P1 - In case of combination products, justification of the compatibility of active ingredients with each other. - Literature data. - Excipients - Justification of the choice of excipients listed in P1, which may influence the drug product performance.		

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.3 Finished Product	- Formulation Development A brief summary describing the development of the finished product, (taking into consideration the proposed route of administration and usage for NCE). - Overages Justification of any overage in the formulation (s) described in P1. - Physicochemical Properties Parameters relevant to the performance of the finished product e.g pH, dissolution.		
	2.4 Manufacturing Process Development	- Selection and optimisation of the manufacturing process - Differences between the manufacturing process (es) used to produce pivotal clinical batches and the process described in P.3.2, if applicable		
	2.5 Container Closure System	- Suitability of the container closure system used		

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		for the storage, transportation (shipping) and use of the finished product.		
	2.6 Microbiological Attributes	- Microbiological attributes of the dosage form, where appropriate		
	2.7 Compatibility	- Compatibility of the finished product with reconstitution diluent (s) or dosage devices. - Literature data		
P3	Manufacture			
	3.1 Batch Formula	- Name and quantities of all ingredients	√	
	3.2 Manufacturing Process and Process Control	- Description of manufacturing process and process control	√	
	3.3 Control of Critical Steps and Intermediates	- Tests and acceptance criteria	√	
	3.4 Process Validation and/or Evaluation	- Description, documentation, and results of the validation and/or evaluation studies for critical steps or critical assays used in the manufacturing process.	√	
P4	Control of excipients			
	4.1 Specifications	- Specifications for excipients	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		Compendial requirements or appropriate information from the manufacturer		
	4.2 Analytical Procedures	- Analytical procedures used for testing excipients where appropriate. Compendial requirements or appropriate information from the manufacturer	√	
	4.3 Excipient of Human or Animal Origin	- Information regarding sources and or adventitious agents. Compendial requirements or appropriate information from the manufacturer	√	
	4.4 Novel Excipients	- For excipient (s) used for the first time in a finished product or by a new route of administration, full details of manufacture, characterization and controls, with cross reference to supporting safety data (non-clinical or clinical)		
P5	Control of Finished Product			
	5.1 Specification	- The specification (s) for the finished product.	√	

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	5.2 Analytical Procedures	- Analytical procedures used for testing the finished product	√	
	5.3 Validation of Analytical Procedures	- Information including experimental data, for the analytical procedure used for testing the finished product Non-compendial method - Verification of compendial method applicability- precision & accuracy	√	
	5.4 Batch Analyses	- Description and test results of all relevant batches.	√	
	5.5 Characterisation of Impurities	- Information on the characterization of impurities Compendial requirements or appropriate information from manufacturer	√	
	5.6 Justification of Specification(s)	- Justification of the proposed finished product specification (s). Compendial requirements or appropriate information from the manufacturer		

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
P6	Reference Standards or Materials	- Information on the reference standards or reference materials used for testing of the finished product. Compendial requirements or appropriate information from the manufacturer	√	
P7	Container Closure System	- Specification and control of primary and secondary packaging material, type of packaging and the package size, details of packaging inclusion (e.g. desiccant, etc)	√	
P8	Stability	- Stability report : data demonstrating that product is stable through its proposed shelf life. Commitment on post approval stability monitoring	√	
P9	Product Interchangeability Equivalence evidence	- In Vitro Comparative dissolution study as required	√	
		- In Vivo Bioequivalence study as required		

[a] If the product contains previously registered NCE but not submitted by the same applicant the requirement of NCE must be followed.

No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
S	Section C. Body of data DRUG SUBSTANCE			
S1	General Information 1.1 Nomenclature	- International non-proprietary name (INN) - Compendial name if relevent - Registry number of chemical abstract service (CAS) - Laboratory code(if applicable) - Chemical name (s)	√	
	1.2 Structure	- Structural formula, including relative and absolute stereochemistry, the molecular formula, and the relative molecular mass.	√	
	1.3 General Properties	- Physicochemical characteristics and other relevant properties.	√	
S2	Manufacture 2.1 Manufacturer (s)	Name and address of the manufacturer (s)	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.2 Description of Manufacturing Process and Process Controls	- The description of the drug substance manufacturing process and process control that represents the applicant's commitment for the manufacture of the drug substances.	√	
	2.3 Control of Materials	- Starting materials, solvents, reagents, catalysts, and any other materials used in the manufacture of the drugs substance indicating where each material is used in the process. Tests and acceptance criteria of these materials.		
	2.4 Controls of Critical Steps and Intermediates	- Critical steps : Tests and acceptance criteria, with justification including experimental data, performed at critical step of the manufacturing process to ensure that the process is controlled. - Intermediates : Specifications and analytical procedure, if any, for intermediates isolated during the process.		
	2.5 Process Validation and/or Evaluation	- Process validation and/or evaluation studies for aseptic processing and sterilization.		

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	2.6 Manufacturing Process Development	- Description and discussion of significant changes made to the manufacturing process and/or manufacturing site of the drug substance used in producing non-clinical, scale-up, pilot and if available, production scale batches. - The development history of the manufacturing process as described in S2.2.		
S3	Characterisation			
	3.1 Elucidation of Structure and other characteristics	- Confirmation of structure based on e.g. synthetic route and spectral analyses. - Compendial requirements or appropriate information from the manufacturer		
	3.2 Impurities	- Summary of impurities monitored or tested for during and after manufacture of drug substance Compendial requirements or appropriate information from the manufacturer	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
S4	Control of Drug Substance			
	4.1 Specification	- Detailed specification, tests and acceptance criteria.	√	
	4.2 Analytical Procedures	- The analytical procedures used for testing of drug substance. Compendial methods or appropriate information from the manufacturer	√	
	4.3 Validation of Analytical Procedures	- Analytical validation information, including experimental data for the analytical procedures used for testing the drug substance Non-compendial methods	√	
	4.4 Batch Analyses	- Description of batches and results of the analysis to establish the specification	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	4.5 Justification of specification	- Justification for drug substance specification		
S5	Reference Standards or Materials	- Information on the reference standards or reference materials used for testing of the drug substance. Compendial reference standard.	√	
S6	Container Closure System	- Descriptions of the container closure systems.		
S7	Stability	- Stability report. - Literature data.		
P	DRUG PRODUCT			
P1	Description and Composition	- Description - Dosage form and characteristics. - Accompanying reconstitution diluent (s) if any. - Type of container and closure used for the dosage form and reconstitution diluent (s), if applicable.	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		Composition Name, quantity stated in metric weight or measures, function and quality standard reference.		
P2	Pharmaceutical Development			
	2.1 Information on Development Studies	- Data on the development studies conducted to establish that the dosage form, formulation, manufacturing process, container closure system, microbiological attributes and usage instruction are appropriate for the purpose specified in the application.		
	2.2 Components of the Drug Product	- Active ingredient - Justification of the compatibility of the active ingredient with excipients listed in P1 - In case of combination products, justification of the compatibility of active ingredients with each other. - Literature data - Excipients		

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		- Justification of the choice of excipients listed in P1, which may influence the drug product performance.		
	2.3 Finished Product	- Formulation Development A brief summary describing the development of the finished product, (taking into consideration the proposed route of administration and usage for NCE). - Overages Justification of any overage in the formulation (s) described in P1. - Physicochemical Properties Parameters relevant to the performance of the finished product e.g pH, dissolution.		
	2.4 Manufacturing Process Development	- Selection and optimisation of the manufacturing process		

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		- Differences between the manufacturing process (es) used to produce pivotal clinical batches and the process described in P.3.2, if applicable		
	2.5 Container Closure System	- Suitability of the container closure system used for the storage, transportation (shipping) and use of the finished product.		
	2.6 Microbiological Attributes	- Microbiological attributes of the dosage form, where appropriate		
	2.7 Compatibility	- Compatibility of the finished product with reconstitution diluent (s) or dosage devices. - Literature data		
P3	Manufacture			
	3.1 Batch Formula	- Name and quantities of all ingredients		
	3.2 Manufacturing Process and Process Control	- Description of manufacturing process and process control	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	3.3 Control of Critical Steps and Intermediates	- Tests and acceptance criteria	√	
P3	3.4 Process Validation and/or Evaluation	- Description, documentation, and results of the validation and/or evaluation studies for critical steps or critical assays used in the manufacturing process.	√	
P4	Control of excipients			
	4.1 Specifications	- Specifications for excipients Compendial requirements or appropriate information from the manufacturer	√	
	4.2 Analytical Procedures	- Analytical procedures used for testing excipients where appropriate. Compendial requirements or appropriate information from the manufacturer	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
	4.3 Excipient of Human or Animal Origin	- Information regarding sources and or adventitious agents. Compendial requirements or appropriate information from the manufacturer		
	4.4 Novel Excipients	- For excipient (s) used for the first time in a finished product or by a new route of administration, full details of manufacture, characterization and controls, with cross reference to supporting safety data (non-clinical or clinical		
P5	Control of Finished Product			
	5.1 Specification	- The specification (s) for the finished product.	√	
	5.2 Analytical Procedures	- Analytical procedures used for testing the finished product	√	
	5.3 Validation of Analytical Procedures	- Information including experimental data, for the analytical procedure used for testing the finished product	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
		Non-compendial method - Verification of compendial method applicability- precision & accuracy		
P5	5.4 Batch Analyses	- Description and test results of all relevant batches.	√	
	5.5 Characterisation of Impurities	- Information on the characterisation of impurities Compendial requirements or appropriate information from the manufacturer	√	
	5.6 Justification of Specification(s)	- Justification of the proposed finished product specification (s). Compendial requirements or appropriate information from the manufacturer		
P6	Reference Standards or Materials	- Information on the reference standards or reference materials used for testing of the finished product. Compendial requirements or appropriate information from the manufacturer	√	

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No.	PARAMETERS	COMPONENTS	REQUIREMENTS New Source[a]	หมายเหตุ
P7	Container Closure System	- Specification and control of primary and secondary packaging material, type of packaging and the package size, details of packaging inclusion (e.g. desiccant, etc)	√	
P8	Stability	- Stability report : data demonstrating that product is stable through its proposed shelf life. Commitment on post approval stability monitoring	√	
P9	Product Interchangeability Equivalence evidence	- In Vitro Comparative dissolution study as required	√	
		- In Vivo Bioequivalence study as required		
	Section D. Key Literature references			

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