APPENDIX 26

GUIDELINE FOR THE SUBMISSION OF ANALYTICAL METHOD VALIDATION (AMV) DOCUMENTS

1. TYPES OF ANALYTICAL PROCEDURES TO BE VALIDATED

a) Identification tests

b) Quantitative tests for impurities' content

c) Limit tests for control of impurities

d) Quantitative tests of the active ingredient in the sample (assay and dissolution)

e) Bacterial endotoxin test

f) Sterility test

g) Microbial Contamination Test

h) Biological Assay of Antibiotics

*For detailed information on requirements for analytical method validation, please refer to:

1. Checklist for AMV Identification, Assay, Dissolution and Related Substances
2. Checklist for Microbial Contamination Test
3. Checklist for Sterility Test
4. Checklist for Bacterial Endotoxin Test

2. TYPICAL VALIDATION PARAMETERS FOR IDENTIFICATION, ASSAY, DISSOLUTION & RELATED SUBSTANCES TESTS

2.1 FULL VALIDATION FOR IN-HOUSE METHODS

Please refer to **Table I** on the next page.

TABLE I:

Characteristics	Type of Analytical Method			
	Identification	Testing for Impurities		Assay: - dissolution (measurement only) - content/ potency
		Quantitation	Limit	
Accuracy		√		√
Precision **Repeatability** **Interm. Precision**		 √ √ (1)		 √ √ (1)
Specificity (2)	√	√	√	√
Detection Limit		(3)	√	
Quantitation Limit		√		
Linearity		√		√
Range		√		√

2.2 PARTIAL VALIDATION FOR COMPENDIAL/ PHARMACOPOEIAL METHODS AND SECOND SOURCE

TABLE II:

Characteristics	Type of Analytical Method			
	Identification	Testing for Impurities		Assay: - dissolution (measurement only) - content/ potency
		Quantitation	Limit	
Precision **Intermediate Precision**		√ (1)		√ (1)
Specificity (2)	√	√	√	√
Detection Limit		(3)	√	
Quantitation Limit		√		

Note:

√ signifies that this characteristic is normally evaluated.

(1) In cases where reproducibility has been performed, intermediate precision is not needed.

(2) Lack of specificity of one analytical procedure could be compensated by other supporting analytical procedure(s).

(3) May be needed in some cases.

3. TYPICAL VALIDATION CHARACTERISTICS FOR MICROBIOLOGICAL TESTS:

TABLE III:

Microbiological tests	Validation characteristics
Bacterial Endotoxin Test	a. Test for Confirmation of Labelled Lysate Sensitivity (Verification of criteria for standard curve) b. Test for Interfering Factors (Inhibition/ Enhancement tests)
Sterility Test	Validation (Bacteriostasis or Fungistasis) Test
Microbial Contamination Test	a. Validation of total viable aerobic count (suitability of the counting method in the presence of product) b. Validation of test for specified microorganisms (suitability of the test method)

Note:

1. All the analytical validation done by the industry should be in accordance to ASEAN Guidelines for Analytical Procedures, ICH Technical Requirements for Registration of Pharmaceuticals for Human Use under Validation of Analytical Procedures: Text and Methodology Q2 (R1), British Pharmacopoeia (BP), United States Pharmacopoeia (USP), or Japanese Pharmacopoeia (JP).
2. The applicants should ensure all documents available in the online Quest system are of the latest versions. All correspondence on the protocol of analysis and analytical method validation should comply with any relevant circulars regarding the registration process. Failure to do so may cause cancellation or rejection of product registration.
3. Raw data is required for new product application that is not registered with DCA reference countries.