APPENDIX 7

GUIDELINE ON REGISTRATION OF NATURAL PRODUCTS

IMPORTANT NOTES:

- 1. This part shall be read in conjunction with the relevant sections of the main DRGD.
- 2. Natural products shall be evaluated based on the criteria for safety and quality of the product, and where appropriate, efficacy/ claimed benefits.
- 3. This document is intended to provide guidance for the registration of natural products. However, this is a living document that is continually updated/revised in the line with progress in scientific knowledge and experience.
- 4. The lists presented are by no means exhaustive. It may be reviewed as and when it is deemed necessary.

Contents:

- 1. **General Information**
 - 1.1 Definitions
 - 1.1.1 Traditional Medicines
 - 1.1.2 Finished Herbal Product
 - 1.1.3 Herbal Remedy
 - 1.1.4 Homeopathic Medicine
 - 1.1.5 Natural Products with Modern Claim
 - 1.1.6 Natural Products with Therapeutic Claim
 - 1.2 Exemption from Product Registration
 - 1.3 Preparations which are not allowed to be registered
 - 1.4 Classification for Specific Active Ingredients
 - 1.4.1 Products Containing Cassia/ Senna
 - 1.4.2 Products Containing Psyllium Husk/ Plantago Ovata
- 2. General Requirements for Registration of Natural Products
 - 2.1 Product Name
 - <u>Table 1</u>: Non-Permissible Product Names
 - 2.2 <u>Ingredients</u>
 - 2.2.1 Active Ingredients
 - 2.2.2 Premix
 - 2.2.3 <u>Prohibited/Banned Ingredients</u>

<u>Table 2</u>: Botanicals (and botanical ingredients) containing

scheduled poisons listed under the Poisons Act 1952

<u>Table 3</u>: Botanicals (& botanical ingredients) banned due to

reported adverse event

<u>Table 4</u>: List A: Botanicals Known or Suspected to Contain

Aristolochic Acid

<u>Table 5</u>: List B: Botanicals that may be Adulterated with

Aristolochic Acid

<u>Table 6</u>: Ingredients (botanicals and substance derived from

animals) banned due to safety reasons

2.2.4 Use of Protected/ Endangered Ingredients

2.3 <u>Excipients</u>

List of Restricted Excipients

- 2.4 <u>Indications</u>
 - 2.4.1 Indications Acceptable for Natural Products
 - 2.4.2 <u>Non-Permissible Indications (Table 7)</u>
- 2.5 <u>Particulars of Packing</u>
- 2.6 <u>Labelling Requirement (Table 8)</u>
 - 2.6.1 Statements to be stated on Product Label
 - 2.6.2 Specific Labelling Statements/ Warning & Precautions
 - 2.6.3 Cautionary Statement for Products Specially Used in Women Table 9: List of Prohibited Ingredients in Pregnancy Table 10: Restricted in Pregnancy
 - 2.6.4 Prohibited Visual/ Graphics/ Statement on Label of Natural Products

2.7 **Quality Control**

- 2.7.1 Quality Testing for Specific Ingredient
- 2.7.2 Limit Test for Heavy Metals
- 2.7.3 Disintegration Test
- 2.7.4 Test for Uniformity of Weight (For Tablets and Capsules Only)
- 2.7.5 Tests for Microbial Contamination
- 2.7.6 Certificate of Analysis (Active Ingredient)
- 2.7.7 Certificate of Analysis (Finished Product)

2.8 <u>Stability Data</u>

3. **Product Specific Requirements:**

- 3.1 Foot Patch
- 3.2 Herbal Tea
- 3.3 Homeopathic Products
- 3.4 Natural Products with Modern Claim
- 3.5 Natural Products with Therapeutic Claim

1. GENERAL INFORMATION

1.1 **DEFINITIONS**

Natural products include traditional medicines, herbal products, homeopathic medicines, natural products with modern claim and natural products with therapeutic claim.

1.1.1 Traditional medicine

As defined under the CDCR 1984, traditional medicine refers to any product used in the practice of indigenous medicine in which the drug consists solely of one or more naturally occurring substances of a plant, animal or mineral, of parts thereof, in the unextracted or crude extract form, and homeopathic medicine. It shall not include any sterile preparation, vaccine, any substance derived human parts, any isolated and characterized chemical substances.

1.1.2 Finished Herbal Product

Finished herbal products consist of herbal preparations made from one or more herbs. If more than one herb is used, the term "mixture herbal product" can also be used. Finished herbal products and mixture herbal products may contain excipients in addition to the active ingredients. However, finished products or mixture herbal products to which chemically defined active substance have been added, including synthetic compounds and/ isolated constituents from herbal materials, are not considered to be herbal.

1.1.3 Herbal Remedy

Herbal remedy refers to any drug consisting of a substance or a mixture of substances produced by drying, crushing or comminuting, but without subjecting to any other process, a natural substance or substances of plant, animal or mineral origin, or any part of such substance or substances.

1.1.4 Homeopathic Medicine

Homeopathic medicine refers to any pharmaceutical dosage form used in the homeopathic therapeutic system where diseases are treated by the use of minute amounts in which such substances are capable of producing in healthy persons symptoms similar to those of the disease being treated. Refer <u>Appendix 7A</u>: Homeopathic Medicine

1.1.5 Natural Products with Modern Claim

Refer to Appendix 7B: Guideline on Natural Products with Modern Claim

1.1.6 Natural Products with Therapeutic Claim

Refer to Appendix 7C: Guideline on Natural Products with Therapeutic Claim

1.2 EXEMPTIONS FROM PRODUCT REGISTRATION

The following preparations do not require registration with the Authority:

- a) Extemporaneous preparation prepared and given directly to the patient by any traditional practitioner during the course of treatment;
- b) Traditional preparation containing plants, animal parts or mineral substance or a mixture of these substances of natural origin that is produced only through drying, without any treatment/process involved. E.g. raw herbs;
- c) Traditional preparation containing plants, animal parts, mineral substance/ extracts or a mixture of these substances of natural origin traditionally used as food, spices or flavouring of food that do not have any medicinal claim;
- d) Traditional preparations used for cosmetic purposes, such as to whiten or improve the appearance of skin, hair, teeth, etc., have to be notified as cosmetic product.

1.3 PREPARATIONS NOT ALLOWED TO BE REGISTERED

- a) Traditional preparation with the indication listed in "List of Non-Permissible Indications for Natural Product"
- b) Traditional preparation containing herbal ingredients listed under Poisons Act 1952, except for those exempted for homeopathic preparation. Refer to Section 3.3 General guidelines for the registration of homeopathic products.
- c) Traditional preparation containing ingredient known or reported to cause any adverse effect on humans.
 - Refer to List of Botanicals (& botanical ingredients) which are banned due to reported adverse event.
- d) Traditional preparation containing combination of plants, animal parts or mineral substance of natural origin with chemical/ synthetic substance with therapeutic effect.
- e) Traditional preparation containing combination of plants, animal parts or mineral substance of natural origin with vitamins and amino acids.
- f) Traditional products are prohibited from containing ingredients derived from human origin. E.g.:
 - i) CRINIS CARBONISATUS = Carbonised human hair (Reference: Pharmacopoeia of The People's Republic Of China: English Edition 1992)
 - ii) HUMAN PLACENTA

1.4 CLASSIFICATION FOR SPECIFIC ACTIVE INGREDIENTS

1.4.1 PRODUCTS CONTAINING CASSIA/ SENNA:

Finished products containing cassia/ senna as an active ingredient with a daily dose of less than 0.5g of the crude drug or 20mg sennoside (standardized preparation) shall be classified as traditional products and restricted to traditional claims. Active ingredient consumed more than this daily limit will be classified as pharmaceutical product, depending on the product formulation.

1.4.2 PRODUCTS CONTAINING PSYLLIUM HUSK/ PLANTAGO OVATA

Finished products containing psyllium husk as an active ingredient and with a total daily consumption of less than 3.5g per day shall be classified as a non-drug. However, daily doses above this amount and up to 6.9g will require this product to be registered under the traditional product category.

Reference: Circular <u>Bil. (24) dlm.BPFK/PPP/07/11 Jld.5</u> Pengkelasan Produk Mengandungi Psyllium Husk (14 May 2010)

2. GENERAL REQUIREMENTS FOR REGISTRATION OF NATURAL PRODUCTS

2.1 PRODUCT NAME

- a) If the product owner wishes to use a *formulary name, any amendments made to the product formulation such as the addition of active ingredients, removal of active ingredients or change in strength of active ingredients will not be permitted.
 - * The name of the Chinese/ Ayurvedic proprietary medicine as stipulated in the reference such as Taiwan Pharmacopoeia, The Chinese Herbal Medicine Materia Medica, and Ayurvedic Pharmacopeia
- b) A brand name added in front of the formulary name shall be required, in order to differentiate the product from products with the same formulary name.
- c) Any product name that is the same or similar either in writing or pronunciation with the product name of an adulterated product is prohibited.
- d) For a product name that is the name of active ingredient or a common name, e.g. *Kapsul Kacip Fatimah; Misal Kucing Tea*; Orthosiphon Capsule; Herbal Rub; Natural Herb Capsule, a brand name shall be added to the product name in order to differentiate and identify this specific product.

- e) For single-ingredient products, in cases where the product name bears the name of the active ingredient, the strength should be added to the product name. E.g.: Sunsky Tongkat Ali 500 mg Capsule.
- f) The dosage form is required to be added to the product name in the system (i.e in section A1)
- g) Justification will be required to prove the "claim" made in the product name. E.g.: "Double Strength/ Acticoat/ WaterSol".
- h) Product name supported by a registered trademark certificate will not be accepted if deemed inappropriate by the Authority or if it does not follow the regulations stated in this Appendix.
- i) The replacement product may use the same product name as a previously registered product provided that the formulation (strength of active ingredient), product registration holder and dosage form of the product remain the same.
- j) The name of the active ingredient is not allowed to be used as brand name.
- k) The name of active ingredient combined with the product indication are not allowed to be used as product name.
- l) Product names not permitted to be registered are specified in **Table 1** below:

Table 1: Non-Permissible Product Names

Ma	Non Downiggible Dyedust Names	Evamula	
No.	Non-Permissible Product Names	Example	
1.	Prohibited use of disease names as stated in the Medicines (Advertisement and Sale) Act 1956 (Revised 1983)	Example: Diabetes, Asthma, Cancer	
2.	Prohibited use of a single active ingredient as a product name in products containing more than one active ingredient unless product name contains words such as 'Plus, Compound, Complex, Herbanika	Tongkat Ali Capsule But product contains tongkat ali	
3.	Prohibited use of superlative - Names that indicates superiority in efficacy	Example: Power/ Kuasa, Superior, Pure, Mustajab, Safe, Healthy/ Sihat, Penawar/ Shifa, VIP, Good, Heal/ Sembuh, Premium, Mustajab, Men/ Women/ Children Complete, Men/ Women/ Children Enriched, Paradise/ Syurga, Menawan, Booster	

No.	Non-Permissible Product Names	Example
4.	Prohibited use of spelling of words that may cause confusion Words that involve names of/ part thereof: i) 20 disease names prohibited in the Medicines (Advertisement and Sale) Act 1956 (Revised 1983) ii) Diseases without scientific evidence of efficacy/ prescription medication to treat diseases/ parameters that indicate certain diseases (e.g. insulin, glucose) iii) Prohibited indication (e.g. to detoxify body)	Example: a) Go Out = GOUT b) UTix = Urinary Tract Infection c) Diabecine = Diabetes d) Metformon = Metformin e) Insuprem = Insulin f) Glucosey = Glucose g) DetoxB = Detox body
5.	Prohibited use of names that may cause ambiguity Ambiguous product name	Example: B For Energy?
6.	Prohibited use of names that may be offensive or indecent	Example: SENXBIG=SEnXBIG(label), Sexy, Enjoy, Paradise, Heavenly, Blue boy, Casanova, Desire (Dezire), Sensual (Xenxual), Asmara, Syok
7.	Prohibited use of product names incoherent with the approved indication Name containing a product claim whereas product is indicated for more than the approved indication	Example: Cough Syrup X= Approved indication for cough, dizziness, flu and itch
8.	Prohibited use of product names that have elements of ludicrous belief Statements referring to ancient believe/ negative spirits/ supernatural power	Example: Words such as miracle, magic, magical, miraculous, saintly, heavenly
9.	Prohibited use of product names similar to the existing approved product names Product names similar to the spelling and pronunciation of words of the existing product names	Example: Tenormin vs Tenormine vs Tenormy Re-Liv vs Re-Lif

No.	Non-Permissible Product Names	Example
10.	Prohibited use of product names that may cause ambiguity in the nature of product (drug/food/beverage) Product names similar to a food/beverage product	Example: Juice, Health drink, Beverage, Kooky
11.	Prohibited use of product names that represent professional advice or opinion or referring to the profession	Example: Dr Sunny, Dr Noortier Rooibose Tea, Professor, Herbalist, Doctor
12.	Prohibited use of product names that represent weight loss/ slimming properties/ names that can be associated with weight loss/ slim	Example: Slim, Langsing, Trim, Trimnfit, Sleen, Kurus, Susut perut, Xlim, Weight watcher, Burn
13.	Prohibited use of product names referring to any religious content	Example: Maksum, Mahmudah, Arifbillah
14.	Name of internal organ	Example: Liver, Brain, Kidney, etc.
15.	Use of abbreviation as a product name unless it carries no meaning	Example: TB, UTI, HB, etc.
16.	Other prohibited product names	Example: Minda, IQ, Smart, Genius, Ultra Mega, Detox, Immune, Phase 2, Defense, Prime

Note:

- 1. This list is not meant to be exhaustive and will be reviewed from time to time.
- 2. The Authority reserves the right to disallow any other words or phrases for product names, which in its opinion, is misleading, improper or not factual.

2.2 INGREDIENTS

2.2.1 Active Ingredients

a) Active ingredients are substances that have a therapeutic role in the formulation. Substances included in the formulation as active ingredients must make a contribution to the proposed indications for the product. Where a claim links the presence of an ingredient to the product indication, that ingredient must contribute to that indication. The evidence may be scientific and or traditional.

- b) Overages of active ingredient
 - Overages may be used during manufacture. An overage is where the amount of an ingredient added during manufacturing is greater than the nominated on the product label. Details of the overage used must be available.
- c) Listed active ingredients can be checked through https://www.npra.gov.my/ through "Product Search". Ingredients not listed will require safety and/or efficacy data evaluation prior to addition to this list.
- d) For new active ingredients or new combination products, the following information shall be required:
 - Product containing new single ingredient:

i) Extract form

- Information on the taxonomy of the ingredient;
- Techniques and methods in preparing/ processing the extract and subsequently the product;
- Information on the use and safety of the ingredient and the product quality standard.

ii) Powder/Granules

- Information on the taxonomy of the ingredient;
- Techniques and methods in preparing/ processing the extract and subsequently the product;
- Information on the use and safety of the ingredient and the product.
- Product containing multiple ingredients (contains ingredients known to be used traditionally):
 - The source of the product formulation; e.g. Chinese Pharmacopoeia
 - Proof or evidence of the traditional use
- Product containing multiple ingredients (contains ingredients not known to be used traditionally):
 - Information on the use and safety of every new ingredient;
 - Safety data on the new formulation;
 - Regulatory status in other countries.

2.2.2 Premix

Effective from 1 December 2007, premixed ingredient(s) shall not be used in natural product (traditional) formulation,

Reference: <u>Bil. (71) dlm. BPFK/02/5/1.3</u>: Keputusan Mesyuarat PBKD: Larangan Penggunaan Bahan 'Premix' dalam Formulasi Produk Semulajadi (Tradisional) (1 June 2007)

2.2.3 Prohibited/Banned Ingredients

The following lists present prohibited/banned ingredients not allowed in the formulation of natural products registered by the Authority:

A. <u>Table 2</u>: Botanicals (and botanical ingredients) containing scheduled poisons listed

under the Poisons Act 1952

B. <u>Table 3</u>: Botanicals (and botanical ingredients) banned due to reported adverse event

C. <u>Table 6</u>: Ingredients (botanicals and substance derived from animals) banned due to

safety reasons

Table 2: Botanicals (and botanical ingredients) containing scheduled poisons listed under the Poisons Act 1952

Genus	Species	Common/ Local Name	Part of plant prohibited (whole plant unless otherwise specified)	Constituent(s) of concern
Aconitum	All species			Aconite
Asidosperma	quebracho	White quebracho		Asidospermine, yohimbine
Atropa	belladonna	Deadly nightshade		Atropine, hyoscine (scopolamine), hyoscyamine
Cabola	albarrane	Squill		Glycoside
Cannabis (controlled under Dangerous Drug Act 1952)	All species	Marijuana		Cannabinoids

Genus	Species	Common/ Local Name	Part of plant prohibited (whole plant unless otherwise specified)	Constituent(s) of concern
Catharanthus	roseus	Periwinkle Madagascar, Old Maid, Vinca rosea, Myrtle Syn: Vinca balcanica, Vinca difformis, Vinca heracea, Vinca major, Vinca minor, Vincae		Vinca, Vincristine, Vinblastine
Chondodendron	tomentosum	Curare, Velvet leaf, Ice Vine,		Tubocurarine
Claviceps	purpurea	Ergot		Ergometrine
Colchicum	autumnale	Autumn Crocus/ Meadow Saffron/ Naked Lady)		Colchicine
Datura	metel	Devil's Trumpet, Metel, J California Jimson Weed Syn.: Datura wrightii		Atropine, Scopolamine
Datura	stramonium	Jimson Weed/ Gypsum Weed,Loco Weed		Atropine, Hyoscyamine, Scopolamine
Delphinium	staphysagria	Lice bane, Stavesacre		Delphinine

Genus	Species	Common/Local Name	Part of plant prohibited (whole plant unless otherwise specified)	Constituent(s) of concern
Digitalis	purpurea	Common Foxglove, Purple Foxglove, Kecubung	Leaf	Glycoside
Drimia	maritima	Squill Syn.:Urginea maritima, Scilla maritima Related substance: Urginea indica, Urginea pancreatium, Urginea scilla		Glycoside
Ephedra	All species	Ma Huang		Ephedrine, Pseudoephedrine
Gelsemium	sempervirens	Yellow Jessamine,Evening Trumpet,Carolina Jessamine		Gelsemine
Hyoscyamus	muticus	Egyptian henbane		Hyoscyamine
Hyoscyamus	niger	Black henbane		Hyoscyamine- atropine
Lobelia	inflata	Lobelia, pokeweed, Indian tobacco, gagroot, asthma weed, vomitwort, bladderpod,rapun tium inflatum.		Lobeline
Lobelia	nicotianifolia	Wild Tobacco		Lobeline

Genus	Species	Common/ Local Name	Part of plant prohibited (whole plant unless otherwise specified)	Constituent(s) of concern
Mitragyna	speciosa	Daun Ketum		Mitragynine
Nicotiana	tabacum	Common tobacco		Nicotine
Papaver	somniferum	Opium poppy		Morphine, codeine, hydrocodone, meperidine, methadone, papaverine
Pausinystalia	yohimbe	Yohimbe, Johimbe Syn. Corynanthe johimbi,Corynanth e yohimbi		Yohimbine
Physostigma	venenosum	Calabar bean		Physostigmine
Pilocarpus	microphyllus	Pilocarpus jaborandi, jaborandi		Pilocarpine
Punica	granatum	Pomegranate	Bark	Iso-Pellatrierine
Rauwolfia	serpentina	Indian snakeroot, Serpentine root		Reserpine
Rauwolfia	vomitoria	African serpentwood		Reserpine
Schoenocaulon	officinale	Veratrum officinale		Sabadilla, Veratrine
Scillae	bulbus	Sea onion, Squill		
Solanum	nigrum	Black nightshade		Solanine

Genus	Species	Common/ Local Name	Part of plant prohibited (whole plant unless otherwise specified)	Constituent(s) of concern
Strychnos	nux-vomica	Poison nut, Quaker button, strychnine tree, ma qian zi/maqianzi		Strychnine
Valerian	All species		All parts except for root part	Valepotriates
Veratrum	All species			
Vinca	All species	Including Catharanthus roseus		Vinca, Vincristine, Vinblastine, Vinpocetin

Table 3: Botanicals (and botanical ingredients) banned due to reported adverse event

Genus	Species	Common/ Local Name	Part of plant prohibited	Reason for prohibition
Aristolochia	All species			Contain Aristolochic Acid reported to cause kidney toxicity (**Please refer to footnote below)

Genus	Species	Common/ Local Name	Part of plant prohibited	Reason for prohibition
Berberis	All species			*Other herbs containing naturally- occuring berberine are allowed to be registered with specific requirements. Please refer to Appendix 20. Notes: Only prohibited for oral preparation.
Borneolum	syntheticum	Bingpian, borneol		Contain borneol- not allowed for oral preparation
Dioscorea	hispida	Ubi gadong, Gadong, Gadog, Gadong Lilin, Gadong Mabok, Ubi Arak, Ubi Akas, Taring Pelanduk, Susur Gadong, Gadongan, Kedut dan Ubi Bekoi	All parts	Contain dioscorine and dioscorinine reported to cause burning sensation in the throat, giddiness, followed by haematemesis, sensation of suffocation, drowsiness and exhaustion Not allowed for oral preparation
Dryobalanops	aromatica	Borneo/ Malay/ Sumatra Camphor, Pokok Kapur	Whole herb	Contain camphor- not allowed for oral preparation
Hydrastis	canadensis	Goldenseal, Eye Balm, Indian Dye		Reported to cause disturbance of the nervous system

Genus	Species	Common/ Local Name	Part of plant prohibited	Reason for prohibition
Larrea	tridenata	Characal		Reported to cause
Lurreu	mexicana	Chapparal		liver toxicity
Piper methysticum		Kava-kava		
	officinale			
Symphytum	asperum	Comfrey		
	x. uplandicum			
	aureus	Life root		
	jacobaea	Tansy ragwort, Tansy Butterweed		
	bicolor	Silver ragwort		Reported to cause
	nemorensis	Alpane ragwort, Wood ragwort		liver toxicity
Senecio	vulgaris	Common groundsel, Groundsel, Old- man-in the- spring		
	longilobus -syn .with douglasii, filifolius	Threadleaf groundsel, Threadleaf ragwort		
	Scandens Buch Ham	German/African /Cape Ivy, Climbing Groundsel		
Stephania	tetrandra			Reported to cause kidney toxicity

- ** To identify the botanicals that may contain Aristolochic Acid besides the Aristolochia genus, refer to:
 - a. List A Botanicals Known or Suspected to contain Aristolochic Acid (*Table 4*)
 - b. List B Botanicals that may be Adulterated with Aristolochic Acid (*Table 5*)

Notes:

Products containing any of the listed herbs (EXCEPT for Aristolochia spp. that is totally banned) will have to be sent to any governmental doping centre for testing and the result shall be attached with the registration form.

(Source for Lists A and B)

U. S. Food and Drug Administration Center for Food Safety and Applied Nutrition Office of Nutritional Products, Labeling, and Health Supplements

[Revised April 9, 2001]

Table 4: List A: Botanicals Known or Suspected to Contain Aristolochic Acid

Botanical Name*	Common or Other Names
Asarum canadense Linn.	Wild ginger
Syn. Asarum acuminatum (Ashe) E.P. Bicknell	Indian ginger
Syn. Asarum ambiguum (E.P. Bicknell) Daniels	Canada
Syn. Asarum canadense var. ambiguum (E.P. Bicknell) Farw.	snakeroot
Syn. Asarum canadense var. reflexum (E.P. Bicknell) B.L.	False coltsfoot
Rob.	Colic root
Syn. Asarum furcatum Raf.	Heart snakeroot
Syn. Asarum medium Raf.	Vermont
Syn. Asarum parvifolium Raf.	snakeroot
Syn. Asarum reflexum E.P. Bicknell	Southern
Syn. Asarum rubrocinctum Peattie	snakeroot
Asarum himalaicum Hook. f. & Thomson ex Klotzsch or	Tanyou-saishin
Asarum himalaycum Hook. f. & Thomson ex Klotzsch	(Japanese)
Asarum splendens (F. Maek.) C.Y. Cheng & C.S. Yang	Do-saishin
	(Japanese)
Bragantia wallichii R.Br.	
Specimen exists at New York Botanical Gardens. Tropicos	
does not list this species as a synonym for any Thottea	
species. Kew Gardens Herbarium does not recognize the	
genera Bragantia. Until additional information is obtained we	
will use the name as cited in J. Nat. Products 45:657-666	
(1982)	

Table 5: List B: Botanicals that may be Adulterated with Aristolochic Acid

Botanical Name*	Common or Other Names
Akebia spp.	Akebia
	Mu tong
	Ku mu tong
	Zi mutong
	Bai mu tong
	Mokutsu (Japanese)
	Mokt'ong (Korean
Akebia quinata (Houtt.) Decne.	Chocolate vine
Syn. Rajania quinata Houtt.	Fiveleaf akebia
	Mu tong
	Yu zhi zi
	Mokutsu (Japanese)
Akebia trifoliata (Thunb.) Koidz.	Mu tong
	Three leaf akebia
	Yu zhi zi
Asarum forbesii Maxim.	Batei-saishin
	(Japanese)
Asarum heterotropoides F. Schmidt	Keirin-saishin
Syn. Asarum heterotropoides F. Schmidt	(Japanese)
Syn. Asiasarum heterotropoides (F. Schmidt) F. Maek.	Chinese wild ginger
	Manchurian wild
	ginger
	Bei xi xin
	Xin xin

Botanical Name*	Common or Other Names
Asarum sieboldii Miq.	Usuba-saishin
Syn. Asarum sieboldii fo. seoulense (Nakai) C.Y. Cheng &	(Japanese)
C.S. Yang	Chinese wild ginger
Syn. Asarum sieboldii var. seoulensis Nakai	Xi Xin
Syn. Asiasarum heterotropoides var. seoulense (Nakai) F.	Hua Xi Xin
Maek.	Manchurian wild
Syn. Asiasarum sieboldii (Miq.) F. Maek.	ginger
	Siebold's wild ginger
Clematis spp.	Clematis
	Mufangji
	Clematidis
	Ireisen (Japanese)
	Wojoksum (Korean)
Clematis armandii Franch.	Armand's clematis
Syn. Clematis armandii fo. farquhariana (W.T. Wang)	Chuan mu tong
Rehder & E.H. Wilson	(stem)
Syn. Clematis armandii var. biondiana (Pavol.) Rehder	Xiao mu tong
Syn. Clematis biondiana Pavol.	Armand's virgin
Syn. Clematis ornithopus Ulbr.	bower
Clematis chinensis Osbeck.	Chinese clematis
	Wei ling xian (root)
Clematis hexapetala Pall.	
Clematis montana BuchHam. ex DC.	
Syn. Clematis insulari-alpina Hayata	

Botanical Name*	Common or Other Names
Clematis uncinata Champ. ex Benth.	
Syn. Clematis alsomitrifolia Hayata	
Syn. Clematis chinensis var. uncinata (Champ. ex Benth.) Kuntze	
Syn. Clematis drakeana H. Lév. & Vaniot	
Syn. Clematis floribunda (Hayata) Yamam.	
Syn. Clematis gagnepainiana H. Lév. & Vaniot	
Syn. Clematis leiocarpa Oliv.	
Syn. Clematis ovatifolia T. Ito ex Maxim.	
Syn. Clematis uncinata var. biternata W.T. Wang	
Syn. Clematis uncinata var. coriacea Pamp.	
Syn. Clematis uncinata var. floribunda Hayata	
Syn. Clematis uncinata var. ovatifolia (T. Ito ex Maxim.)	
Ohwi ex Tamura	
Syn. Clematis uncinata var. taitongensis Y.C. Liu & C.H. Ou	
Cocculus spp.	Cocculus
Cocculus carolinus (L.) DC. Syn. Cebatha carolina Britton	
Syn. Epibaterium carolinum (L.) Britton Syn. Menispermum carolinum L.	
Cocculus diversifolius DC.	
Syn. Cocculus madagascariensis Diels	
Cocculus hirsutus (L.) Diels	
Syn. Cocculus villosus DC.	
Syn. Menispermum hirsutum L.	
Cocculus indicus Royle	Indian cockle
Syn. Anamirta paniculata Colebr.	
Cocculus laurifolius DC.	
Syn. Cinnamomum esquirolii H. Lév.	
Cocculus leaebe DC.	

Botanical Name*	Common or Other Names
Cocculus madagascariensis Diels	
Syn. Cocculus diversifolius DC.	
Cocculus orbiculatus DC.	Moku-boui
Syn. Cissampelos pareira Linn.	(Japanese)
Cocculus orbiculatus (L.) DC.	
Syn. Cocculus cuneatus Benth.	
Syn. Cocculus sarmentosus (Lour.) Diels	
Syn. Cocculus sarmentosus var. linearis Yamam.	
Syn. Cocculus sarmentosus var. pauciflorus Y.C. Wu	
Syn. Cocculus sarmentosus var. stenophyllus Merr.	
Syn. Cocculus thunbergii DC.	
Syn. Cocculus trilobus (Thunb.) DC.	
Syn. Menispermum orbiculatus L.	
Syn. Menispermum trilobum Thunb.	
Syn. Nephroia sarmentosa Lour.	
Cocculus palmatus (Lam.) DC.	Columba
	Columbo
Cocculus pendulus Diels	
Syn. Cebatha pendula (J.R. & C. Forst.) Kuntze	
Syn. Epibaterium pendulus Forst. f.	
Syn. Cocculus Epibaterium DC.	
Cocculus pendulus (Forst. & Forst.) Diels	
Cocculus palmatus Hook.	Colombo
Syn. Jateorhiza Miersii Oliver	
Cocculus thunbergii DC.	
Diploclisia affinis (Oliv.) Diels	
Syn. Diploclisia chinensis Merr.	
Syn. Cocculus affinis Oliv.	

Botanical Name*	Common or Other Names
Diploclisia chinensis Merrill	Xiangfangchi
Menispernum dauricum	
Saussurea lappa (Decne.) Sch. Bip. / Aucklandia Lappa	Mokkou (Japanese)
Sinomenium acutum (Thunb.) Rehder & E.H. Wilson	Orientvine
Syn. Cocculus diversifolius var. cinereus Diels	Xunfengteng
Syn. Cocculus heterophyllus Hemsl. & E.H. Wilson	Dafengteng
Syn. Menispermum acutum Thunb.	Daqingmuxinag
Syn. Sinomenium acutum (Thunb.) Rehder & E.H. Wilson	Zhuigusan
var. cinereum (Diels) Rehder & E.H. Wilson	Da ye qingshener
Syn. Sinomenium diversifolium (Diels) Diels	Mufangji
	Hanfangji
	Tuteng
	Zhuigufeng
	Maofangji
Stephania spp. (except for Stephania Tetrandra which is banned)	Stephania
Vladimiria souliei (Franch.) Ling	Sen-mokkou

Table 6: Ingredients (Botanicals and Substance Derived from Animals) banned due to safety reasons:

salety reasons:			•	
Genus	Species	Part of Plant/ Animal Prohibited (whole plant/ animal unless otherwise specified)	Constituent of Concern	Reasons for Prohibition
Abrus	precatorius	Seed	Abrin, Agrus, Agglutinin	 Potent inhibitor of protein and DNA synthesis Severe diarrhea Severe stomach cramp Severe gastroenteritis
Adonis	vernalis		Adonitoxin	Uncontrolled dose can damage heart and cause death
Animal parts containing hormones (All species)				
Antiaris	toxicaria	Latex, sap	Cardiac glycoside (antiarin), Cardenolides & alkaloids with cardiac arresting potential	Latex is highly poisonousParalyze heart muscle and cause death
Aristolochia	All species		Aristolochic acid	Reported to cause kidney toxicity, interstitial nephropathy
	gigantean		Cardiac	Severe mucous membrane irritation characterized by
Calotropis	procera	Latex	glycosides, calotropin	vomiting, diarrhea, bradycardia, convulsion and death
Catharanthus	roseus		Vinca alkaloids	Bone marrow depression, central and peripheral (including autonomic) neurotoxicity

Genus	Species	Part of Plant/ Animal Prohibited (whole plant/ animal unless otherwise specified)	Constituent of Concern	Reasons for Prohibition
	manghas	Seed	Digitoxynglycosi de, Cerberine, Cerberoside, thevetin	 Drastic purgative and emetic Burning in the stomach sensation, vertigo, nausea, violent purgation and colic Heart failure
Cerbera	odollam	Seed	Cerberine, Cerberoside, odollin, odolotoxin, thevetin and cerapain	 Gastro intestinal symptoms cardiac toxicity Nausea, severe retching, vomiting, abdominal pain, blurring of vision Arterial block and nodal rhythm, hyperkalaemia Irregular respiration, collapse and death from heart failure
Cinchona	All species		Quinine and derivatives	 Resistance of malarial vector Use of bark is contraindicated in pregnancy and ulcers, intestinal or gastric, and if taken concomitantly with anticoagulants can increased their effects Can elicit thrombocytopenia with purpura Cinchona alkaloids are toxic. Can cause symptoms such as blindness, deafness, convulsions and paralysis

Genus	Species	Part of Plant/ Animal Prohibited (whole plant/ animal unless otherwise specified)	Constituent of Concern	Reasons for Prohibition
Citrullus	Colocynthis	Seed, fructus	Curcubitacin	 Carcinogenic effects, induce infertility in both sexes Enterohepatonephro- toxicity
Dryopteris	filix-mas	Rhizome	Filicin, aspidinol	Hepatotoxic and blindness
Eunhowhia	antiquorum	Lator	Apha euphorbol, Beta amyrin	Inflammation of the gastrointestinal mucous
Euphorbia	trigona		cycloartenol Euphol	membrane, irritate skin, difficult respiration, eyes pupil dilated
Excoecaria	agallocha	Latex	Excoecaria phorbol	Highly irritant to skinCause blindness if it enters the eyeBiocidal
	acuminate Garcinia hanburyi Gum		Cambogic acid,	Vomiting, hypercarthasis, sympathetic irritation of
Garcinia		Gum resin	β-guttiferin, α-1	sympathetic nervous system, caused death by
	morella		guttiitiii	gastro-enteritis
Gelsemium	elegans	Root, leaf, rhizome	Gelsemine & gelseminine (Gelsemium indole alkaloid)	Paralysis, shortness of breath, muscle stiffeningcoma, hypocyclosis
Hyoscyamus	muticus		Hyoscyamine, atropine, hyoscine	Difficulty in swallowing and talking, transient bradycardia followed by tachycardia with palpitation and arrhythmias, CNS depression, coma

Genus	Species	Part of Plant/ Animal Prohibited (whole plant/ animal unless otherwise specified)	Constituent of Concern	Reasons for Prohibition
Jatropha	multifida	Fruit, seed	Phytotoxin (toxalbumin - Curcin	Nausea, vomiting, serious purgative action
Lantana	camara		Lantadene, Lancamaron	Cause toxicity in buffalo, cattle, sheep and goat. Symptoms include photosensitive dermatitis, jaundice and yellowing of mucous membrane and loss of appetite with a decrease in ruminal motility
Lobelia	chinensis		Lobeline	 Stimulant and has peripheral and central effects Excessive use can cause nausea, vomiting and dizziness
	tupa			Stimulant and has peripheral and central effects Caused arrhythmias
Lytta	vesicatoria	Whole body, tincture	Cantharidin	 Excessive salivation, abdominal pain, swelling of kidney and urogenital system, headache, vomiting and diarrhea accompanied by bleeding Burning of the mouth, dysphagia, nausea, hematemesis, gross hematuria and dysuria
				- Renal dysfunction and related to acute tubular necrosis and glomerular

Genus	Species	Part of Plant/ Animal Prohibited (whole plant/ animal unless otherwise specified)	Constituent of Concern	Reasons for Prohibition
				destruction
Melaleuca	alternifolia		Tea tree oil	Skin irritation, respiratory distress, vomiting, diarrhea and cytotoxic for oral administration. * Banned in oral preparation
Papaver	All species		Morphine and derivatives, codeine	 Potential abuse Dependence, palpitation, hallucination, euphoric activities, CNS depression Nervous system toxicity Possible death from circulatory and respiratory failure
D.J.	pinnatifolius	Bark	Dil i	Bronchospasm, ocular
Pilocarpus	jaborandi		Pilocarpine	problem, miosis, blurred vision
Podophyllum	emodii	Root, leaf	Podophyllin	- Serious systemic toxicity with excessive amounts (persistent nausea and vomiting, tachypnea, fever, stupor, coma, tachycardia,
	peltatum			resin
Solanum	dulcamara	Leaf, flowering tops	Solanaceous alkaloids	Typical antimuscarinic effect e.g. dry mouth, mydriasis
Strophantus	All species		Strophantus alkaloids	Cardiac effect similar to digoxin

Genus	Species	Part of Plant/ Animal Prohibited (whole plant/ animal unless otherwise specified)	Constituent of Concern	Reasons for Prohibition
Symphytum	pregrinum		Pyrrolizidine alkaloid	Reported to cause liver toxicity

2.2.4 Use of Protected/ Endangered Ingredients

a) Protected/Endangered Wildlife Species

It is the responsibility of the applicant to ensure that the ingredient(s) derived from wildlife species, its parts and derivatives used in the formulation **COMPLIES** with the Wildlife Conservation Act 2010 (Act 716) and International Trade in Endangered Species Act 2008 (Act 686). Both guidelines can be downloaded through the PERHILITAN website: http://www.wildlife.gov.mv.

The applicant shall contact the following department to obtain the necessary permit/ license. A copy of the permit/ license shall be attached with the application form for product registration.

Department of Wildlife and National Parks, Peninsular Malaysia Km. 10, Jalan Cheras, 56100 Kuala Lumpur,

Tel: +603-90866800, Fax: +603-90753873

b) Endangered Botanical Species

It is the responsibility of the applicant to declare the source of the botanical ingredient if it is listed under the International Trade in Endangered Species Act 2008 (Act 686). Please refer to http://myphyto.gov.my for the details.

2.3 EXCIPIENTS

a) Excipients are substances used to assist in the manufacture of active substance into dosage forms suitable for administration. Each excipient ingredient included in a formulation must have a justifiable excipient role and shall be controlled by specifications. The intended use of an excipient shall be appropriate.

b) New excipient will require safety and/or other additional data to support the function in the product prior to addition into the Quest database.

c) LIST OF RESTRICTED EXCIPIENTS:

Specific Excipient	Allowable Limits
Menthol	Oral (0 to 4mg/kg body weight/day)External (<10%)

2.4 INDICATIONS

General note: The indications listed below will serve as a guide for the applicant. For traditional/ homeopathic medicines, only low level claim(s) will be accepted. Other indication with the same level of claims may be considered if supported with traditional/homeopathic use.

2.4.1 Indications Acceptable for Natural Products

a) General Health Maintenance/ Kesihatan Am

"Traditionally used..../ "Digunakan secara tradisional....

- 1. For general health/ for health/ untuk kesihatan.
- 2. For general health maintenance/ for general well-being/ *untuk mengekalkan kesihatan*
- 3. For health and strengthening the body/ *untuk kesihatan dan menguatkan badan*.
- 4. For relief of body heatiness/ untuk melegakan panas badan.
- 5. For general debility, weakness after illness or childbirth/ *untuk letih lesu/ kelesuan badan selepas sakit atau selepas bersalin.*
- 6. For loss of appetite/ untuk kurang selera makan.
- 7. For difficulty in sleep/ bagi melegakan kesukaran untuk tidur.
- 8. For relief of fatigue/ untuk melegakan kepenatan.
- 9. As an aid to overcome fatigue during physical exertion/ *membantu melegakan kepenatan fizikal.*
- 10. To expel wind and invigorate vital energy/ untuk membuang angin dan menambah tenaga.
- 11. To improve appetite/ untuk menambah selera makan.
- 12. For relieving waist ache and body weakness/ untuk melegakan sakit pinggang dan lemah anggota badan.
- 13. For relieving dizziness, sweating, and difficulty in sleep/ *untuk melegakan pening, berpeluh berlebihan dan sukar untuk tidur.*
- 14. For reducing body odour/ untuk mengurangkan bau badan.
- 15. For reducing toothache/ untuk mengurangkan sakit gigi.
- 16. To relieve tired eyes/ untuk melegakan kepenatan mata.
- 17. For healthy eyes/ untuk kesihatan mata.

[&]quot;Homeopathically used.... / "Digunakan secara homeopati...

b) Blood & Body Fluid/ Darah & Cecair Badan

"Traditionally used..../ "Digunakan secara tradisional....

"Homeopathically used.... / "Digunakan secara homeopati...

- 1. For improving blood circulation/ untuk melancarkan perjalanan darah.
- 2. To improve urination/ untuk melawaskan kencing/ buang air kecil.
- 3. For improving bowel movement/ *untuk melawaskan buang air besar.*
- 4. For relieving mild vomiting/ untuk melegakan muntah ringan.
- 5. For reducing minor swelling/ untuk melegakan bengkak-bengkak ringan.

c) Bone, Muscle & Joint/ Tulang, Otot & Sendi

"Traditionally used..../ "Digunakan secara tradisional....

"Homeopathically used.... / "Digunakan secara homeopati...

- 1. For strengthening muscle and bone/ untuk menguatkan otot dan tulang.
- 2. For relieving muscular ache/untuk melegakan sakit otot.
- 3. For relieving waist ache and backache/ untuk melegakan sakit pinggang dan sakit belakang.
- 4. For relief of joints and muscular pain/untuk melegakan sakit sendi dan otot.
- 5. For relieving muscles sprain/ untuk melegakan terseliuh/ terkehel.

d) Pain & Fever/ Sakit Am & Demam

"Traditionally used..../ "Digunakan secara tradisional....

"Homeopathically used.... / "Digunakan secara homeopati...

- 1. To relieve/ alleviate pain/ untuk melegakan kesakitan.
- 2. For relieving fever/ untuk melegakan demam.
- 3. For relieving headache/ untuk melegakan sakit kepala.
- 4. For relieving pain and itchiness related to piles/ *untuk melegakan kesakitan dan rasa gatal akibat buasir.*
- 5. For symptomatic relief of body heatiness/ body heat / *untuk melegakan panas badan.*

e) Cough & Cold/ Batuk & Selesema

"Traditionally used....../ "Digunakan secara tradisional.....

"Homeopathically used.... / "Digunakan secara homeopati...

- 1. For relief of fever, cough and cold/ untuk melegakan demam, batuk dan selesema.
- 2. For relief of sore throat/ untuk melegakan sakit tekak.

- 3. For reducing phlegm and relief of cough, sore throat and body heatiness/ *untuk mengurangkan kahak dan melegakan batuk, sakit tekak dan panas badan.*
- 4. For relief of throat irritations and cough/ *untuk melegakan sakit tekak dan batuk.*
- 5. For relief of nasal congestion/ untuk melegakan hidung tersumbat.
- 6. For relief of sore throat and cough/ untuk melegakan sakit tekak dan batuk.
- 7. For relief of mouth ulcers due to heatiness/ untuk melegakan sakit mulut akibat panas badan.
- 8. To relieve sinusitis/ untuk melegakan resdung.

f) Digestive System/ Sistem Pencernaan

"Traditionally used..../ "Digunakan secara tradisional....

"Homeopathically used.... / "Digunakan secara homeopati...

- 1. For relief of stomach ache, mild diarrhoea/ untuk melegakan sakit perut, cirit-birit ringan.
- 2. For relief of flatulence, stomach ache, mild diarrhoea, and loss of appetite/ untuk melegakan kembung perut, sakit perut, cirit-birit ringan dan kurang selera makan.
- 3. For relief of mild diarrhoea, vomiting and improve appetite/ untuk melegakan cirit-birit, muntah ringan dan menambah selera makan.
- 4. For relief of mild constipation/ untuk melegakan sembelit ringan.
- 5. To improve appetite and digestion/ untuk menambah selera makan dan pencernaan.
- 6. For relieving abdominal pain and flatulence/ untuk melegakan sakit perut dan kembung perut.
- 7. For relief of stomach ache, constipation, mild vomiting and indigestion/ *untuk melegakan sakit perut, sembelit, muntah ringan dan makanan tidak hadam.*
- 8. Aid in digestion/ untuk membantu penghadaman.

g) Women's Health/ Kesihatan Wanita

"Traditionally used...../ "Digunakan secara tradisional....

"Homeopathically used.... / "Digunakan secara homeopati...

- 1. To relieve menstrual pain, headache and to regulate menstruation/ untuk melegakan senggugut, sakit kepala dan melancarkan perjalanan haid.
- 2. To reduce body weight/ untuk mengurangkan berat badan.

 [Note: For specific active ingredient only supported by established reference, examples: Cassia species, Garcinia Cambogia and Phaseolus vulgaris]
- 3. For relief of vaginal discharge/ untuk melegakan keputihan.
- 4. For women after childbirth/ untuk wanita lepas bersalin.
- 5. For general wellbeing and strengthen the body after childbirth/ *untuk kesihatan dan menguatkan badan wanita selepas bersalin.*
- 6. For women after childbirth to reduce body weight/ *untuk ibu-ibu selepas bersalin mengurangkan berat badan.*

- 7. For symptomatic relief of vaginal discharge and mild itch/ untuk melegakan keputihan dan gatal-gatal ringan.
- 8. To improve menstrual flow, for relief of menstrual pain, vaginal discharge and flatulence/ untuk melancarkan haid, melegakan senggugut, keputihan dan kembung perut.
- 9. For strengthening body muscle and reducing body weight/ *untuk menguatkan otot-otot tubuh dan mengurangkan berat badan.*
- 10. For general health of women after childbirth/ *untuk menyihatkan rahim selepas melahirkan anak.*
- 11. To relieve symptoms of menopause/ untuk melegakan simptom menopause. [Note: For specific active ingredient only supported by established reference, examples: red clover (trifolium pratense) and black cohosh (cimicifuga racemosa)]

h) Men's Health/ Kesihatan Lelaki

"Traditionally used..../ "Digunakan secara tradisional....

"Homeopathically used.... / "Digunakan secara homeopati...

1. For men's health and energy/ for vitality/ untuk memulihkan tenaga dan kesihatan lelaki.

i) Skin And External Usage/ Kulit Dan Kegunaan Luar

"Traditionally used...../ "Digunakan secara tradisional...

"Homeopathically used.... / "Digunakan secara homeopati...

- 1. For symptomatic relief of pain and itch associated with insect bites/ untuk melegakan sakit dan gatal-gatal digigit serangga.
- 2. For relief of minor burns / untuk melegakan lecur ringan.
- 3. For relief minor cuts/ untuk melegakan luka-luka ringan.
- 4. For relief of minor bruises/ untuk melegakan lebam yang ringan.
- 5. For reducing pimples/ untuk mengurangkan jerawat.
- 6. To help maintaining healthy skin, nail and hair/ untuk kesihatan kulit, kuku dan rambut.
- 7. For reducing pimples and mild itch/ untuk melegakan jerawat dan gatal-gatal ringan.

2.4.2 Non-Permissible Indications

Table 7:

NO.	NON-PERMISSIBLE INDICATIONS
1.	Penyakit atau kecacatan ginjal / Disease or defects of the kidney
2.	Penyakit atau kecacatan jantung / Disease or defects of the heart
3.	Kencing manis / Diabetes
4.	Epilepsi atau sawan / Epilepsy or fits
5.	Kelumpuhan / Paralysis
6.	Tibi / Tuberculosis
7.	Asma / Asthma
8.	Kusta / Leprosy
9.	Kanser / Cancer
10.	Kepekakan / Deafness
11.	Ketagihan dadah / Drug addiction
12.	Hernia atau pecah / Hernia or rupture
13.	Penyakit mata / Disease of the eye
14.	Hipertensi (Darah Tinggi) / Hypertension
15.	Sakit otak / Mental disorder
16.	Kemandulan / Infertility
17.	Kaku / Frigidity

- 17. Kaku / Frigidity
- 18. *Lemah fungsi seks atau impoten /* Impairment of sexual function or impotency
- 19. *Penyakit venerus /* Venereal disease
- Lemah urat saraf atau aduan atau kelemahan lain timbul daripada atau 20. berhubung kait dengan perhubungan seks / Nervous debility or pother complaint of infirmity arising from or relating to sexual intercourse.

2.5 PARTICULARS OF PACKING

- The maximum pack size allowed for all dosage forms is based on the daily dosing for a quantity not exceeding six (6) months usage. This does not apply to products in blister or strip packaging (with justification).
- Packaging particulars to the listing of packing are:
 - C1: Pack size and fill details by weight, or volume or quantity.
 - C2: Container type
 - C3: Barcode/ serial number (optional)
 - C4: Recommended distributor's price (optional)
 - C5: Recommended retail price (optional)
- Measuring spoon/ device must be provided for all products in bulk <u>powder form</u>, unless if for physician use only.
- Sample pack size should not exceed 20 capsules/ tablets.

2.6 LABELLING REQUIREMENTS

a) The following information shown in **Table 8** below shall be included in the product label.

No.	Items	Immediate Label	Outer Label	Package Insert	Blister Pack
1.	Product name	V	V	√	√
2.	Dosage Form	√	√	$\sqrt{}$	
3.	Name of active ingredients, including part of plant used	V	V	V	
4.	Strength of active ingredient in weight	V	V	V	
5.	Indication	√	√	√	
6.	Batch number	√	√		√
7.	Manufacturing date	√	V		
8.	Expiry date	V	V		√
9.	Dosage/ Use instruction	V	V	V	
10.	Storage condition(s) - state temperature used in the stability study - state "Protect from light and moisture" (If product is not packed in moisture resistant container)	V	V	V	
11.	Registration number (MAL)	V	V		V
12.	Name and address of product registration holder (Example: Product Registration Holder: XXXXX)	V	V	٧	

No.	Items	Immediate Label	Outer Label	Package Insert	Blister Pack
13.	Name and address of manufacturer (Example: Manufacturer: XXXXX)	√ At least name of town/ city and country of manufacturer	√ At least name of town/ city and country of manufacturer	V	
14.	Warning label (if applicable) e.g. Ginseng, Bee Pollen etc. as required under 2.6.2 Specific Labelling Statements/ Warning & Precautions Note: Please refer to Appendix 19: General Labelling Requirements		V	V	
	Appendix 20: Specific Labelling Requirements				
15.	Pack size (unit/ volume)	$\sqrt{}$	$\sqrt{}$	V	
16.	Name and strength of preservative	\checkmark	V	V	
17.	Name and content of alcohol, where present	$\sqrt{}$	V	V	
18.	To declare source of ingredients derived from animal origin (active and excipient) including starting materials and gelatine (capsule shell).	V	√		
19.	Additional statement (if applicable)	V	V	V	
20.	Contraindication/ Precaution (if any)	V	V	V	
21.	Security Label (Hologram) # In products without an outer carton, the security label shall be applied onto the immediate label. The security label shall not be applied onto the outer shrink		√#		

No.	Items	Immediate Label	Outer Label	Package Insert	Blister Pack
	wrap of the product.				
22.	Product Description			$\sqrt{}$	
23.	Date of Revision			$\sqrt{}$	

- b) All labels and package inserts must be in *Bahasa Malaysia* or English. Additional translation to another language will be allowed.
- c) Font size of the product name on the label, including alphabets and numbers, should be equal in size.
- d) For a product containing two (2) or more active ingredients, the font size of each active ingredient highlighted on the inner/ outer carton must be of equal size and equal prominence (Note: This does not refer to the product name, but the statement made on the label). Justification for highlighting certain ingredients only on the product name/ label must be provided and is subject to approval by the Drug Evaluation Committee.
- e) All the following requirements must be stated on the labels and package inserts:
 - State the weight per dosage form
 - State the quantity/ content of active ingredients per dosage form
 - For products in liquid form (syrup), content of active ingredients shall be stated as follows:

"Each ___ml (per dosage) product contains extract of the following ingredients"

Herb
$$Y = \underline{\hspace{1cm}} mg$$

- Check and correct all spelling/ grammar and translations.
- f) For products meant for traditional practitioner/ physician use, state its primary use by the related traditional physician/ practitioner on the label.

E.g.: 'For Chinese Physician Use Only' OR 'For Ayurvedic Practitioner Use Only'.

- g) For small label, the labelling requirements may follow that of blister packaging subject to satisfactory justification.
 - * Definition of small label: Small label refers to the label on a small primary (immediate) container, where the container is not large enough to accommodate an immediate label that includes all the information and formatting typically required.

g) Example of label approved by the Authority:

This is a traditional medicine

Please consult your pharmacist/ doctor before taking this product

Jauhkan daripada capaian kanakkanak

Keep out of reach of children

Indication: Traditionally used for women's health

Warning: Pregnancy and breastfeeding: Insufficient reliable data

Keep below 30 ° celcius Protect from light and moisture

Batch No.: Manufacturing date: Expiry date: KAPSUL PQR 500MG

MALXXXXXXXX

50 CAPSULE

Hologram

Each Capsule (Vegetable capsule) contains :

Folium XX 200mg Fructus QY 300mg

Dosage

Adult: 2 capsules taken twice a day after food

Product Registration Holder: Syarikat XYZ Sdn Bhd 18, Jalan Utama 47000 Sungai Buloh Selangor

Manufactured by: Syarikat ABC Sdn Bhd 3, Jalan Universiti 46730 Petaling Jaya Selangor

2.6.1 Statements to Be Stated on Product Label

The following statements shall also be stated on the product label, where applicable:

- For product with an indication "For general health/ well-being" **or** "*Untuk kesihatan umum*":
 - "Please consult your pharmacist / doctor before taking this product **or** *Sila* merujuk kepada ahli farmasi/ doktor sebelum mengambil produk ini."
- For product with an indication "To relieve symptoms for.... (any illness)" **or** "untuk mengurangkan tanda-tanda/ simptom....":
 - "Please consult your pharmacist/ doctor if symptoms persist/ worsen **or** *Sila merujuk kepada ahli farmasi/ doktor jika simptom berlarutan/ bertambah teruk.*"
- For product with indication "To regulate menstruation/ To improve menstrual flow":

"Contraindicated in pregnant women."

- For product with indication 'To reduce body weight', state these statements, (unless proven otherwise):
 - "Balanced diet and regular exercise are essential."
 - "Safety on long term use has not been established."

- "This is a traditional medicine/ *Ini adalah ubat tradisional.*" **OR** "This is a homeopathy medicine/ *Ini adalah ubat homeopati.*"
- Unless otherwise supported, all natural products label shall state the following general cautionary statement, **EXCEPT** for products with indication for men's health or product for children use only:

"Pregnancy and breastfeeding: Insufficient reliable data"

- For product with an indication to be taken/ used **specially for women**, refer to **2.6.3 Cautionary Statement for Products Specially Used in Women**.
- "Keep out of reach of children & Jauhkan daripada capaian kanak-kanak" (in both Bahasa Malaysia and English).
- "Protect from light and moisture."
- State the storage condition according to the temperature stated in stability data.
- For products containing <u>ingredients</u> as specified below, include the required statements:

i) Animal part(s):

"This product contains animal part(s)."

ii) Animal origin(s):

Example: for active ingredients such as pearl, shell of oyster (Concha), etc.

"This product contains substance(s) from animal origin."

iii) Porcine:

"This product contains animal part(s) (porcine/pig)."

iv) Alcohol:

- "This product contains alcohol."
- Please declare the percentage of alcohol contained in the product.
- For the following <u>dosage forms</u>, include:
 - i) **Topical preparations:** "For external use only."
 - ii) Liquids and suspensions: "Shake well before use"

- Labels with the picture/ graphic of the herb/ animal should not have the picture/ graphic of only one (1) particular active ingredient if the product formulation contains more than one (1) ingredient. For multiple ingredients exceeding two (2), the label should have picture/ graphics of at least two (2) ingredients on the label.
- Any special/ specific name of active ingredient/ extract stated on the label should be positioned away from name of the active ingredient in the product formulation.
- Any picture of the founder placed on the label must be decent and should not exceed $1/10^{th}$ of the panel.

2.6.2 Specific Labelling Statements/ Warning & Precautions

- Refer to <u>Appendix 20</u>: Specific Labelling Requirements for common substance (e.g. alfalfa, bee pollen, black cohosh etc.).
- For products containing the following substances, specific cautionary statement as specified shall be included:

No.	Substance	Specific Cautionary Statement
1.	For product containing 'Anti-diarrhoea', please state:	"Contraindicated in children below 1 year old" (to be stated for products with children dosing only)
2.	For product containing Benzyl Alcohol/ Phenylmethanol (as preservative), please state:	As this preparation contains benzyl alcohol, its use shall be avoided in children under 2 years of age. Not to be used in neonates.
3.	For products containing Camphor:	i) The following <u>warning</u> shall be stated on the <u>label</u> :
		WARNING:
		CAN CAUSE CONVULSION CONTRAINDICATED IN CHILDREN BELOW 2 YEARS OF AGE.
		CAUTION MUST BE EXERCISED WHEN OLDER CHILDREN ARE TREATED.
		AVOID DIRECT APPLICATION INTO NOSTRILS
		PRECAUTION: It is dangerous to place any camphor – containing product into the nostril of children. A small amount applied this way may cause immediate collapse. - Avoid contact with the eyes. - Do not apply to wounds or damaged skin.
		ii) The following warning and precaution shall be stated on product leaflet: WARNING: "This product is contraindicated in children under 2 years of age. Caution must be exercised when older children are treated."

No.	Substance	Specific Cautionary Statement
		PRECAUTION: "It is dangerous to place any camphor containing product into the nostrils of children. A small amount applied this way may cause immediate collapse."
4.	For pack size meant as samples, please state:	Sample not for sale

2.6.3 Cautionary Statements for Products Specifically Used in Women

Special precaution shall be given to ingredients taken during pregnancy. The Authority urges pregnant women to consult their medical/ traditional health care providers prior to taking any natural products.

Unless otherwise supported, all natural products label shall state the following general cautionary statement:

"Pregnancy and breastfeeding: Insufficient reliable data"

However, for products containing any ingredients as listed in the following lists, i.e. List of Prohibited Ingredients in Pregnancy and List of Restricted Ingredients in Pregnancy, the following cautionary statement shall be stated in the product label:

- i) Prohibited Ingredients in Pregnancy:
 - "Contraindicated in pregnant women. Insufficient reliable data in breastfeeding women"
- ii) Restricted Ingredients in Pregnancy:
 - "To be used with caution in pregnancy. Insufficient reliable data in breastfeeding women"

The following list has been compiled based on well documented information as an aid to the industry to comply with the labelling requirement for products used during pregnancy.

Table 9: List of Prohibited Ingredients in Pregnancy

	Latin Compendium Name	Common/ Chinese Name	Remarks
A	Acorus Calamus	Calamus	
	Achillea Millefolium	Yarrow	
	Aloe barbadensis	Aloe vera	
	Angelica Archangelica	Angelica	
	Angelica sinensis	Dong Quai	When taken orally
	Artemisia Vulgaris	Mugwort	
	Arctostaphylos Uva Ursi	Uva Ursi	
	Artemisia Absinthium	Wormwood	
	Astragalus gummifer	Tragacanth	
В	Bryonia Alba	White Bryony	
	Bupleurum chinense, Bupleurum falcatum	Bupleurum	
С	Calendula Officinalis	Calendula	
	Calomel (mercurous chloride; Hg ₂ Cl ₂)	Qing fen	
	Capsella Bursa-Pastoris	Shepherd's Purse	
	Cassia Marilandica	Senna	
	Caulophyllum Thalictroides	Blue Cohosh	When taken orally
	Chamaemelum nobile (Anthemis nobilis)	Roman Chamomile	When taken orally
	Chenopodium Ambrosioides	Epazote	
	Cichorium intybus	Chicory	
	Cimicifuga Racemosa	Black Cohosh	When taken orally
	Cnicus Benedictus	Blessed Thistle	
	Conium maculatum	Hemlock	
	Convalaria Majalis	Lily of the Valley	
	Cortex Cinnamomum Cassia	Rou Gui	
	Cortex Paeonia suffruticosa (Cortex Moutan Radicis)	Mu Dan Pi	
	Crocus Sativus	Saffron	

	Latin Compendium Name	Common/ Chinese Name	Remarks
	Croton tiglium	Ba dou	
Е	Epimedium grandiflorum	Horny goat weed	
	Equisetum arvense L.	Horsetail	
F	Flos Carthamus Tinctorius	Hong Hua	
	Flos Daphne Genkwa	Yuan Hua	
	Folium Cassia Angustifolia	Fan Xie Ye	
	Fructus Citrus Aurantium	Zhi Ke	
	Fructus Citrus Aurantium Immaturus (Fructus Aurantii Immaturus)	Zhi Shi	
G	Gentiana lutea	Gentian	
	Ginkgo Biloba	Ginkgo	
	Glycyrrhiza glabra/ Glycyrrhiza uralensis	Licorice	
Н	Helleborus spp.	Hellebore	
	Hyssopus officinalis	Hissopo	
I	Iris Versicolor	Blue Flag	
	Ipecac Ipecachuana	Ipecac	
J	Juglans Canadensis	Butternut	
	Juglans nigra	Black Walnut	
	Juniper (Juniperus communis)	Juniper Berries	
L	Leonurus Cardiaca	Motherwort	
M	Magnolia officinalis	Houpu, Magnolia	
	Marrubium Vulgare	Horehound	
	Mentha Pulegium	Pennyroyal	When used orally or topically
	Monarda didyma	Bee Balm	
	Moschus berezovskii Flerov, Moschus sifanicus Przewalski, Moschus moschiferus Linnaeus (Moschus)	She xiang / musk	

	Latin Compendium Name	Common/ Chinese Name	Remarks
	Mylabris / Radix Sacchari Arundinacei	Ban Mao	
N	Natrii Sulfas	Mang Xiao	
	Nepeta cataria	Catnip	
	Nigella sativa	Black seed/ black cumin	
0	Oenothera biennis <i>L.</i>	Evening Primrose	
P	Panax Ginseng, Panax Quinquefolius	Ginseng	
	Passiflora incarnata <i>L.</i>	Passion Flower	When taken orally
	Petroselinum Crispum	Parsley	
	Podophyllum Peltatum	American Mandrake	
	Polygala Senega	Senega Snakeroot	
R	Radix Euphorbiae Pekinensis	Jing Da Ji	
	Radix et Rhizoma Rheum Palmatum	Da Huang	
	Radix Kansui/ Radix Euphorbiae Kansui	Gan Sui	
	Radix Phytolacca actinosa	Shang Lu	
	Rhizoma Sparganium Stoloniferum	San Leng	
	Resina Toxicodendri/ Resina Rhois Praeparata	Gan Qi	
	Rhizome et Radix Veratrum nigrum L.	Li Lu	
	Radix Achyranthes bidentata	Niu Xi	
	Rhizoma Ligustici Chuanxiong	Chuan Xiong	
	Rhizome Curcumae Longae	Jiang Huang	
	Rhamnus Purshiana	Cascara Sagrada	
	Rhamnus Frangula	Buckthorn	
	Rheum Palmatum	Rhubarb Root	
	Ruta Graveolens	Rue	
	Rheum Australe	Turkey Rhubarb	

	Latin Compendium Name	Common/ Chinese Name	Remarks
S	Sanguinaria Canadensis	Bloodroot	
	Semen Pharbitis nil	Qian Niu Zi	
	Semen Strychnos nux-vomica. L.	Ma Qian Zi	
	Semen Prunus Persica	Tao Ren	
	Serenoa repens	Saw Palmetto	When taken orally
Т	Tabebuia impetiginosa	Pay D' Arco	When taken orally
	Tanacetum parthenium	Feverfew	
	Tanacetum Vulgare	Tansy	
	Thuja Occidentalis	Arbor Vitae	
	Turnera Diffusa	Damiana	
	Trigonella foenum-graecum	Fenugreek	
	Trillium Erectum	Bethroot	
	Tussilago Farfara	Coltsfoot	
V	Venenum Bufonis	Chan Su	
	Viscum Album	European Mistletoe	
w	Whitmania pigra Whitman, Hirudo nipponica Whitman, Whitmania acranulata Whitman (Hirudo)	Shui Zhi	
X	Xanthoxylum Americanum	Prickley Ash	

Note: The list is not to be exhaustive and will be reviewed from time to time.

Table 10: Restricted in Pregnancy

No.	Latin Compendium Name	Common/ Chinese Name	Remarks
1.	Zingiber Officinalis	Ginger	> 1g dry weight/day

Note: The list is not to be exhaustive and will be reviewed from time to time.

2.6.4 Prohibited Visual/ Graphics/ Statement on Packaging Materials (Label, Box, Package Insert or Consumer Medication Information Leaflet)

General requirements:

- The label should not contain any statement or visual presentation which, whether directly or by implication, is likely to mislead the consumer about any product.
- The graphics printed on the outer and inner labels have to be standardized to avoid confusion to the customers.

Table 11:

No.	Subject Matter	Example(s)	Notes
1.	Marketing strategy	Example: "Money back guarantee" "Buy 1 free 1" "Backed by RM5 million product Liability Insurance"	Such statements are prohibited on labels for immediate container, outer carton, package insert or Consumer Medication Information Leaflet.
2.	Usage guide that promotes use of other product(s)	Example: "After consumption of this product (Product A), for better results, it is recommended to take Product B"	Not allowed
3.	Consumer testimonial		Prohibited on product label

No.	Subject Matter	Example(s)	Notes
4.	Clinical Trial results or any information on clinical trial done on product	Example: "Clinically Tested" "Randomized Double-Blind Placebo Control Clinical Study"	Such statements are prohibited on labels.
5.	Opinion/ Name of prominent figure(s)/ professionals on product or its active ingredient/ content	Example: Opinion of product/ formulation inventor	Prohibited on product label
6.	Label design (graphic and color) similar to labels from another company		Prohibited on product label
7.	Statement on herbal origin	Example: Source from the Mountains of Alps	Allowed if proven true
8.	Introduction/ description of founder/ manufacturer/ professionals, i.e. elaboration on the identity of the founder or manufacturer	Example: "Manufacturer ABC is a GMP certified manufacturer and has manufactured many products." "Founder Dr. ABC is a world renowned surgeon."	Prohibited on product label

No.	Subject Matter	Example(s)	Notes
9.	Logo with certification	Example: SIRIM/ ISO / GMP /HACCP	Prohibited on product label because certification renewal is on a yearly basis
10.	Name/ Statement / Logo/ registered trademark that does not satisfy the specifications of the Traditional Unit	Example: "Dr. ABC's Formula" "Nothing like it"	Prohibited on product label
11.	Special technique used/ superiority in ingredients	Example: Capsule coat	Allowed if proven true
12.	Nutritional claims with analysis certificate attached	Example: Calorie, Fat, Protein and others	Prohibited on product label This is not a food supplement.
13.	Graphics or picture of internal organs	Example: Kidney, Heart, Nerves.	Prohibited on product label
14.	Photograph of celebrities	Example: Artiste, Sports person(s), Politician	Prohibited on product label
15.	Gender symbol (male or female)	(♀ and / or ♂)	Prohibited on product label

No.	Subject Matter	Example(s)	Notes
16.	Indecent photographs/ pornography/ graphics/images		Prohibited on product label
17.	Graphics incoherent with the indication	 Example: Noted indication is for constipation, but graphics on label shows a slim-looking lady which denotes indication for weight loss Indication for urination but label graphics contains picture of a water hose. 	Prohibited on product label
18.	Highlighting unnecessary body parts	Example: Indication is for general health but graphics on label highlights male and female sexual organ parts	Prohibited on product label
19.	Graphics of plants or animal that may cause confusion	Example: Radix Ginseng which is improvised as a male sexual organ	Prohibited on product label

No.	Subject Matter	Example(s)	Notes
20.	Statement on sugars in traditional products	Example: - This product contains no added sugar	Allowable on product label provided the product contains no fructose, glucose, sucrose or other kind of sugars with a potential to affect diabetics are not included in the formulation
21.	Negative statements	Example: - No active ingredient - No gluten, yeast, etc.	Prohibited on product label
22.	Other statements	Example: - This product is blended with premium quality - Certified chemical residue free	Prohibited on product label
23.	Label design (graphic/ colour) similar to/ same as an adulterated product		Prohibited on product label

Notes:

- 1. This list is not meant to be exhaustive and will be reviewed from time to time.
- 2. The Authority reserves the right to disallow any other words, phrases or graphics for product label, which in its opinion, is misleading, improper or not factual.

2.7 QUALITY CONTROL

2.7.1 Quality Testing for Specific Ingredient

- i) For product containing Aphanizomenon flosaquae, applicants shall provide certificates of analysis showing that the microcystin-LR or total microcystins content of the raw material does not exceed $1\mu g/g$ and the finished product has been tested for microcystin-LR using an acceptable method;
- ii) For products containing Red Yeast Rice (*Monascus purpureus*), applicants shall provide certificates of analysis (for both raw material and finished product) showing the Monacolin-K content. The percentage of Monacolin-K shall not exceed 1% and the Monacolin-K consumed shall not exceed 10 mg per day.

2.7.2 Limit Test for Heavy Metals

Limit for heavy metals:

i) Lead : NMT 10.0 mg/kg or 10.0 mg/litre (10.0ppm)

ii) Arsenic : NMT 5.0 mg/kg or 5.0 mg/litre (5.0ppm)

iii) Mercury : NMT 0.5 mg/kg or 0.5 mg/litre (0.5ppm)

iv) Cadmium : NMT 0.3 mg/kg or 0.3 mg/litre (0.3ppm)

2.7.3 Disintegration Test

Disintegration time for tablets, capsules and pills

i) Uncoated tablets : NMT 30 minutes

ii) Film-coated tablets : NMT 30 minutes

iii) Sugar-coated tablets : NMT 60 minutes

iv) Enteric-coated tablets : Does not disintegrate for 120 minutes in acid solution

but to disintegrate within 60 minutes in buffer solution

v) Capsules : NMT 30 minutes

vi) Pills : NMT 120 minutes

2.7.4 Test for Uniformity of Weight (For Tablets and Capsules Only)

i) Tablet

- For tablet with average weight of 130mg or less: Not more than 2 tablets differ from the average weight by more than 10% AND no tablets differ from the average weight by more than 20%
- For tablet with average weight between 130-324mg: Not more than 2 tablets differ from the average weight by more than 7.5% AND no tablet differs from the average weights by more than 15%
- For tablets with average weight more than 324mg: Not more than 2 tablets differ from the average weight by more than 5% AND no tablet differs from the average weight by more than 10%

ii) Capsule

Individual weight of the capsule to be within the limit of 90 - 110% of the average weight.

2.7.5 Tests for Microbial Contamination

A. Herbal medicinal products containing herbal drugs, with or without excipients, intended for the preparation of infusions and decoctions using boiling water (e.g. herbal teas, with or without added flavourings)

Microbiological Quality	Acceptance Criteria	
TAMC	NMT 5 x 10 ⁷ CFU/g	
TYMC	NMT 5 x 10 ⁵ CFU/g	
Escherichia coli	NMT 1 x 10 ³ CFU/g	
Salmonella	Absence (25 g)	

B. Herbal medicinal products containing, e.g. extracts and/or herbal drugs, with or without excipients, where the method of processing (e.g., extraction) or, where appropriate, in the case of herbal drugs, of pre-treatment reduces the levels of organism to below those stated for this category

Microbiological Quality	Acceptance Criteria
TAMC	NMT 5 x 10 ⁴ CFU/g or CFU/mL
TYMC	NMT 5 x 10 ² CFU/g or CFU/mL
Bile-tolerant gram-negative bacteria	NMT 1 x 10 ² CFU/g or CFU/mL
Escherichia coli	Absence (1 g or 1 mL)
Salmonella	Absence (25 g or 25 mL)

C. Herbal medicinal products containing, e.g. extracts and/or herbal drugs, with or without excipients, where it can be demonstrated that the method of processing (e.g. extraction with low strength ethanol or water that is not at boiling or low temperature concentration) or, in the case of herbal drugs, of pre-treatment, would not reduce the level of organisms sufficiently to reach the criteria required under B.

Microbiological Quality	Acceptance Criteria
TAMC	NMT 5 x 10 ⁵ CFU/g or CFU/mL
ТҮМС	NMT 5 x 10 ⁴ CFU/g or CFU/mL
Bile-tolerant gram-negative bacteria	NMT 1 x 10 ⁴ CFU/g or CFU/mL
Escherichia coli	Absence (1 g or 1 mL)
Salmonella	Absence (25 g or 25 mL)

D. Special Ph. Eur. provision for oral dosage forms containing raw materials of natural (animal, vegetal or mineral) origin for which antimicrobial pretreatment is not feasible and for which the competent authority accepts TAMC of the raw material exceeding 10^3 CFU/g or CFU/mL.

Microbiological Quality	Acceptance Criteria
TAMC	NMT 2 x 10 ⁴ CFU/g or CFU/mL
TYMC	NMT 2 x 10 ² CFU/g or CFU/mL
Bile-tolerant gram-negative bacteria	NMT 1 x 10 ² CFU/g or CFU/mL
Salmonella	Absence (10 g or 10 mL)
Escherichia coli	Absence (1 g or 1 mL)
Staphylococcus aureus	Absence (1 g or 1 mL)

E. Herbal Medicine for External use

Route of Administration	TAMC (CFU/g or CFU/ml)	TYMC (CFU/g or CFU/ml)	Specified microorganisms
Oromucosal use Gingival use Cutaneous use Nasal use Auricular use	NMT 2 x 10 ²	NMT 2 x 10 ¹	Absence of Staphylococcus aureus (1 g or 1 ml) Absence of Pseudomonas aeruginosa (1 g or 1 ml)
Transdermal patches (limits for one patch including adhesive layer and backing layer)	NMT 2 x 10 ²	NMT 2 x 10 ¹	Absence of <i>Staphylococcus aureus</i> (1 patch) Absence of <i>Pseudomonas</i> aeruginosa (1 patch)

Notes:

TAMC: Total Aerobic Microbial Count TYMC: Total Yeasts & Moulds Count

NMT : Not more than

[Reference: latest version of British Pharmacopoeia]

2.7.6 Certificate of Analysis (Active Ingredient)

Certificate of Analysis (COA) for one batch of active ingredient (herbal substance/preparation/quantified extract), issued by both the active ingredient supplier and the product manufacturer, shall be submitted during traditional product registration application. The COA consists of the following tests (as in **Table 1 and Table 2**), shall be submitted for **all active ingredients** in the formulation.

 $\textbf{Table 1} : List of testing requirements for active ingredients \textbf{(herbal substances}^1\textbf{)}$

Tests	Specifications	Results
Appearance/Organoleptic characteristics		
Identification: (should be specific for the herbal substance and are usually a combination of three or more of the following): Macroscopy/Microscopy/ Chromatographic procedures or Chemical tests		
Quantitative assay (for active ingredient compounds that are claimed on label)		
Purity Tests: Foreign Matter Total Ash Content Ash insoluble in hydrochloric acid* Water content Extractive Values* Water Soluble extracts Ethanol Soluble extracts Extractable matter Microbial Contamination Tests: Total Aerobic Microbial Count (TAMC) Total Yeast and Mould Count (TYMC) Bile tolerant gram-negative bacteria Salmonella Escherichia coli Staphylococcus aureus Pseudomonas aeruginosa		
Heavy metal limit: Arsenic Mercury Lead Cadmium		
Other Tests*: Residual solvents Mycotoxins (Aflatoxin, Ochratoxin A) Pesticides Particle size		

Notes:

1Herbal substances refers to all mainly whole, fragmented or cut plants, plant parts, algae, fungi, lichen in an unprocessed, usually dried form but sometimes fresh. Certain exudates that have not been subjected to a specific treatment are also considered to be herbal substances. Herbal substances are precisely defined by the plant part used and the botanical name according to the binomial system (genus, species, variety and author).

*These tests might not apply to all herbal substances and must be justified by the applicant.

Table 2: List of testing requirements for active ingredients (herbal preparations²/ quantified extracts³)

Tests	Specifications	Results
Appearance/Organoleptic characteristics		
Identification: Chromatographic procedure (Identification tests should be specific for the herbal preparation, and optimally should be discriminatory with regard to substitutes/adulterants that are likely to occur. Identification solely by chromatographic retention time, for example, is not regarded as being specific; however, a combination of chromatographic tests (e.g. HPLC and TLC-densitometry) or a combination of tests into a single procedure, such as HPLC/UV-diode array, HPLC/MS, or GC/MS may be acceptable.)		
Quantitative assay (for active ingredient compounds that are claimed on label)		
Purity Tests: Water Content		
Microbial Contamination Tests: Total Aerobic Microbial Count (TAMC) Total Yeast and Mould Count (TYMC) Bile tolerant gram- negative bacteria Salmonella Escherichia coli Staphylococcus aureus Pseudomonas aeruginosa		

Tests	Specifications	Results
Heavy metal limit:		
Arsenic		
Mercury		
Lead		
Cadmium		
Other Tests**:		
Residual solvents		
Mycotoxins (Aflatoxin,		
Ochratoxin A)		
Pesticides		

Notes:

2Herbal preparations are obtained by subjecting herbal substances to treatments such as extraction, distillation, expression, fractionation, purification, concentration or fermentation. These include comminute or powdered herbal substances, tinctures, extracts, essential oils, expressed juices and processed exudates.

³**Quantified extracts** refer to herbal substances/herbal preparations adjusted to one or more active markers, the content of which is controlled within a limited, specified range. Adjustments are made by blending batches of the herbal substance/herbal preparation.

** These tests might not apply to all herbal preparations/quantified extracts and must be justified by the applicant.

2.7.7 Certificate of Analysis (Finished Product)

The PRH shall submit a Certificate of Analysis (CoA) for the purpose of product registration evaluation. The CoA submitted to NPRA must meet the following requirements:

- a) CoA from panel laboratories (certified by NPRA) or local manufacturers' laboratories.
 - Only local laboratories can be accepted as a panel laboratory
 - Refer to NPRA website for the list of panel laboratories
 - Local manufacturers are allowed to issue CoA for their own products only
- b) CoA for one (1) batch of local or imported product to be submitted during product evaluation with NPRA's product reference number from QUEST 3+ system.
- c) CoA from multiple laboratories for different tests may be accepted, provided that the same batch of the products is submitted to the laboratories.
- d) The following compulsory testing parameters shall be stated in the CoA:

Testing parameters	Panel laboratories/ manufacturers' laboratories	Other laboratories
Organoleptic	$\sqrt{}$	X
Disintegration	$\sqrt{}$	X
Uniformity of weight		X
Microbial Contamination Test	√ 	Х
Heavy Metal Contamination	√ 	X
Lovastatin (product containing Red Yeast Rice; Monascus purpureus)	V	V
Microcystin (product containing Aphanizomenon flosaquae)		$\sqrt{}$
Assay (for all standardize compounds claimed on label)		

e) For imported products, applicants are required to submit CoA from panel laboratories. Import permit issued by the Centre of Product & Cosmetic Evaluation is required to bring in samples for the purpose of laboratory testing. The applicant should ensure that the import permit is endorsed by the enforcement officer at the entry point.

Reference: Directive No. 8, 2020, <u>BPFK/PPP/07/25 (8) Ild.4.</u> Direktif Penerimaan Keputusan Pengujian Pra-Pendaftaran Produk Semulajadi dari Makmal Swasta yang Telah Diiktiraf oleh Bahagian Regulatori Farmasi Negara (NPRA) dan Makmal Kawalan Kualiti Pengilang Tempatan (12 May 2020)

f) All submitted sample test results are deemed final. There is no provision for appeal to submit new or updated results.

Reference: Pekeliling (25) dlm.BPFK/PPP/01/03 Jld.3. Pekeliling Pemansuhan Sistem Rayuan Pengujian Semula Sampel (Appeal for Sample Retesting) Bagi Sampel Prapendaftaran Produk Tradisional Yang Tidak Lulus Pengujian Makmal Kali Pertama Oleh Pusat Kawalan Kualiti BPFK (19 January 2015)

g) Effective from 1 January 2023, Quantification by Input (QBI) of active ingredients may be considered for Traditional Medicine and Health Supplement (TMHS) Products. For details, refer to the Direktif Berkenaan Pelaksanaan Garis Panduan Guidance on the Acceptance Criteria for Quantification by Input (QBI) of Active Ingredients Claimed on Label of Traditional Medicine and Health Supplement (TMHS) Products. NPRA.600-1/9/13(16) Jld 1. (8 November 2022)

Example of Certificate of Analysis for Finished Product (Natural Product)

Certificate of Analysis

Company name/ Address :

Product Name :

Batch no.

Dosage form :

Packaging :

Date of manufacture :

Date of expiry :

zuce of expiry			
Test Parameter	Specifications	Results	Method
Appearance/ Organoleptic:			
Odour	To describe the		
Colour	characteristic		
Disintegration	DRGD		
Uniformity of weight			
Assay:			
All standardized compounds claimed on label	To specify		
Standardized compounds assayed by QBI	To specify	Example: Results and statement 'Not Assayed. Quantified by Input'or words with similar meaning	QBI
Microbial Contamination Test			
TAMC, TYMC, specified	DRGD		
microorganism			
Heavy Metal Contamination			
	NN (TO 4.0		
Lead (Pb)	NMT 10 ppm		
Cadmium (Cd)	NMT 0.3 ppm		
Mercury (Hg)	NMT 0.5 ppm		
Arsenic (As)	NMT 5 ppm		

NMT = Not More Than

Signature : Name :

Designation : (At least by Quality Control Manager or equivalent)

Date of signature :

Note: The above parameter are only as an example, other tests may be required for specific product.

2.8 STABILITY DATA

General:

- The stability of the product is important to ensure the quality of natural product (traditional and homeopathic medicines). This is to ensure that the product specifications are maintained throughout the shelf life of product.
- Effective from 27 Nov 2014, a shelf life of two (2) years shall be approved for both local and imported products. Proposed shelf life exceeding this period will have to be supported by stability study data conducted in Malaysia under Zone IVb conditions (30±2 °C, 75±5%). For further information, refer to circular: <u>Bil (27).dlm BPFK/PPP/06/04Jld.7</u> Tempoh Hayat Simpanan (Shelf-Life) Bagi Produk Tradisional dan Suplemen Kesihatan (27 November 2014).
- Should the applicant wish to declare the percentage or content of the isolated compound of a standardized extract, the stability study should state the results of the assay of the isolated compound conducted along the proposed shelf-life. If results of the assay are not provided, the shelf life period approved will not be more than two (2) years.
- Effective from 1 January 2023, Quantification by Input (QBI) of active ingredients may be considered for Traditional Medicine and Health Supplement (TMHS) Products. For details, refer to the *Direktif Berkenaan Pelaksanaan Garis Panduan Guidance on the Acceptance Criteria for Quantification by Input (QBI) of Active Ingredients Claimed on Label of Traditional Medicine and Health Supplement (TMHS) Products*. NPRA.600-1/9/13(16) Jld 1. (8 November 2022)
- The testing frequency of the stability data is as described below:

Storage condition	Testing frequency
Real time	Time 0, 3, 6, 9, 12, 18, 24 months and annually there after
	through
Accelerated	0, 3 and 6 months

Refer to the ASEAN Guidelines on Stability Study and Shelf Life of Traditional Medicines for further details.

Stability data as shown in the following example shall be submitted for evaluation.

RECOMMENDED PRESENTATION OF THE SUMMARY TABLE OF STABILITY RESULTS

Product Name : Storage Temperature, :

Relative Humidity

Dosage Form:Batch No.:Strength:Manufacturing Date:Container/Packaging:Date of Report:Pack Size:Period of The Study:

Appearance	Testing Parameters	Specifications	Testing Frequency (Months)								
Organoleptic characteristics: Odour Colour Colour Disintegration DRGD Uniformity of weight DRGD DRGD Uniformity of weight Assay: (All standardized compounds claimed on label, if applicable) Standardized compounds Standardized compounds assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -Total Yeasts & Moulds -NMT 1 x 10² CFU/g or CFU/mL -Total Yeasts & Moulds -NMT 1 x 10² CFU of bile-tolerant gram- negative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -NA	(as applicable)		0	3	6	9	12	18	24	36	
characteristics: Odour Colour Disintegration DRGD Uniformity of weight Assay: (All standardized compounds claimed on label, if applicable) Standardized compounds assayed by QBI Microbial Contamination Test -Total Yeasts & Moulds Count -Total Specified Microorganisms NMT 1 x 102 CFU/g or CFU/mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL -NMT 10 ppm -Lead (Pb) -NMT 0.3 ppm -NMT 0.5 ppm	Appearance/	To describe the characteristics									
Odour Colour Disintegration DRGD DRGD DRGD Assay: (All standardized compounds claimed on label, if applicable) Standardized compounds assayed by QBI Microbial Contamination Test -Total Yeasts & Moulds Count -Total Yeasts & Moulds Count -Test for Specified Microorganisms -NMT 1 x 102 CFU/g or CFU/mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL -NMT 10 ppm -NMT 03 ppm -NMT 05 ppm -NMT 0	Organoleptic										
Colour Distributegration DRGD DRGD DRGD To specify (All standardized compounds claimed on label, if applicable) Standardized compounds assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -Total Yeasts & Moulds Count -Tost or Specified Microorganisms -NMT 2 x 10² CFU/g or CFU/mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -NMT 0.5	characteristics:										
Disintegration DRGD DRGD DRGD DRGD DRGD DRGD DRGD DRG	Odour										
Uniformity of weight Assay: (All standardized compounds claimed on label, if applicable) Standardized compounds assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -Total Yeasts & Moulds Count -NMT 2 x 10² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	Colour										
Assay: (All standardized compounds claimed on label, if applicable) Standardized compounds assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -Total Yeasts & Moulds Count -Total Yeasts & Moulds Count -Total Yeasts & Moulds Count -Test for Specified Microorganisms -NMT 2 x 10² CFU/g or CFU/mL -NMT 1 x 10² CFU of bile-tolerant gram-negative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 1.3 ppm -NMT 0.5 ppm To specify 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar m	Disintegration	DRGD									
(All standardized compounds claimed on label, if applicable) Standardized compounds assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -NMT 2 x 10 ⁴ CFU/g or CFU/mL -Total Yeasts & Moulds Count -NMT 2 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -Cadmium (Cd) -NMT 0,3 ppm -NMT 0,5 ppm	Uniformity of weight	DRGD									
compounds claimed on label, if applicable) Standardized compounds assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -NMT 2 x 10 ⁴ CFU/g or CFU/mL -Total Yeasts & Moulds Count -NMT 1 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -Cadmium (Cd) -NMT 10 ppm -Cadmium (Cd) -NMT 0.5 ppm 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not Assayed. Quantified by Input' or words with similar meaning 'Not A	Assay:	To specify									
Label, if applicable Standardized compounds assayed by QBI	(All standardized										
Standardized compounds assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -NMT 2 x 10 ⁴ CFU/g or CFU/mL -Total Yeasts & Moulds Count -NMT 1 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Salmonella in 25g or 25mL	compounds claimed on										
Assayed by QBI Microbial Contamination Test -Total Aerobic Microbial Count -NMT 2 x 10 ⁴ CFU/g or CFU/mL -Total Yeasts & Moulds Count -NMT 2 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	label, if applicable)										
Microbial Contamination Test -Total Aerobic Microbial Count -NMT 2 x 10 ⁴ CFU/g or CFU/mL -Total Yeasts & Moulds Count -NMT 2 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -Cadmium (Cd) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	Standardized compounds	To specify	'Not Assayed. Quantified by Input' or words with								
Contamination Test -Total Aerobic Microbial Count -NMT 2 x 10 ⁴ CFU/g or CFU/mL -Total Yeasts & Moulds Count -NMT 2 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	assayed by QBI										
-Total Aerobic Microbial Count -NMT 2 x 10 ⁴ CFU/g or CFU/mL -Total Yeasts & Moulds Count -NMT 2 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -Mercury (Hg) -NMT 0.5 ppm	Microbial	DRGD									
Count -Total Yeasts & Moulds Count -NMT 2 x 10² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	Contamination Test	e.g.:									
-Total Yeasts & Moulds Count -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	-Total Aerobic Microbial										
Count -NMT 2 x 10 ² CFU/g or CFU/mL -Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	Count	-NMT 2 x 10 ⁴ CFU/g or CFU/mL									
-Test for Specified Microorganisms -NMT 1 x 10 ² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -Cadmium (Cd) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -NMT 0.5 ppm	-Total Yeasts & Moulds										
Microorganisms -NMT 1 x 10² CFU of bile-tolerant gramnegative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL NA Contamination -Lead (Pb) -NMT 10 ppm -NMT 0.3 ppm -NMT 0.5 ppm	Count	-NMT 2 x 10 ² CFU/g or CFU/mL									
negative bacteria in 1g or 1mL -Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -Cadmium (Cd) -NMT 10 ppm -NMT 0.3 ppm -NMT 0.5 ppm	-Test for Specified										
-Absence of Salmonella in 25g or 25mL -Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -Nercury (Hg) -NMT 0.5 ppm	Microorganisms	-NMT 1 x 10 ² CFU of bile-tolerant gram-									
-Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -Cadmium (Cd) -NMT 0.3 ppm -Mercury (Hg) -NMT 0.5 ppm		negative bacteria in 1g or 1mL									
-Absence of Escherichia coli in 1g or 1mL -Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -Cadmium (Cd) -NMT 0.3 ppm -Mercury (Hg) -NMT 0.5 ppm											
-Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -NA		-Absence of Salmonella in 25g or 25mL									
-Absence of Staphylococcus aureus in 1g or 1mL Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -NA											
Or 1mL		-Absence of Escherichia coli in 1g or 1mL									
Or 1mL											
Heavy Metal Contamination -Lead (Pb) -NMT 10 ppm -Cadmium (Cd) -NMT 0.3 ppm -Mercury (Hg) -NMT 0.5 ppm		-Absence of Staphylococcus aureus in 1g									
Contamination -NMT 10 ppm NA NA -Lead (Pb) -NMT 0.3 ppm NA		or 1mL									
-Lead (Pb) -NMT 10 ppm -NA											
-Cadmium (Cd) -NMT 0.3 ppm -Mercury (Hg) -NMT 0.5 ppm											
-Mercury (Hg) -NMT 0.5 ppm		I = = = = = = = = = = = = = = = = = = =		<u> </u>			NA				
	-Cadmium (Cd)										
-Arsenic (As) -NMT 5 ppm		-NMT 0.5 ppm									
	-Arsenic (As)	-NMT 5 ppm									

NMT = Not More Than

Conclusion:

Prepared by: (signature) Checked by: (signature) Approved by: (signature)

Name:Name:Name:Designation:Designation:Designation:Date:Date:Date:

The tabulated list of parameters for each dosage form is presented as a guide for the following types of tests to be included in a stability study.

<u>Tabulated list of stability indicating parameters for natural products</u>

Testing Parameters								Ţ.	le		
Dosage Form	Organoleptic characteristics	Assay	Hardness/ friability	Dissolution/ Disintegration	Water content	Viscosity	Hd	Microbial content	Granules/Particle Size variation	Resuspendability	Adhesiveness
Oral powder	$\sqrt{}$	$\sqrt{}$			$\sqrt{}$			V			
Hard capsule	V	$\sqrt{}$		\checkmark				$\sqrt{}$			
Soft capsule	$\sqrt{}$	$\sqrt{}$		\checkmark				$\sqrt{}$			
Coated and Uncoated Tablet	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	√	$\sqrt{}$			$\sqrt{}$			
Coated and Uncoated Pill/ Pellet	V	$\sqrt{}$		\checkmark				$\sqrt{}$			
Suspension	$\sqrt{}$	$\sqrt{}$				$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Solution	$\sqrt{}$	$\sqrt{}$				$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			
Emulsion	$\sqrt{}$	$\sqrt{}$				$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			
Semi Solid Preparations (Ointment/ Cream/ Gel/ Lotion/ Paste)	\checkmark	$\sqrt{}$				V	√	V			
Plaster	$\sqrt{}$	$\sqrt{}$						$\sqrt{}$			$\sqrt{}$
Granules	V	V			V			V	V		
Herbal Infusion Bag/ Herbal Tea Bag	V	$\sqrt{}$			$\sqrt{}$			V			
Pastilles	$\sqrt{}$	$\sqrt{}$			$\sqrt{}$			$\sqrt{}$			

3. PRODUCT SPECIFIC REQUIREMENTS

3.1 FOOT PATCHES

A foot patch that contains herbs with a health claim needs to be registered with the Authority.

Summary of registration for foot patches is described below:

a) Product Indication

- Traditionally used for
 - a) General health;
 - b) Promoting blood circulation;
 - c) Relieve fatigue.
- If there are other indications other than those mentioned above, the applicant is required to submit clinical study data to support the proposed indication.

b) Active ingredient/ Excipient

- The product may only contain active ingredient classified under the category of Natural Products (Traditional).
- Pharmaceutical ingredients with dual function as an active ingredient and excipient, e.g. Vitamin C can be used as excipient.
- However, the maximum allowable amount for the excipient in the traditional product has to follow the pharmacopoeia limits established. If, for example, in the case where the amount of Vitamin C is more than 0.1%, the product shall be classified as an OTC product. The product will then have to fulfill the requirement for the registration of an OTC product.

c) Certificate of Analysis for Finished Product

- It is required with at least one (1) batch data for registration.

d) Certificate of Free Sale (CFS)

- CFS from the regulatory authority of the country of origin of the product depending on the product classification of that product in that country is required.

e) Good Manufacturing Practice (GMP)

 GMP from the governmental issuing body declaring manufacturer adherence to GMP/ ISO or other standards depending on the classification of the product in the country of origin is required.

3.2 HERBAL TEA

Refer to <u>Bil. (19)dlm.BPFK/PPP/01/03 Jld.3</u>. Pekeliling Kriteria Baru Pengkelasan Produk Food-Drug Interphase (FDI) (7 August 2014)

3.3 HOMEOPATHIC PRODUCTS

Refer to **Appendix 7A**: **Homeopathic Products**

3.4 NATURAL PRODUCTS WITH MODERN CLAIM

Refer to Appendix 7B: Guideline on Natural Products with Modern Claim

3.5 NATURAL PRODUCTS WITH THERAPEUTIC CLAIM

Refer to Appendix 7C: Guideline on Natural Products with Therapeutic Claim