



ZAMBIA ESSENTIAL MEDICINE LIST (ZEML)

03

2013





ZAMBIA ESSENTIAL MEDICINE LIST (ZEML)

Users of this publication are encouraged to send any comments and queries to the following address:

THE DEPUTY DIRECTOR
PHARMACEUTICAL SERVICES
MINISTRY OF HEALTH
P.O Box 30205
LUSAKA
Email: cmbewe@moh.gov.zm

Proposals for amendments to the list should be sent to the same address using the ZEML amendment form (page 32)

CONTENTS

Acknowledgement	i
ZAMBIA NATIONAL FORMULARY COMMITTEE 2011 - 2013	ii
INTRODUCTION	iii
Drugs used in anaesthesia	1
Drugs acting on the gastrointestinal system	2
Drugs acting on the central nervous system	3
Drugs used in the treatment of infections	6
Drugs acting on the endocrine system and obstetrics, gynaecology and contraception	12
Drugs used in the treatment of diseases of the respiratory system and allergy	15
Drugs used in the treatment of diseases of the cardiovascular system	16
Drugs used in the treatment of malignant disease: anti-neoplastic drugs	19
Drugs acting on the eye	21
Blood	24
Nutrition	25
Drugs acting on the skin	26
Drugs used in the treatment of diseases of the ear, nose and throat	28
Drugs used in the treatment of musco-skeletal disorder	29
Immunological products	29
Antidotes and other substances used in poisoning	30
ZEML amendment form	32

Acknowledgement

The Zambia National Formulary Committee is grateful to the Ministry of Health for the support given to the Committee during the preparation of this edition of the ZEML. The Committee would also like to thank WHO, MSH – RPM Plus and Clinton Foundation for financial and technical support towards the preparation of the ZEML.

Some advice and contributions were also received from various health professionals from various institutions.

The Committee would also like to thank Mrs. Mildred F.L. Mulenga, Mr Chikuta Mbewe, Mrs Bernice Mwale, Mr Luke Alutuli, Mr George Kadimba, Mr Maxwell Kasonde, Mrs Florence Chindalo from ZNFC Secretariat for their support and Mrs Mary N Mupeta for typesetting and computerising the text for printing.

We would like to acknowledge UNICEF support for typesetting services to the document. A special thanks to SIDA for supporting the printing of this edition.

ZAMBIA NATIONAL FORMULARY COMMITTEE 2011 - 2013

- | | | | |
|---|---|---|--|
| 1. Professor Chifumbe Chintu, Haemato-oncologist, UTH | General Medical Officer | 27. Mrs Anne Zulu, Director of Standards, MSL | Coordinator, MoH |
| 2. Dr John Musuku, Consultant Paediatric Cardiologist | 15. Dr L T Mungo, Lecturer, Pharmacy Department, UNZA School of Medicine | 28. Mrs Bernice Mwale, Director, Product Registration, PRA | 7. Ms Fales Mwamba, Dip MLT, Bsc (Hon) MLS, MoH |
| 3. Dr Kennedy Lishimpi, Oncologist | 16. Mrs Loyce Lishimpi Mitelo, Pharmacist | 29. Mrs Mildred Mulenga, Principal Pharmacist, Rational Use of Medicines, MoH | Editor |
| 4. Dr Maureen Chisembele, Obstetrician/Gynaecologist, UTH | 17. Mr Oliver Hazemba, Pharmacist, Management Sciences for Health (MSH) | 30. Mr Chikuta Mbewe, Deputy Director, Pharmaceutical Services | Mr Spencer Banda, BA UNZA, Med. (Man) |
| 5. Dr Robert Zulu, General Surgeon | 18. Mr Enock Chikatula, Pharmacist, UTH | 31. Mr Luke Alutuli, Principal pharmacist, Logistics Management | Design and print |
| 6. Dr Kalinichenko, Cardiologist, UTH | 19. Dr Aggrey Mweemba, Renal Specialist | 32. Mrs Florence Chindalo, Secretary, DCCDs, MoH | New Horizon Printing Press |
| 7. Dr Izukanji Sikazwe, Infectious Disease Specialist, MoH | 20. Dr Gardner Syakantu, Director, Clinical Care & Diagnostics, MoH | | Secretariat |
| 8. Dr Crispin Moyo, HIV Medicine Specialist, MoH | 21. Ms Esnat Mwape, Director General, Pharmaceutical Regulatory Authority (PRA) | | 1. Mrs Bernice Mwale, Director, Product Registration, PRA |
| 9. Dr Gloria Munthali, Clinical Care Specialist, MoH | 22. Mr Patrick Banda, Senior Planner, Planning & Budgeting, MoH | Other Technical Reviewers | 2. Mrs Mildred Mulenga, Principal Pharmacist, Rational Use of Medicines, MoH |
| 10. Dr A Chomba, Dermatologist, UTH | 23. Dr Mary Miyanda, Ophthalmologist, MoH | 1. Dr F Simenda, Psychiatrist | 3. Mr Luke Alutuli, Principal pharmacist, Logistics Management |
| 11. Dr Jospeh Wapabeti, Psychiatrist, Chainama Hills Hospital | 24. Dr Mutale Nsakashalo, Non-Communicable Diseases (NCDs) Specialist | 2. Mr George Kadimba, Lusaka District Pharmacist | 4. Mrs Florence Chindalo, Secretary, DCCDs, MoH |
| 12. Dr Nason Lambwe, Consultant Physician, UTH | 25. Dr Nathan Kapata, TB Specialist | 3. Ms Dorothy Samalesu, EN/ Counselor, MoH | 5. Mr Katongo Chikwanda, Office Orderly |
| 13. Dr Lawrence Siyamuyoba, Internal Medicine Specialist | 26. Mrs Pamela Kauseni, Economist, MoFND | 4. Mr Maxwell Kasonde, Pharmacist Lusaka DHMT | |
| 14. Dr Jenipher Chisanga, | | 5. Mr Billy Mweetwa, Pharmacist, WHO | |
| | | 6. Dr Albert Mwangi, National Antiretroviral Programme | |

INTRODUCTION

Essential medicines are those that satisfy the needs of the majority of the population and therefore should be available at all times, in adequate amounts and in the appropriate dosage forms.

The criteria for selection of essential medicines:

- The choice of essential medicines depends on factors such as: The pattern of prevalent diseases; the treatment facilities; the training and experience of available personnel; the financial resources; and also the results of efficacy and safety evaluations obtained in controlled clinical trials and epidemiological studies, and the performance in general use in a variety of medical settings.
- When several medicines are available for the same indication, only the medicine and the pharmacological form that provides the more convenient, benefit/risk ratio must be selected.
- When two or more medicines are therapeutically equivalent, the selection should fall on the basis of careful evaluation of their relative efficacy, safety,

quality, price and availability:

- A medicine with which the health workers are familiar
- A medicine with the most favorable pharmacokinetic properties
- One that has been thoroughly investigated
- In cost comparison, it must be a medicine with the lowest cost of the total treatment, not only the unit cost of the medicine
- And a medicine that is readily available

Most essential medicines must be formulated as single compounds. A fixed dose combination should be accepted only if clinical documentation justifies the concomitant use of more than one drug, and the combination provides a proven advantage over single compounds when administered separately in terms of therapeutic effect, safety, cost or patients adherence to treatment.

	Drug	Presentation	Level	VEN
1	Drugs used in anaesthesia			
1.1.	Drugs used in general anaesthesia			
1.1.1	Intravenous and intramuscular anaesthetics			
1.1.1.1	Ketamine	injection 10mg/ml	(10 ml) II-IV	V
1.1.1.2	Thiopentone sodium	powder for reconstitution 1g and 5g vials	II-IV	V
1.1.2	Inhalation anaesthetics			
1.1.2.1	Halothane	inhalation	II-IV	V
1.1.2.2	Nitrous oxide	medical gas	II-IV	E
1.1.3	Muscle relaxants			
1.1.3.1	Suxamethonium chloride	injection 50mg/ml, (2ml)	II-IV	V
1.1.4	Anticholinesterases			
1.1.4.1	Neostigmine	injection 2.5mg/ml, (1ml)	II-IV	V
1.2	Drugs used in local anaesthesia			
1.2.1.	Lignocaine	injection 1% (10ml, 50ml)	I-IV	V
1.2.2	Lignocaine + adrenaline	dental cartridge injection 2% (1 in 80,000)	II-IV	V
1.3	Drugs used in spinal anaesthesia			
1.3.1	Bupivacaine/glucose	injection 0.5%, (4ml)	IV	E

	Drug	Presentation	Level	VEN
2.	Drugs acting on the gastrointestinal system			
2.1	Antacids			
2.1.1	Aluminium hydroxide	gel, chewable tablets	I-IV	E
2.1.2	Magnesium trisilicate Compound	chewable tablets, mixture	I-IV	E
2.2.	Antispasmodics			
2.2.1	Hyoscine butyl bromide	injection 20mg/ml, (1ml)	II-IV	E
2.2.2	Propantheline bromide	tablets 15mg	I-IV	E
2.3	Ulcer healing drugs			
2.3.1	Cimetidine	tablets 200mg	II-IV	E
2.3.2	Omeprazole	tablets 10mg,	II-IV	E
2.3.3	Ranitidine	tablets 150mg	II-IV	E
2.3.4	Tripotassium dicitratobismuthate	tablets 120mg	II-IV	E
2.3.5	Clarithromycin	tablets 250mg	II-IV	E
2.4.	Antidiarrhoeals			
2.4.1	Codeine phosphate	tablets 15mg	II-IV	E
2.4.2	Loperamide	tablets 2mg	IV	E
2.4.3	Nitazoxanide	suspension 100mg	III-IV	E

	Drug	Presentation	Level	VEN
2.5.	Laxatives			
2.5.1	Glycerol	suppository 1g,4g	I-IV	E
2.5.2	Senna	tablets 7.5mg	II-IV	E
2.6	Drugs used for treating haemorrhoids			
2.6.1	Bismuth subgallate and zinc oxide	suppository, cream	II-IV	E
3	Drugs acting on the central nervous system			
3.1	Anxiolytics and Antipsychotic drugs			
3.1.1	Alprazolam	tablets 0.25 microgram	III-IV	E
3.1.2	Lorazepam	tablets 2mg tablets	III-IV	E
3.1.3	Diazepam	tablets 2mg, injection 5mg/ml (2ml)	II-IV	V
3.1.4	Medazolam	injection 1mg/ml	III	E
3.1.5	Selective serotonin reuptake inhibitors			
3.1.5.1	Sertraline	tablets 50mg	IV	E
3.2	Tricyclic Antidepressants			
3.2.1	Clomipramine	tablets 25mg	III	E
3.3	Anti-depressant drugs			
3.3.2	Fluoxetine	tablets 20mg	IV	E

	Drug	Presentation	Level	VEN
3.3.4	Lithium carbonate	tablets 300mg	IV	E
3.3.5	Sodium valproate	tablets 200mg,	II-IV	E
3.4	Antiepileptic drugs			
3.4.1	Carbamazepine	tablets 200mg injection 5mg/ml	II-IV I-IV	V V
3.4.2	Lamotrigine	tablets 25mg, 50mg	I-IV	V
3.4.3	Ethosuximide	capsules 250mg	III-IV	V
3.4.4	Phenobarbitone	tablets 30mg, injection 200mg/ml	II-IV	V
3.4.5	Phenytoin	tablets 100mg	II-IV	V
3.4.6	Sodium valproate	tablets 200mg, syrup 200mg/5ml	II-IV	V
3.4.7	Clonazepam	tablets 0.5mg, 2mg	II-IV	V
3.4.8	Acetazolamide	tablets 250mg	IV	E
3.4.9	Gabapentin	tablets 600mg	IV	E
3.5	Drugs used in Parkinsonism and related disorders			
3.5.1	Benzhexol	tablets 5mg	II-IV	V
3.5.2	Bromocriptine	tablets 2.5mg	III-IV	E
3.5.3	Procyclidine	tablets 5mg, injection 5mg/ml,(2ml)	I-IV	E
3.5.4	Selegiline	tablets 5mg, 10mg	III-IV	E
3.5.5	Levodopa	tablets 125mg, 250mg, 500g	III-IV	E

	Drug	Presentation	Level	VEN
3.6	Drugs used in nausea			
3.6.1	Cyclizine	tablets 50mg, injection 50mg/ml	IV	E
3.6.2	Domperidone	tablets 10mg	II-IV	E
3.6.3	Metoclopramide	tablets 10mg, injection 5mg/ml (2ml)	II-IV	E
3.6.4	Prochlorperazine	tablets 5mg	III-IV	E
3.6.5	Promethazine	tablet 25mg, injection 25mg/ml(2ml)	I-IV	V
3.6.6	Trifluoperazine	tablets 1mg, injection 1mg/ml	II-IV	E
3.7	Analgesics			
3.7.1	Non-opioid analgesics			
3.7.1.1	Acetyl salicylic acid (aspirin)	tablets 300mg	I-IV	V
3.7.1.2	Paracetamol (acetaminophen)	tablets 100mg, 500mg, mixture 120mg/5ml	I-IV	V
3.7.2	Opioid analgesics			
3.7.2.1	Dihydrocodeine	tablets 30mg	II-IV	E
3.7.2.2	Morphine sulphate	tablets 10mg, injection 10mg/ml	II-IV	V
3.7.2.3	Pethidine	tablets 50mg, injection 50mg/ml	II-IV	V
3.8	Anti-migraine drugs			
3.8.1	Ergotamine tartrate	tablets 1mg	II-IV	E
3.9	Stimulants			
3.9.1	Methylphenidate	tablets 5mg	IV	E

	Drug	Presentation	Level	VEN
3.10	Non-steroidal anti-inflammatory drugs			
3.10.1.	Ibuprofen	tablets 200mg, 400mg	I-IV	E
4	Drugs used in the treatment of infections			
4.1	Antibacterial drugs			
4.1.1	Penicillins			
4.1.1.1	Benzathine penicillin	injection 2.4 MU vial	I-IV	E
4.1.1.2	Benzyl penicillin	injection 5MU vial	I-IV	V
4.1.1.3	Phenoxymethyl penicillin	tablets 250mg, suspension 125mg/5ml	I-IV	E
4.1.1.4	Procaine penicillin	injection 3MU vial	I-IV	E
4.1.2	Broad-spectrum penicillins			
4.1.2.1	Amoxicillin	tablets/capsules 250mg, syrup 125mg/5ml	I-IV	V
4.1.2.2	Ampicillin	injection 500mg vial	II-IV	V
4.1.3	Penicillinase-resistant penicillins			
4.1.3.1	Amoxicillin+clavulanic acid	tablets 375mg(250mg+125mg)	III-IV	E
4.1.3.2	Cloxacillin capsules 250mg	injection 500mg	II-IV	V
4.1.3.3	Flucloxacillin capsules 250mg	injection 250mg	III-IV	E
4.1.4	Aminoglycosides			
4.1.4.1	Gentamicin	injection 40mg/ml, (2ml)	I-IV	V
4.1.4.2	Kanamycin	injection 1g vial	I-IV	E

	Drug	Presentation	Level	VEN
4.1.5	Aminocyclitol			
4.1.5.1	Spectinomycin	injection 2g vial	III-IV	E
4.1.6	Sulphonamides and trimethoprim			
4.1.6.1	Co-trimoxazole	tablets 120mg, 480mg, (sulfamethoxazole + trimethoprim)mixture 240mg/5ml	I-IV	V
4.1.6.2	Trimethoprim	tablets 200mg	I-IV	E
4.1.7	quinolones			
4.1.7.1	Ciprofloxacin	tablets 250mg I.V 2mg/ml 50ml,100ml bottle	III-IV IV	E E
4.1.7.2	Nalidixic acid	tablets 500mg, suspension 30mg/5ml	I-IV	V
4.1.7.3	Ofloxacin	tablets 400mg, I.V 2mg/ml IV E		
4.1.8	Nitro-furan drugs			
4.1.8.1	Nitrofurantoin	tablets 50mg	I-IV	E
4.1.9	Macrolides			
4.1.9.1	Erythromycin	tablets 250mg, injection 500mg vial, syrup 125mg/5ml	I-IV	V
4.1.9.2	Azithromycin	capsules/tablets 250mg, Suspension 200mg/5ml	II-IV	V
4.1.9.10	Clindamycin	capsule 75mg, suspension 75mg/5ml, injection 150mg/ml	III-IV	E
4.1.10	Cephalosporins and cephamycins			
4.1.11.1	Cefotaxime	injection 500mg vial	III-IV	E
4.1.11.2	Cefoxitine	injection 1g, 2g vial	II-IV	E

	Drug	Presentation	Level	VEN
4.1.11.3	Ceftriaxone	injection 250mg,500mg,1g vial	II-IV	E
4.1.11.4	Cephalexin	tablets or capsules 250mg	III-IV	E
4.1.12	Tetracyclines			
4.1.12.1	Doxycycline	tablets 100mg	I-IV	E
4.1.12.2	Tetracycline	tablets 250mg	I-IV	E
4.1.13	Metronidazole	tablets 200mg	I-IV	V
		IV infusion 5mg/ml, (100ml)	III-IV	V
	Other antibacterials			
4.1.14	Chloramphenicol	capsules 250mg, suspension 125mg/5ml, injection 1g vial	II-IV	V
4.2	Anti-tuberculosis drugs			
4.2.1	Rifampicin + Isoniazid	Tablets 150 mg + 75 mg	I-IV	V
4.2.2	Rifampicin + Isoniazid	Tablets 60 mg + 30 mg	I-IV	V
4.2.3	Rifampicin + Isoniazid + Ethambutol	Tablets 150 mg + 75 mg + 275 mg	I-IV	V
4.2.4	Rifampicin + Isoniazid + Pyrazinamide	Tablets 60 mg + 30 mg + 150 mg	I-IV	V
4.2.5	Rifampicin + Isoniazid + Ethambutol + Pyrazinamide	Tablets 150 mg + 75 mg + 275 mg+ 400mg	I-IV	V
4.2.6	Ethambutol	Tablets 400 mg	I-IV	V
4.2.7	Pyrazinamide	Tablets 400 mg	I-IV	V
4.2.8	Streptomycin	Injection 1 g, 5 g vial	I-IV	V

	Drug	Presentation	Level	VEN
4.3	Anti-leprosy drugs			
4.3.1	Clofazimine	capsules 50mg,100mg	II-IV	V
4.3.2	Dapsone	tablets 10mg,25mg,50mg	II-IV	V
4.3.3	Rifampicin	capsules 150mg, 300mg, syrup 100mg/5ml	II-IV	V
4.4	Antifungal drugs (also see section 12.3 and 13.3)			
4.4.1	Amphotericin B	injection 50mg	III-IV	E
4.4.2	Clotrimazole vaginal	tablet 500mg II-IV E		
4.4.3	Fluconazole	50mg, 150mg, 299mg, IV 2mg/ml	III-IV	V
4.4.4	Flucytosine	Injection 10mg/ml	III-IV	E
4.4.5	Griseofulvin	tablets 125mg	III-IV	E
4.4.6	Ketoconazole	tablets 200mg	II-IV	E
4.4.7	Nystatin vaginal	tablets 100,000 IU	II-IV	V
4.5	Anti-protozoal drugs			
4.5.1	Antimalarials			
4.5.1.1.	Artemether-lumefantrine	tablets 20mg/120mg	I-IV	V
4.5.1.2	Pyrimethamine + sulphadoxine	tablets 25mg/500mg	I-IV	V
4.5.1.3	Quinine	tablets 300mg, injection 300mg/1ml (2ml)	I-IV	V
4.5.2	Amoebocides			
4.5.2.1	Metronidazole	tablets 200mg	I-IV	V
4.5.2.2	Tinidazole	tablets 500mg	III-IV	E

	Drug	Presentation	Level	VEN
4.6	Trypanocides			
4.6.1	Melarsoprol	injection 3.6%	III-IV	V
4.6.2	Suramin sodium	injection 1g vial	III-IV	V
4.7	Drugs used in pneumocystis pneumonia			
4.7.1	Co-trimoxazole (sulfamethoxazole + trimethoprim)	tablets 120mg, 480mg, mixture 240mg/5ml	II-IV	V
4.8	Herpes zoster and varicella zoster drugs			
4.8.1	Acyclovir	cream	II-IV	E
4.8.2	Acyclovir	tablets 200mg, 400mg	II-IV	E
4.9	Antiretrovirals			
4.9.1	Nucleoside Reverse Transcriptase Inhibitors			
4.9.1.1	Abacavir	tablets 300mg	II-IV	E
4.9.1.3	Lamivudine, 3TC	tablets 150mg	II-IV	E
4.9.1.4	Lamivudine + zidovudine	tablets 150/250mg	II-IV	E
4.9.1.5	Lamivudine + Stavudine	tablets 150/30mg	II-IV	E
4.9.1.6	Lamivudine + Stavudine + Nevirapine	tablets 150/30/200mg	II-IV	E
4.9.1.7	Stavudine, D4T	tablets 30mg	II-IV	E
4.9.1.8	Zidovudine, ZDV, AZT	tablets 100mg, 250mg	II-IV	E
4.9.1.9	Tenofovir	tablets 245mg	II-IV	E
4.9.1.10	Emitricitabine	tablets 200mg	II-IV	E

	Drug	Presentation	Level	VEN
4.9.1.11	Tenofovir/Emitricitabine	tablets 300/200mg	II-IV	E
4.9.2	Non-nucleoside Reverse Transcriptase inhibitors			
4.9.2.1	Efavirenz	tablets 600mg	II-IV	E
4.9.2.2	Nevirapine	tablets 200mg	II-IV	E
4.9.3	Protease inhibitors			
4.9.3.2	Ritonavir	tablets 600mg	II-IV	E
4.9.3.3	Lopinavir/Ritonavir	tablets 133.3/33.3mg	II-IV	E
4.9.3.4	Nelfinavir	tablets 750mg	II-IV	E
4.10	Anthelmintics			
4.10.1	Mebendazole chewable	tablets 100mg	I-IV	V
4.10.2	Nicosamide	tablets 500mg	I-IV	E
4.10.3	Pyrantel	tablets 125mg, suspension 250mg/5ml	I-IV	E
4.10.4	Thiabendazole	tablets 500mg	II-IV	E
4.10.5	Albendazole	tablets 400mg	II-IV	E
4.11	Schistosomicides			
4.11.1	Praziquantel	tablets 600mg	I-IV	V
4.12	Anti-filarials			
4.12.1	Diethylcarbamazine	tablets 50mg	III-IV	E
4.12.2	Ivermectin	tablets	III-IV	E

	Drug	Presentation	Level	VEN
4.12.3	Suramin sodium	injection 1g vial	III-IV	V
5.	Drugs acting on the endocrine system and obstetrics, gynaecology and contraception			
5.1	Drugs used in diabetes			
5.1.1	Insulin			
5.1.1.1	Short acting (soluble)	injection 100 IU/ml 10ml	II-IV	V
5.1.1.2	Isophane Insulin, Biphasic Insulin	Injection 100IU/ml 10ml	II-IV	V
5.1.1.3	Actraphane or mixtard (30/70)Intermediate-and long acting	Injection 100IU/ml 10ml	II-IV	V
5.1.2	Oral hypoglycaemics			
5.1.2.1	Chlorpropamide	tablets 100,250mg	II-IV	V
5.1.2.2	Glibenclamide	tablets 5mg	II-IV	V
5.1.2.3	Metformin	tablets 500mg	II-IV	V
	Other Antidiabetics			
5.1.4.1	Glucagon	Injection	II-IV	V
5.2	Preparations acting on the thyroid			
5.2.1	Carbimazole	tablets 5mg	III-IV	E
5.2.2	Iodine aqueous	solution	III-IV	E
5.2.3	Thyroxin	tablets 100mcg	III-IV	V
5.3	Corticosteroids			

	Drug	Presentation	Level	VEN
5.3.1	Dexamethasone	tablets 500mcg, injection 5mg/ml (5ml)	III-IV	V
5.3.2	Hydrocortisone sodium succinate	injection 100mg vial	I-IV	V
5.3.3	Prednisolone	tablets 5mg	I-IV	V
5.4	Oestrogens and progestogens			
5.4.1	Norethisterone	tablets 5mg	III-IV	E
5.4.2	Conjugated oestrogens	tablets 625micrograms	III-IV	E
5.5	Androgens and anti androgens			
5.5.1	Cyproterone	tablets 50mg	III-IV	E
5.5.2	Stilboestrol	tablets 1mg	III-IV	E
5.5.3	Testosterone	capsules 40mg, injection oily depot 250mg/ml,(1ml)	III-IV	E
5.6	Other endocrine drugs			
5.6.1	Bromocriptine	tablets 2.5mg	III-IV	E
5.6.2	Clomiphene citrate	tablets 50mg	III-IV	E
5.6.3	Danazol	capsules 100mg	III-IV	E
5.7	Drugs used in obstetrics and gynaecology			
5.7.1	Drugs acting on smooth muscle			
5.7.1.1	Anticonvulsants			
5.7.1.1.1	Magnesium sulphate	injection 50%	II-IV	E

	Drug	Presentation	Level	VEN
5.7.1.2	Prostaglandins and oxytocics			
5.7.1.2.1	Dinoprostone	tablets 500mcg, injection 1mg/ml	III-IV	E
5.7.1.2.2	Ergometrine maleate	tablets 250mcg,500mcg, injection 200mcg/ml	I-IV	V
5.7.1.2.3	Ergometrine/ oxytocin	injection	II-IV	E
5.7.1.2.4	Oxytocin	injection 10IU/ml,1ml	II-IV	V
5.7.1.2.5	Misoprostol	Tablet 200microgram	I-IV	V
5.7.1.3	Myometrial relaxants			
5.7.1.3.1	Salbutamol	injection 500mcg/ml (1ml)	II-IV	V
5.8	Contraceptives			
5.8.1	Combined oral contraceptives			
5.8.1.1	Ethinylestradiol/levonorgestrel	tablet 30mg/150mcg	I-IV	V
5.8.2	Emergency contraception			
5.8.2.1	Levonorgestrel	tablet 750mcg	I-IV	V
5.8.3	Progesterone-only oral contraceptives			
5.8.3.1	Levonorgestrel	tablet 30mcg	I-IV	V
5.8.4	Progesterone-only injectable contraceptives			
5.8.4.1	Medroxyprogesterone acetate	injection 150mg/ml,1ml	I-IV	V
5.8.4.2	Norethisterone enanthate	injection, oily 200mg/ml,1ml	I-IV	V
5.8.5	Barrier methods			
5.8.5.1	Female condoms	artificial plastic sheath	I-IV	V
5.8.5.2	Intrauterine device (IUD)	copper long coil type (Copper T 380A)	II-IV	V

	Drug	Presentation	Level	VEN
5.8.5.3	Male condoms	latex sheath with/without spermicide	I-IV	V
5.8.5.4	Menefegol vaginal foaming	tablets	I-IV	E
5.8.6	Implants			
5.8.6.1	Levonorgestrel implant 38mg in silicone	capsule	IV	V
6	Drugs used in the treatment of diseases of the respiratory system and allergy			
6.1	Bronchodilators			
6.1.1	Adrenaline	1 in 1000, (1ml)	I-IV	V
6.1.2	Aminophylline	tablets 100mg, injection 25mg/ml (10ml) suppositories 50mg,360mg	I-IV I-IV	V E
6.1.3	Salbutamol	tablets 2mg, syrup 2mg/5ml, inhaler 100mcg/dose	I-IV I-IV	V E
6.2	Corticosteroids			
6.2.1	Hydrocortisone sodium succinate	injection 100mg vial	I-IV	V
6.2.2	Prednisolone	tablets 5mg	II-IV	V
6.3	Asthma prophylaxis therapy			
6.3.1	Beclomethasone	inhaler 50mcg/dose	II-IV	E
6.3.2	Sodium chromoglicate	inhaler 5mg/dose	II-IV	E
6.4	Antihistamines			

	Drug	Presentation	Level	VEN
6.4.1	Chlorpheniramine	tablets 4mg	I-IV	E
6.4.2	Promethazine	tablets 10mg, 25mg	I-IV	E
6.5	Oxygen			
6.5.1	Oxygen	medical gas	I-IV	V
7	Drugs used in the treatment of diseases of the cardiovascular system			
7.1	Cardiac glycosides			
7.1.1	Digoxin	tablets 250mcg, injection 250mcg/ml, (2ml), elixir	II-IV	V
7.2	Diuretics			
7.2.1	Thiazides			
7.2.1.2	Bendrofluazide	tablets 5mg	II-IV	E
7.2.1.3	Hydrochlorothiazide	tablets 50mg	II-IV	E
7.2.2	Loop diuretics			
7.2.2.1	Frusemide	tablets 40mg, injection 10mg/ml, (2ml)	II-IV	V
7.2.3	Potassium sparing diuretics			
7.2.3.1	Amiloride + hydrochlorothiazide	tablets 5mg/50mg	II-IV	E
7.2.4	Osmotic diuretics			
7.2.4.1	Mannitol	injection 20% 250ml bottle	II-IV	V

	Drug	Presentation	Level	VEN
7.3	Antiarrhythmic drugs			
7.3.1	Amiodarone	tablets 100mg	III-IV	E
7.3.2	Atenolol	tablets 50mg	II-IV	E
7.3.3	Digoxin	tablets 250mcg, injection 250mcg/ml,(2ml)	II-IV	V
7.3.4	Lignocaine	injection 1%, (10ml, 25ml)	II-IV	V
7.3.5	Quinidine	tablets 200mg, 300mg	IV	V
7.4	Anti-angina drugs			
7.4.1	Atenolol	tablets 50mg	III-IV	E
7.4.2	Glyceryl trinitrate sub-lingual	tablets 500mcg	II-IV	E
7.4.3	Isosorbide mononitrate	tablets 10mg	II-IV	E
7.4.4	Nifedipine	tablets or capsules 10mg Antihypertensive drugs	II-IV	E
7.5	Diuretics			
7.5.1	Thiazide diuretics			
7.5.1.1	Hydrochlorothiazide	tablets 50mg	II-IV	E
7.5.1.2	Potassium sparing diuretics			
7.5.1.2.1	Amiloride + hydrochlorothiazide	tablets 5mg/50mg	II-IV	E
7.5.1.2.2	Spironolactone	tablets 25mg	II-IV	E
7.5.2	Beta blockers			
7.5.2.1	Atenolol	tablets 50mg	II-IV	E
7.5.2.2	Propranolol	tablets 10mg, 40mg	II-IV	E

	Drug	Presentation	Level	VEN
7.5.2.3	Carvedilol	tablets 3.125mg	IV	E
7.5.2.4	Labetalol	tablets 100mg	III-IV	E
7.5.2.5	Metoprolol	tablets 50mg, 100mg	III-IV	E
7.5.3	Vasodilators			
7.5.3.1	Hydralazine	tablets 25mg, injection 20mg ampoule	II-IV	E
7.5.4	ACE inhibitors			
7.5.4.1	Captopril	tablets 25mg	III-IV	E
7.5.4.2	Lisinopril	tablets 5mg, 10mg, 25mg	III-IV	E
7.5.4.3	Enalapril	tablets 5mg, 10mg, 20mg	III-IV	E
		ACE inhibitors II		
7.5.4.4	Losartan	tablets 25mg, 50mg	IV	E
7.5.5	Calcium channel blockers			
7.5.5.1	Nifedipine	tablets or capsules 10mg, 20mg	III-IV	E
7.5.5.2	Verapamil	tablets 40mg	III-IV	E
7.5.5.3	Amlodipine	tablets 5mg, 10mg	III-IV	E
7.6	Drugs used in shock - sympathomimetics			
7.6.1	Adrenaline	injection 1 in 1000 (1mg/ml)	I-IV	V
7.7	Alpha-adrenoceptor blocking agents			
7.7.1	Prazosin	tablets 500 mcg, 1mg	III-IV	E
7.8	Lipid-regulating drugs			

	Drug	Presentation	Level	VEN
7.8.1	Statins			
7.8.1.1	Simvastatin	tablets 20mg, 40mg	IV	E
7.9.	Inotropic sympathomimetics			
7.9.1	Dopamine	injection 40mg/ml	IV	E
8	Drugs used in the treatment of malignant disease: anti-neoplastic drugs			
8.1	Actinomycin D	injection 500mcg	III-IV	V
8.2	Asparaginase	injection 1000 IU		
8.3	Azathioprine	tablets 50mg, injection 50mg vial	IV	V
8.4	Bleomycin	injection 15 unit ampoule	IV	V
8.5	Busulphan	tablets 500mcg	IV	V
8.6	Calcium folinate	tablets 15mg	IV	V
8.7	Carboplatin	injection 10mg/ml		
8.8	Carmustine	vial 100mg	IV	V
8.9	Chlorambucil	tablets 2mg	IV	V
8.11	Cisplatin	injection 1mg/ml	IV	V
8.12	Cyclophosphamide	tablets 50mg, injection 100mg	IV	V
8.13	Cytarabine	injection 100mg,500mg,1g vial	IV	V
8.14	Cytosine arabinosate	injection100mg	IV	V
8.15	Cyproteron acetate	tablets 50mg, 100mg	IV	V

	Drug	Presentation	Level	VEN
8.16	Darcabazine	injection 200mg	IV	V
8.17	Daunorubicin	injection 20mg	IV	V
8.18	Doxorubicin	injection 10mg,50mg	IV	V
8.19	Etoposide	IV infusion 20mg/ml	IV	V
8.20	Fludarabine	my mouth 40mg/m2, injection, infusion	IV	V
8.21	Filgastrin	injection 300mcg/ml	IV	V
8.22	Fluorouracil	injection 25mg/ml	IV	V
8.23	Hydroxyurea	capsules 500mg	IV	V
8.24	Ifosfamide	injection, 1g, 2g vial	IV	V
2.29	Imatinib	tablets 100mg	IV	V
8.25	Interferon	injection 300mg	IV	V
8.26	Lomustine	capsules 40mg	IV	V
8.27	Melphalan	tablets 2mg, injection 100mg	IV	V
8.28	Mercaptopurine	tablets 50mg	IV	V
8.29	Methotrexate	tablets 2.5mg, injection 50mg	IV	V
8.30	Mitomycin	injection 40mg	IV	V
8.31	Mustine	injection 10mg	IV	V
2.32	Paclitaxel	IV infusion 6mg/ml	IV	V
8.33	Procarbazine	capsules 50mg	IV	V
8.34	Stilboeastroil	tablets 1mg	IV	V
8.35	Tamoxifen	tablets 20mg	IV	V
8.36	Temozolmide	capsules 5mg	IV	V

	Drug	Presentation	Level	VEN
8.37	Thioguanine	tablets 40mg	IV	V
8.38	Vinblastine	injection 1mg/ml		
8.39	Vincristine	injection 1mg, 5mg	III-IV	V
9	Drugs acting on the eye			
9.1	Ophthalmic diagnosis			
9.1.1	Fluorescein sodium	eye drops, strips	III-IV	E
9.2	Anti-infective preparations			
9.2.1	Antibacterial			
9.2.1.1	Chloramphenicol	eye drops 0.5% eye ointment 1%	II-IV	E
9.2.1.2	Chloramphenicol/dexamethasone	eye drops 15/0.1%	III-IV	E
9.2.1.3	Framycetin	eye drops, eye ointment	III-IV	E
9.2.1.4	Tetracycline	eye ointment 1%	I-IV	E
9.2.1.5	Oxy-tetracycline/Hydrocortisone	eye drops 3%/1%	III-IV	E
9.2.1.6	Neomycin/betamethasone	eye drops 0.5%/0.1%	III-IV	E
9.2.1.7	Gentamicin	eye drops 0.3%	II-IV	E
9.2.1.8	Cefotaxime	injection 500mg, 1g vial	III-IV	E
9.2.2	Antifungals – Preparations are not generally available and could be made extemporaneously			
9.2.2.1	Povidone Iodine	eye drops 2%	III-IV	E

	Drug	Presentation	Level	VEN
9.2.2.2	Natamycin	eye suspension 5%	IV	E
9.2.2.3	Econazole	eye suspension 1%	IV	E
9.2.2.4	Miconazole	eye suspension 10mgg/ml	IV	E
9.2.2.5	Amphotericin B	eye solution 0.05% -0.2%	IV	E
9.2.3	Antiviral			
9.2.3.1	Aciclovir	eye ointment	III-IV	E
9.2.3.2	Ganciclovir	IV infusion 500mg vial	IV	E
9.2.3.3	Foscarnet	IV infusion 24mg/ml	IV	E
9.3	Anti-inflammatory preparations			
9.3.1	Betamethasone	eye drops, eye ointment	III-IV	E
9.3.2	Hydrocortisone acetate	eye drops, eye ointment	II-IV	E
9.3.3	Dexamethasone	eye drops 0.1%	III-IV	E
9.3.4	Prednisolone	eye drops 0.5%, 1%	III-IV	E
9.3.5	Tropicamide	eye drop 1%	III-IV	E
9.3.6	Sodium chromoglycate	eye drops 2%	III-IV	E
9.4	Miotics and anti-glaucoma drugs			
9.4.1	Pilocarpine	eye drops 2%, 4%	III-IV	E
9.5	Mydriatic drugs			
9.5.1	Atropine sulphate	eye drops 1%	III-IV	E

	Drug	Presentation	Level	VEN
9.6	Systemic preparations			
9.6.1	Acetazolamide sodium	tablets 250mg	III-IV	V
9.7	Local anaesthetics			
9.7.1	Lignocaine hydrochloride	eye drops 4%	III-IV	E
9.8	Postaglandin Analogue			
9.8.1	Latanoprost	eye drops 50mcg/ml	IV	E
9.9	Sympathomimetics			
9.9.1	Dipivefrine	eye drops 0.1%	IV	E
9.10	Beta-blocker			
9.10.1	Timolol maleate	eye drops 0.25% or 0.5%	III-IV	E
9.11	Diuretics			
9.11.1	Cyclopenthiiazide	tablets 0.5mg	IV	E
9.12	Artificial tears			
9.12.1	Hypromellose	eye drops 0.3mg	III-IV	E

	Drug	Presentation	Level	VEN
9.13	Hyperosmotic agents			
9.13.1	Mannitol	solution in water 20%	III-IV	E
9.13.2	Urea	solution 30% in 10% invert sugar	III-IV	E
10	Blood			
10.1	Anti-coagulants			
10.1.1	Heparin	injection 5000IU/ml, 1ml	II-IV	V
10.1.2	Warfarin	tablets 1mg, 5mg	II-IV	V
10.2	Anti-haemorrhagic			
10.2.1	Amino caproic acid	Effervescent powder 3g Oral suspension 10mg/5ml	III-IV	E
10.2.2	Fibrinogen	dry or freeze dried powder	III-IV	V
10.2.3	Human anti-haemophilic fraction(dried)	3 units/ml IV E		
10.2.4	Phytomenadione (vitamin K)	injection 10mg/ml, (1ml)	II-IV	V
10.3	Haemopoetics			
10.3.1	Ferrous sulphate	tablets 50mg, 200mg	I-IV	V
10.3.2	Folic acid	tablets 5mg	I-IV	V
10.3.3	Hydroxocobalamin (vitamin B12)	injection 1mg/ml, 1ml	II-IV	E
10.3.4	Iron dextran	injection 50mg iron in 2ml ampoule	II-IV	E

	Drug	Presentation	Level	VEN
11	Nutrition			
11.1	Vitamins, minerals and dietary supplements			
11.1.1	Ascorbic acid (vitamin C)	tablets 50mg,200mg	I-IV	E
11.1.2	Calcium gluconate	injection 10%, (5ml,10ml)	III-IV	E
11.1.3	Ergocalciferol (vitamin D)	tablets 50,000 IU, solution 3000 IU/ml	II-IV	E
11.1.4	Nicotinamide	tablets 50mg	II-IV	E
11.1.5	Pyridoxine (vitamin B6)	tablets 50mg	I-IV	E
11.1.6	Retinol (vitamin A)	capsules/tablets 200,000IU	I-IV	E
11.1.7	Riboflavine (vitamin B2)	tablets 5mg	III-IV	E
11.1.8	Thiamine (vitamin B1)	tablets 50mg	III-IV	E
11.2	Electrolyte and water replacement			
11.2.1	Oral administration			
11.2.1.1	Oral rehydration	salts sachet 27.9g powder to make 1 litre	I-IV	V
11.2.1.2	Potassium chloride	tablets slow-release 600mg	II-IV	E
11.2.2	Infusions			
11.2.2.1	Dextrose (glucose)	solution 5%, 20, 50%	I-IV	V
11.2.2.2	Potassium chloride	solution 11.2%	II-IV	E
11.2.2.3	Sodium bicarbonate	solution 4.2%	III-IV	V
11.2.2.4	Sodium chloride (normal saline)	solution 0.9%	I-IV	V
11.2.2.5	Sodium lactate and glucose (Darrows)	solution, full and half strength	I-IV	V

	Drug	Presentation	Level	VEN
11.2.2.6	Sodium lactate compound (Ringers lactate)	solution	I-IV	V
11.2.2.7	Water for injection	2ml, 5ml, 10 ml	I-IV	V
11.2.3	Plasma substitutes			
11.2.3.1	Dextran 40	solution 10%	III-IV	V
11.2.3.2	Gelatin (as polygeline)	solution	III-IV	E
12	Drugs acting on the skin			
12.1	Topical corticosteroids			
12.1.1	Betamethasone	cream/ointment 0.1%	III-IV	E
12.1.2	Hydrocortisone	cream/ointment 1%	I-IV	E
12.2	Soothing preparations			
12.2.1	Aqueous	lotion	I-IV	E
12.2.2	Calamine	lotion	I-IV	E
12.2.3	Zinc oxide	cream	I-IV	E
12.3	Antifungal preparations			
12.3.1	Miconazole nitrate	cream 2%	III-IV	E
12.3.2	Ketokonazole	tablets 200mg	III-IV	E
12.3.3	Griseofulvin	tablets 500mg	II-IV	E

	Drug	Presentation	Level	VEN
12.4	Anti-bacterial preparations			
12.4.1	Tetracycline	ointment	I-IV	E
12.5	Antiseptic preparations			
12.5.1	Gentian violet	solution	I-IV	E
12.5.2	Potassium permanganate	solution	I-IV	E
12.6	Anti-parasitic preparations			
12.6.1	Benzyl benzoate	application 25%	I-IV	E
12.6.2	Malathion	lotion 0.5%	I-IV	E
12.6.3	Permethrin	cream 1%	I-IV	E
12.7	Keratoplastics and keratolytics			
12.7.1	Coal tar	solution 5%	I-IV	E
12.7.2	Dithranol	ointment 1%	III-IV	E
12.7.3	Podophylline	paint 15% in compound benzoin tincture	II-IV	E
12.7.4	Salicylic acid ointment 5%, 10%, 20%		I-IV	E
12.8	Acne preparations			
12.8.1	Salicylic acid	lotion	I-IV	E
12.8.2	Benzyl peroxide	lotion	I-IV	E

	Drug	Presentation	Level	VEN
12.9	Surgical disinfectants			
12.9.1	Cetrimide	solution 1%	I-IV	E
12.9.2	Chlorhexidine + cetrimide	concentrated solution (1.5%/15%)	I-IV	E
12.9.3	Chlorhexidine gluconate concentrated solution 5%	I-IV V		
12.9.4	Chloroxylenol	concentrated solution 4.8%	I-IV	E
12.9.5	Povidone iodine	solution 10%	I-IV	V
12.9.6	Sodium hypochlorite	0.1% available chlorine	I-IV	V
12.10.	Antivirus 12.10.1 Acyclovir	cream 5%	II-IV	E
		Tablets 50mg	II-IV	E
13	Drugs used in the treatment of diseases of the ear, nose and throat			
13.1	Drugs acting on the ear			
13.1.1	Betamethasone	eye/ear drops	III-IV	E
13.1.2	Gentamicin + hydrocortisone	ear drops	II-IV	E
13.1.3	Sodium bicarbonate	ear drops	III-IV	E
13.1.4	Vegetable oil	ear drops	I-IV	E
13.2	Drugs acting on the nose: topical nasal decongestants			
13.2.1	Normal saline	nasal drops	II-IV	E

	Drug	Presentation	Level	VEN
13.3	Drugs acting on the throat			
13.3.1	Chlorhexidine	mouth wash 0.2%	I-IV E	
13.3.2	Ketaconazole	tablets 200mg, suspension 100mg/5ml	I-IV E	
13.3.3	Miconazole	oral gel	I-IV E	
13.3.4	Nystatin	oral suspension	I-IV E	
14	Drugs used in the treatment of musco-skeletal disorder			
14.1	Drugs used in rheumatic diseases			
14.1.1	Acetyl salicylic acid	tablets 300mg	I-IV V	
14.1.2	Ibuprofen	tablets 200mg	I-IV E	
14.2	Drugs used in gout			
14.2.1	Allopurinol	tablets 100mg	III-IV E	
14.2.2.	Colchicine	tablets 500mcg	IV E	
15	Immunological products			
15.1	Antisera, immunoglobulins and anti-toxins			
15.1.1	Anti-D immunoglobulin	injection	II-IV V	
15.1.2	Diphtheria antitoxin	injection	II-IV V	
15.1.3.	Mamba anti-sera	injection	II-IV V	

	Drug	Presentation	Level	VEN
15.1.4	Polyvalent snake anti-sera	injection	II-IV	V
15.1.5	Tetanus antitoxin	injection	I-IV	V
15.2	Vaccines			
15.2.1	BCG	injection	I-IV	V
15.2.3	Diphtheria-pertussis tetanus, heamophilia influenza B and heapatitis B (Pentavalent,)	injection	I-IV	V
15.2.4	Hepatitis B	injection	II-IV	E
15.2.5	Measles	injection	I-IV	V
15.2.6	Poliomyelitis	injection	I-IV	V
15.2.7	Rabies	injection	I-IV	V
15.2.8	Tetanus toxoid (TT)	injection	I-IV	V
15.2.9	Typhoid	injection	III-IV	E
15.2.10	Yellow fever	injection	III-IV	E
16	Antidotes and other substances used in poisoning			
16.1	General treatment of poisoning			
16.1.1	Activated charcoal	powder	I-IV	V
16.1.2	Ipecacuanha	syrup 0.14% ipecacuanha alkaloids	I-IV	V

	Drug	Presentation	Level	VEN
16.2	Specific treatment of poisoning			
16.2.1	Atropine	injection 1mg/ml, (1ml)	III-IV	V
16.2.2	Naloxone	injection 400mcg/1ml	III-IV	V
16.2.3	Pralidoxine mesylate	injection 200mg/ml, (5ml)	III-IV	V
16..2.3.	N-acetylcysteine	20% solution	IV	E

FORM FOR PROPOSING REVISIONS IN ZAMBIA ESSENTIAL MEDICINES LIST

FORMULARY ADDITION/DELETION/ CHANGE OF PRESENTATION SPECIAL AUTHORISATION FORM

<p>Section A (To be completed by reporting facility) / proposer</p>	<p>Name of medication to be added / deleted / change of presentation or other (generic / brand): _____</p> <p>Desired Dosage: (Tick) ___ Tablet ___ Capsule ___ Injection</p> <p>Other (specify) _____</p> <p>Estimated usage(Tick) ___ Routine ___ Emergency ___ Clinical Evaluation</p> <p>Is similar- acting medication stocked now in pharmacy? ___ Yes ___ No</p> <p>Reason for addition / deletion /change of presentation or other If addition, please explain advantage of this medication: _____ _____ _____ _____</p> <p>Name of proposer _____ Signature _____ Date : _____</p>	<p>Pertinent Pharmacological Data On Medication</p> <p>Therapeutic Action and Indication for Use: _____ _____ _____</p> <p>Side effects, toxicity, and Precautions:</p> <p>Side effects:</p> <p>Relative contraindications:</p> <p>Caution:</p> <p>Dosages: (Maximum and Minimum)</p> <p>References: 1) 2)</p>
--	--	--

<p>SECTION B To be completed by Formulary Committee</p>	<p>FORMULARY COMMITTEE EVALUATION</p> <p>Cost of requested medication _____</p> <p>Cost of similar –acting item stocked _____</p> <p>Manufacturer/Registration status _____</p> <p>Remarks(Advantages, Disadvantages):</p> <p>Chairman of Formulary Committee _____</p> <p>Date _____</p>	
<p>SECTION C To be completed by formulary committee</p>	<p>FORMULARY COMMITTEE REPORT</p> <p>Determination : ____ Rejected ____ Approved : Level of use:(e.g For <u>specialists use</u>)</p> <p>Reasons:</p> <p>Formulary committee chairperson _____</p> <p>Date _____</p>	

