## World Health Organization Model List of Essential Medicines for Children

8th List (2021)



#### WHO/MHP/HPS/EML/2021.03

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## Explanatory notes

#### This Model List is intended for use for children up to and including 12 years of age.

The **core list** presents a list of minimum medicine needs for a basic health-care system, listing the most efficacious, safe and cost-effective medicines for priority conditions. Priority conditions are selected on the basis of current and estimated future public health relevance, and potential for safe and cost-effective treatment.

The **complementary list** presents essential medicines for priority diseases, for which specialized diagnostic or monitoring facilities, and/or specialist medical care, and/or specialist training are needed. In case of doubt medicines may also be listed as complementary on the basis of consistent higher costs or less attractive cost–effectiveness in a variety of settings.

The **square box symbol** (**□**) is intended to indicate therapeutic alternatives to the listed medicine that may be considered for selection in national essential medicines lists. Alternatives may be individual medicines, or multiple medicines within a pharmacological class or chemical subgroup, defined at the 4th level of the <u>Anatomical Therapeutic Chemical (ATC) classification</u>, which have similar clinical effectiveness and safety. The listed medicine should be the example of the class or subgroup for which there is the best evidence for effectiveness and safety. In some cases, this may be the first medicine that is licensed for marketing; in other instances, subsequently licensed compounds may be safer or more effective. Where there is no difference in terms of efficacy and safety data, the listed medicine should be the one that is generally available at the lowest price, based on international drug price information sources. A square box is not used to indicate alternative generic brands of the same small molecule medicines, nor alternative biosimilars of biological medicines. However, the selection and use of quality-assured generics and biosimilars of essential medicines at country level is recommended.

National lists should not use a similar symbol and should be specific in their final selection, which would depend on local availability and price.

The format and numbering of the 22nd WHO Model List of Essential Medicines is used for the 8th WHO Model Essential List for Children. Some sections have been deleted because they contain medicines that are not relevant for children.

The **a** symbol indicates that there is an age or weight restriction on use of the medicine; details for each medicine are in Table 1.1 of Annex 1.

The presence of an entry on the Essential Medicines List for Children carries no assurance as to pharmaceutical quality. It is the responsibility of the relevant national or regional drug regulatory authority to ensure that each product is of appropriate pharmaceutical quality (including stability) and that when relevant, different products are interchangeable.

For recommendations and advice concerning all aspects of the quality assurance of medicines see the WHO Medicines website <u>https://www.who.int/teams/health-product-and-policy-standards/standards-and-specifications/norms-and-standards-for-pharmaceuticals/guidelines/quality-assurance</u>.

Medicines and dosage forms are listed in alphabetical order within each section and the order of listing does not imply preference for one form over another. Standard treatment guidelines should be consulted for information on appropriate dosage forms.

The main terms used for dosage forms in the Essential Medicines List can be found in Table 1.2 of Annex 1.

Definitions of many of these terms and pharmaceutical quality requirements applicable to the different categories are published in the current edition of *The International Pharmacopoeia* <u>https://www.who.int/teams/health-product-and-policy-standards/standards-and-specifications/norms-and-standards-for-pharmaceuticals/pharmacopoeia</u>.

1. ANAESTHETICS, PREOPERATIVE MI	EDICINES AND MEDICAL GASES	
1.1 General anaesthetics and oxygen		
1.1.1 Inhalational medicines		
halothane	Inhalation.	
isoflurane	Inhalation.	
nitrous oxide	Inhalation.	
oxygen	Inhalation (medical gas).	
1.1.2 Injectable medicines		
ketamine	Injection: 50 mg/mL (as hydrochloride) in 10 mL vial.	
D propofol *		
Therapeutic alternatives:	Injection: 10 mg/mL; 20 mg/mL.	
- thiopental		
1.2 Local anaesthetics	· ·	
	Injection: 0.25%; 0.5% (hydrochloride) in vial.	
bupivacaine Therapeutic alternatives to be reviewed (2023)	<b>Injection for spinal anaesthesia:</b> 0.5% (hydrochloride) in 4 mL ampoule to be mixed with 7.5% glucose solution.	
	Injection: 1%; 2% (hydrochloride) in vial.	
□ lidocaine Therapeutic alternatives to be reviewed (2023)	<b>Injection for spinal anaesthesia:</b> 5% (hydrochloride) in 2 mL ampoule to be mixed with 7.5% glucose solution.	
	Topical forms: 2% to 4% (hydrochloride).	
	Dental cartridge: 2% (hydrochloride) + epinephrine 1:80 000.	
lidocaine + epinephrine (adrenaline)	<b>Injection:</b> 1%; 2% (hydrochloride or sulfate) + epinephrine 1:200 000 in vial.	
1.3 Preoperative medication and sedation for s	hort-term procedures	
atropine	Injection: 1 mg (sulfate) in 1mL ampoule.	
	Injection: 1 mg/mL.	
🗆 midazolam	Oral liquid: 2 mg/mL.	
Therapeutic alternatives to be reviewed (2023)	<b>Tablet:</b> 7.5 mg; 15 mg.	
morphine	Injection: 10 mg (sulfate or hydrochloride) in 1mL ampoule.	
1.4 Medical gases		
	Inhalation	
oxygen*	For use in the management of hypoxaemia.	
oxygen	*No more than 30% oxygen should be used to initiate resuscitation of neonates less than or equal to 32 weeks of gestation.	

2. MEDICINES FOR PAIN AND PALLIATIV	E CARE	
2.1 Non-opioids and non-steroidal anti-inflammate	ory medicines (NSAIMs)	
	Oral liquid: 200 mg/5 mL.	
ibuprofen <b>a</b>	Tablet: 200 mg; 400 mg; 600 mg.	
	<b>a</b> Not in children less than 3 months.	
	<b>Oral liquid:</b> 120 mg/5 mL; 125 mg/5 mL.	
	Suppository: 100 mg.	
paracetamol*	Tablet: 100 mg to 500 mg.	
	*Not recommended for anti-inflammatory use due to lack of proven benefit to that effect.	
2.2 Opioid analgesics		
morphine	Granules (slow release; to mix with water): 20 mg to 200 mg (morphine sulfate).	
Therapeutic alternatives:	<b>Injection:</b> 10 mg (morphine hydrochloride or morphine sulfate) in 1 mL ampoule.	
- hydrormorphone - oxycodone	<b>Oral liquid:</b> 10 mg/5 mL (morphine hydrochloride or morphine sulfate).	
	Tablet (slow release):10 mg to 200mg (morphine hydrochloride or morphine sulfate).	
	Tablet (immediate release):       10 mg (morphine sulfate).	
Complementary list		
	Tablet: 5 mg; 10 mg (hydrochloride).	
methadone*	<b>Oral liquid:</b> 5 mg/5 mL; 10 mg/5 mL (hydrochloride).	
methadone	Concentrate for oral liquid: 5 mg/mL; 10 mg/mL (hydrochloride)	
	*For the management of cancer pain.	
2.3 Medicines for other symptoms common in pal	liative care	
amitriptyline	Tablet: 10 mg; 25 mg.	
	Injection: 50 mg/mL.	
cyclizine	Tablet: 50 mg.	
	Injection: 4 mg/mL (as disodium phosphate salt) in 1 mL ampoule.	
dexamethasone	<b>Oral liquid:</b> 2 mg/5 mL.	
	Tablet: 2 mg.	
	Injection: 5 mg/mL.	
diazepam	<b>Oral liquid:</b> 2 mg/5 mL.	
	Rectal solution: 2.5 mg; 5 mg; 10 mg.	
	Tablet: 5 mg; 10 mg.	

	Capsule: 100 mg.	
docusate sodium	<b>Oral liquid:</b> 50 mg/5 mL.	
fluoxetine a	Solid oral dosage form: 20 mg (as hydrochloride).	
nuoxetine a	<b>a</b> > 8 years.	
	Injection: 400 micrograms/mL; 600 micrograms/mL.	
hyoscine hydrobromide	Transdermal patches: 1 mg/72 hours.	
lactulose	Oral liquid: 3.1 to 3.7 g/5 mL.	
	Injection: 1 mg/mL; 5 mg/mL.	
midazolam	Oral liquid: 2mg/mL.	
	Solid oral dosage form: 7.5 mg; 15 mg.	
□ ondansetron a	Injection: 2 mg base/mL in 2 mL ampoule (as hydrochloride).	
Therapeutic alternatives	Oral liquid: 4 mg base/5 mL.	
- dolasetron - granisetron	<b>Solid oral dosage form:</b> Eq 4 mg base; Eq 8 mg base.	
- palonosetron	<b>a</b> > 1 month.	
- tropisetron		
senna	Oral liquid: 7.5 mg/5 mL.	
3. ANTIALLERGICS AND MEDICINES U	USED IN ANAPHYLAXIS	
dexamethasone	<b>Injection:</b> 4 mg/mL (as disodium phosphate salt) in 1 mL ampoule.	
epinephrine (adrenaline)	<b>Injection:</b> 1 mg/mL (as hydrochloride or hydrogen tartrate) in 1 mL ampoule.	
hydrocortisone	Powder for injection: 100 mg (as sodium succinate) in vial.	
	Oral liquid: 1 mg/mL.	
□ loratadine*	Oral liquid: 1 mg/mL.	
Ioratadine* Therapeutic alternatives:	Oral liquid: 1 mg/mL. Tablet: 10 mg.	
Therapeutic alternatives: - cetirizine	Tablet:       10 mg.         *There may be a role for sedating antihistamines for limited indications.	
Therapeutic alternatives: - cetirizine - fexofenadine	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.	
Therapeutic alternatives: - cetirizine - fexofenadine      prednisolone	Tablet:       10 mg.         *There may be a role for sedating antihistamines for limited indications.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives:	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific charcoal, activated 4.2 Specific	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific charcoal, activated	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS         Powder.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific charcoal, activated 4.2 Specific	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS         Powder.         Injection: 200 mg/mL in 10 mL ampoule.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific charcoal, activated 4.2 Specific acetylcysteine	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS         Powder.         Injection: 200 mg/mL in 10 mL ampoule.         Oral liquid: 10%; 20%.	
Therapeutic alternatives: - cetirizine - fexofenadine □ prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific charcoal, activated 4.2 Specific acetylcysteine atropine	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS         Powder.         Injection: 200 mg/mL in 10 mL ampoule.         Oral liquid: 10%; 20%.         Injection: 1 mg (sulfate) in 1 mL ampoule.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific charcoal, activated 4.2 Specific acetylcysteine atropine calcium gluconate	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS         Powder.         Injection: 200 mg/mL in 10 mL ampoule.         Oral liquid: 10%; 20%.         Injection: 1 mg (sulfate) in 1 mL ampoule.         Injection: 100 mg/mL in 10 mL ampoule.	
Therapeutic alternatives: - cetirizine - fexofenadine prednisolone Therapeutic alternatives: - prednisone 4. ANTIDOTES AND OTHER SUBSTAN 4.1 Non-specific charcoal, activated 4.2 Specific acetylcysteine atropine calcium gluconate naloxone	Tablet: 10 mg.         *There may be a role for sedating antihistamines for limited indications.         Oral liquid: 5 mg/mL.         Tablet: 5 mg; 25 mg.         NCES USED IN POISONINGS         Powder.         Injection: 200 mg/mL in 10 mL ampoule.         Oral liquid: 10%; 20%.         Injection: 1 mg (sulfate) in 1 mL ampoule.         Injection: 100 mg/mL in 10 mL ampoule.	

dimercaprol	Injection in oil: 50 mg/mL in 2 mL ampoule.	
fomepizole	<i>Injection:</i> 5 mg/mL (sulfate) in 20 mL ampoule or 1 g/mL (base) in 1.5 mL ampoule.	
sodium calcium edetate	Injection: 200 mg/mL in 5 mL ampoule.	
succimer	Solid oral dosage form: 100 mg.	
5. ANTICONVULSANTS/ANTIEPILEPTICS		
	Oral liquid: 100 mg/5 mL.	
carbamazepine	Tablet (chewable): 100 mg; 200 mg.	
	Tablet (scored): 100 mg; 200 mg.	
diazepam	Gel or rectal solution: 5 mg/mL in 0.5 mL; 2 mL; 4 mL tubes.	
	<b>Tablet:</b> 25 mg; 50 mg; 100 mg; 200 mg.	
lamotrigine*	Tablet (chewable, dispersible): 2 mg; 5 mg; 25 mg; 50 mg; 100 mg; 200 mg.	
	*For use as adjunctive therapy for treatment-resistant partial or generalized seizures.	
□ lorazepam		
Therapeutic alternatives:	<b>Injection:</b> 2 mg/mL in 1 mL ampoule; 4 mg/mL in 1 mL ampoule.	
- diazepam (injection) - midazolam (injection)		
	Solution for oromucosal administration: 5 mg/mL; 10 mg/mL	
	Ampoule*: 1 mg/mL; 10 mg/mL	
midazolam	*For buccal administration when solution for oromucosal administration is not available	
	Injection: 200 mg/mL (sodium).	
phenobarbital	Oral liquid: 15 mg/5 mL.	
	Tablet: 15 mg to 100 mg.	
	Injection: 50 mg/mL (sodium) in 5 mL vial.	
	Oral liquid: 25 mg to 30 mg/5 mL.*	
	Solid oral dosage form: 25 mg; 50 mg; 100 mg (sodium).	
phenytoin	Tablet (chewable): 50 mg.	
	*The presence of both 25 mg/5 mL and 30 mg/5 mL strengths on the same market would cause confusion in prescribing and dispensing and should be avoided.	
valproic acid (sodium valproate)*		
*avoid use in pregnancy and in women and girls of	Oral liquid: 200 mg/5 mL.	
child-bearing potential, unless alternative treatments are ineffective or not tolerated because of the high	Tablet (crushable): 100 mg.       Tablet (crushable): 000 mg.	
risk of birth defects and developmental disorders in children exposed to valproate in the womb.	Tablet (enteric-coated): 200 mg; 500 mg.	

Complementary List		
athaowinida	Capsule: 250 mg.	
ethosuximide	Oral liquid: 250 mg/5 mL.	
valproic acid (sodium valproate)*		
*avoid use in pregnancy and in women and girls of child-bearing potential, unless alternative treatments are ineffective or not tolerated because of the high risk of birth defects and developmental disorders in children exposed to valproate in the womb.	<i>Injection:</i> 100 mg/mL in 4 mL ampoule; 100 mg/mL in 10 mL ampoule.	
6. ANTI-INFECTIVE MEDICINES		
6.1 Anthelminthics		
6.1.1 Intestinal anthelminthics		
albendazole	Tablet (chewable): 400 mg.	
ivermectin	Tablet (scored): 3 mg.	
levamisole	Tablet:       50 mg;       150 mg (as hydrochloride).	
mebendazole	Tablet (chewable): 100 mg; 500 mg.	
niclosamide	Tablet (chewable): 500 mg.	
praziquantel	Tablet: 150 mg; 600 mg.	
pyrantel	Oral liquid: 50 mg (as embonate or pamoate)/mL.	
	Tablet (chewable):         250 mg (as embonate or pamoate).	
6.1.2 Antifilarials		
albendazole	Tablet (chewable): 400 mg.	
diethylcarbamazine	Tablet:         50 mg;         100 mg (dihydrogen citrate).	
ivermectin	Tablet (scored): 3 mg.	
6.1.3 Antischistosomals and other antitrematode	medicines	
praziquantel	Tablet: 600 mg.	
triclabendazole	Tablet: 250 mg.	
Complementary List		
	Capsule: 250 mg.	
oxamniquine*	Oral liquid: 250 mg/5 mL.	
	*For use when praziquantel treatment fails.	
6.1.4 Cysticidal medicines		
Complementary List		
albendazole	Tablet (chewable): 400 mg.	
mebendazole	Tablet (chewable):   500 mg.	
praziquantel	Tablet: 500 mg; 600 mg	

#### 6.2 Antibacterials

To assist in the development of tools for antibiotic stewardship at local, national and global levels and to reduce antimicrobial resistance, the Access, Watch, Reserve (AWaRe) classification of antibiotics has been developed by WHO – where antibiotics are classified into different groups to emphasize the importance of their appropriate use.

#### ACCESS GROUP ANTIBIOTICS

This group includes antibiotics that have activity against a wide range of commonly encountered susceptible pathogens while also showing lower resistance potential than antibiotics in the other groups. Selected Access group antibiotics are recommended as essential first or second choice empiric treatment options for infectious syndromes reviewed by the EML Expert Committee and are listed as individual medicines on the Model Lists to improve access and promote appropriate use. They are essential antibiotics that should be widely available, affordable and quality assured.

#### WATCH GROUP ANTIBIOTICS

This group includes antibiotic classes that have higher resistance potential and includes most of the highest priority agents among the <u>Critically Important Antimicrobials for Human Medicine</u> and/or antibiotics that are at relatively high risk of selection of bacterial resistance. These medicines should be prioritized as key targets of stewardship programs and monitoring. Selected Watch group antibiotics are recommended as essential first or second choice empiric treatment options for a limited number of specific infectious syndromes and are listed as individual medicines on the Model Lists.

#### **RESERVE GROUP ANTIBIOTICS**

This group includes antibiotics and antibiotic classes that should be reserved for treatment of confirmed or suspected infections due to multi-drug-resistant organisms. Reserve group antibiotics should be treated as "last resort" options. Selected Reserve group antibiotics are listed as individual medicines on the Model Lists when they have a favourable risk-benefit profile and proven activity against "Critical Priority" or "High Priority" pathogens identified by the <u>WHO Priority</u> <u>Pathogens List</u>, notably carbapenem resistant *Enterobacteriaceae*. These antibiotics should be accessible, but their use should be tailored to highly specific patients and settings, when all alternatives have failed or are not suitable. These medicines could be protected and prioritized as key targets of national and international stewardship programs involving monitoring and utilization reporting, to preserve their effectiveness.

6.2.1 Access group antibiotics				
	Injection: 250 mg/mL (as sulfate) in 2 mL	Injection: 250 mg/mL (as sulfate) in 2 mL vial.		
amikacin	FIRST CHOICE	SECOND CHOICE		
	<ul> <li>High-risk febrile neutropenia- pyelonephritis (severe)</li> </ul>	– Sepsis in neonates and children		
	Powder for injection: 250 mg; 500 mg; 1 g	g (as sodium) in vial.		
	Powder for oral liquid: 125 mg/5 mL; 250	mg/5 mL (as trihydrate).		
	Solid oral dosage form: 250 mg; 500 mg (	Solid oral dosage form: 250 mg; 500 mg (as trihydrate).		
	FIRST CHOICE	SECOND CHOICE		
amoxicillin	<ul> <li>Community acquired pneumonia (mild to moderate)</li> <li>Community acquired pneumonia (severe)</li> <li>Complicated severe acute malnutrition</li> <li>Otitis media</li> <li>Pharyngitis</li> <li>Progressive apical dental abscess</li> <li>Sepsis in neonates and children</li> <li>Sinusitis</li> <li>Uncomplicated severe acute malnutrition</li> </ul>	– Acute bacterial meningitis		
	<ul> <li>Powder for injection: 500 mg (as sodium) + 100 mg (as potassium salt); 1000 mg (as sodium) + 200 mg (as potassium salt) in vial.</li> <li>Powder for oral liquid: 125 mg (as trihydrate) + 31.25 mg (as potassium salt)/5 mL; 250 mg (as trihydrate) + 62.5 mg (as potassium salt)/5mL.</li> </ul>			
	<b>Tablet:</b> 500 mg (as trihydrate) + 125 mg (	,		
	FIRST CHOICE	SECOND CHOICE		
amoxicillin + clavulanic acid	<ul> <li>Community acquired pneumonia (severe)</li> <li>Complicated intraabdominal infections (mild to moderate)</li> <li>Hospital acquired pneumonia</li> <li>Low-risk febrile neutropenia</li> <li>Lower urinary tract infections</li> <li>Sinusitis</li> <li>Skin and soft tissue infections</li> </ul>	<ul> <li>Bone and joint infections</li> <li>Community acquired pneumonia (mild to moderate)</li> <li>Community acquired pneumonia (severe)</li> <li>Otitis media</li> <li>Surgical prophylaxis</li> </ul>		
	<b>Powder for injection:</b> 500 mg; 1 g (as sodium) in vial.			
	FIRST CHOICE	SECOND CHOICE		
ampicillin	<ul> <li>Community acquired pneumonia (severe)</li> <li>Complicated intraabdominal infections</li> <li>Complicated severe acute malnutrition</li> <li>Sepsis in neonates and children</li> </ul>	– Acute bacterial meningitis		

	Powder for injection: 1.2 million IU (≈ 900 mg) in vial; 2.4 million IU (≈ 1.8 g) in vial.		
benzathine benzylpenicillin	FIRST CHOICE	SECOND CHOICE	
	– Syphilis (congenital)		
	<b>Powder for injection:</b> 600 mg (= 1 millio potassium salt) in vial.	n IU); 3 g (= 5 million IU) (sodium or	
benzylpenicillin	<ul> <li>FIRST CHOICE</li> <li>Community acquired pneumonia (severe)</li> <li>Complicated severe acute malnutrition</li> <li>Sepsis in neonates and children</li> <li>Syphilis (congenital)</li> </ul>	SECOND CHOICE – Acute bacterial meningitis	
	Powder for oral liquid: 125 mg/5 mL; 25	50 mg/5 mL (anhydrous).	
	Solid oral dosage form: 250 mg (as mo	nohydrate).	
cefalexin	FIRST CHOICE	SECOND CHOICE	
	– Skin and soft tissue infections	– Pharyngitis	
	Powder for injection: 1 g (as sodium sa	Powder for injection: 1 g (as sodium salt) in vial.         a         > 1 month.	
cefazolin <b>a</b>	FIRST CHOICE	SECOND CHOICE	
	– Surgical prophylaxis	– Bone and joint infections	
	Capsule: 250 mg.		
<b>Oily suspension for injection*:</b> 0.5 g/mL (as sodi		. (as sodium succinate) in 2 mL ampoule.	
	*Only for the presumptive treatment of epidemic meningitis in children older than 2 years.		
chloramphenicol	<b>Oral liquid:</b> 150 mg/5 mL (as palmitate).		
	Powder for injection: 1 g (sodium succi	Powder for injection: 1 g (sodium succinate) in vial.	
	FIRST CHOICE	SECOND CHOICE	
		-Acute bacterial meningitis	
	Capsule: 150 mg (as hydrochloride).		
	<b>Injection:</b> 150 mg/mL (as phosphate).		
clindamycin	<b>Oral liquid:</b> 75 mg/5 mL (as palmitate).		
omaarryon	FIRST CHOICE	SECOND CHOICE	
	– Necrotizing fasciitis		
		– Bone and joint infections	

	Capsule: 500 mg; 1 g (as sodium).			
	Powder for injection: 500 mg (as sodium)	<b>Powder for injection:</b> 500 mg (as sodium) in vial.		
□ cloxacillin*	<b>Powder for oral liquid:</b> 125 mg/5 mL (as s	odium).		
Therapeutic alternatives: - 4 <sup>th</sup> level ATC chemical subgroup (J01CF Beta-lactamase resistant penicillins)	*cloxacillin, dicloxacillin and flucloxacillin are preferred for oral administration due to better bioavailability.			
	FIRST CHOICE	SECOND CHOICE		
	<ul><li>Bone and joint infections</li><li>Skin and soft tissue infections</li></ul>	- Sepsis in neonates and children		
	Oral liquid: 25 mg/5 mL; 50 mg/5 mL (ant	nydrous).		
	Powder for injection: 100 mg in vial.			
	Solid oral dosage form: 50 mg; 100 mg (a	as hyclate).		
doxycycline <b>a</b>	a Use in children <8 years only for life-threatening in	nfections when no alternative exists.		
	FIRST CHOICE	SECOND CHOICE		
		<ul> <li>Cholera</li> <li>Community acquired pneumonia (mild to moderate)</li> </ul>		
	Injection: 10 mg/mL (as sulfate); 40 mg/m	L (as sulfate) in 2 mL vial.		
	FIRST CHOICE	SECOND CHOICE		
gentamicin	<ul> <li>Acute bacterial meningitis in neonates</li> <li>Community acquired pneumonia (severe)</li> <li>Complicated intraabdominal infections</li> <li>Complicated severe acute malnutrition</li> <li>Sepsis in neonates and children</li> </ul>	– Surgical prophylaxis		
	Injection: 500 mg in 100 mL vial.			
	Oral liquid: 200 mg/5 mL (as benzoate).			
	Tablet: 200 mg to 500 mg.			
	FIRST CHOICE	SECOND CHOICE		
metronidazole	<ul> <li>C. difficile infection</li> <li>Complicated intra-abdominal infections (mild to moderate)</li> <li>Complicated intra-abdominal infections (severe)</li> <li>Necrotizing fasciitis</li> <li>Surgical prophylaxis</li> </ul>	– Complicated intra-abdominal infections (mild to moderate)		
	Oral liquid: 25 mg/5 mL.			
nitrofurantoin	Tablet: 100 mg.			
	FIRST CHOICE	SECOND CHOICE		
	- Lower urinary tract infections			

	Powder for oral liquid: 250 mg/5 mL (as p	otassium).	
	Tablet: 250 mg (as potassium).		
	FIRST CHOICE	SECOND CHOICE	
phenoxymethylpenicillin	<ul> <li>Community acquired pneumonia (mild to moderate)</li> <li>Pharyngitis</li> <li>Progressive apical dental abscess</li> </ul>		
	Powder for injection: 1 g (=1 million IU); 3	g (=3 million IU) in vial.	
procaine benzylpenicillin*	*Procaine benzylpenicillin is not recomme sepsis / sepsis except in settings with high health workers in cases where hospital ca	n neonatal mortality, when given by trained	
	FIRST CHOICE	SECOND CHOICE	
	– Syphilis (congenital)		
	Injection: 80 mg + 16 mg/ mL in 5 mL am ampoule.	boule; 80 mg + 16 mg/ mL in 10 mL	
	<b>Oral liquid:</b> 200 mg + 40 mg/5 mL.		
sulfamethoxazole + trimethoprim	<b>Tablet:</b> 100 mg + 20 mg; 400 mg + 80 mg	).	
	FIRST CHOICE	SECOND CHOICE	
	– Lower urinary tract infections	<ul> <li>Acute invasive bacterial diarrhoea / dysentery</li> </ul>	
	Tablet: 100 mg; 200 mg.		
trimethoprim	Oral liquid: 50 mg/5 mL.		
	FIRST CHOICE	SECOND CHOICE	
	– Lower urinary tract infections		
6.2.2 Watch group antibiotics		<u> </u>	
	<b>Capsule:</b> 250 mg; 500 mg (anhydrous). <b>Oral liquid:</b> 200 mg/5 mL.		
azithromycin	FIRST CHOICE	SECOND CHOICE	
	– Cholera – Enteric fever – Trachoma – Yaws	<ul> <li>Acute invasive bacterial diarrhoea / dysentery</li> </ul>	
	Powder for oral liquid: 100 mg/5 mL.		
cefixime	Solid oral dosage form: 200 mg; 400 mg	(as trihydrate).	
	FIRST CHOICE	SECOND CHOICE	
		<ul> <li>Acute invasive bacterial diarrhoea / dysentery</li> </ul>	

	Powder for injection: 250 mg (as sodium)	in vial.	
	*3rd generation cephalosporin of choice for use in hospitalized neonates.		
	FIRST CHOICE	SECOND CHOICE	
cefotaxime*	<ul> <li>Acute bacterial meningitis</li> <li>Community acquired pneumonia (severe)</li> <li>Complicated intraabdominal infections (mild to moderate)</li> <li>Complicated intraabdominal infections (severe)</li> <li>Hospital acquired pneumonia</li> <li>Pyelonephritis (severe)</li> </ul>	<ul> <li>Bone and joint infections</li> <li>Pyelonephritis (mild to moderate)</li> <li>Sepsis in neonates and children</li> </ul>	
	Powder for injection: 250 mg; 1 g (as sodium) in vial.		
	*Do not administer with calcium and avoid	d in infants with hyperbilirubinaemia.	
	a > 41 weeks corrected gestational age.		
	FIRST CHOICE	SECOND CHOICE	
ceftriaxone*a	<ul> <li>Acute bacterial meningitis</li> <li>Community acquired pneumonia (severe)</li> <li>Complicated intraabdominal infections (mild to moderate)</li> <li>Complicated intraabdominal infections (severe)</li> <li>Endophthalmitis</li> <li>Enteric fever</li> <li>Hospital acquired pneumonia</li> <li>Necrotizing fasciitis</li> <li>Pyelonephritis (severe)</li> </ul>	<ul> <li>Acute invasive bacterial diarrhoea / dysentery</li> <li>Bone and joint infections</li> <li>Pyelohepnritis or prostatitis (mild to moderate)</li> <li>Sepsis in neonates and children</li> </ul>	
	<b>Powder for injection:</b> 250 mg; 750 mg; 1.5 g (as sodium) in vial.		
cefuroxime	FIRST CHOICE	SECOND CHOICE	
		– Surgical prophylaxis	
	Oral liquid: 250 mg/5 mL (anhydrous) .		
	Solution for IV infusion: 2 mg/ mL (as hyclate) .		
	Solid oral dosage form: 250 mg (as hydrochloride).		
ciprofloxacin	FIRST CHOICE	SECOND CHOICE	
cipronoxacin	<ul> <li>Acute invasive bacterial diarrhoea / dysentery</li> <li>Enteric fever</li> <li>Low-risk febrile neutropenia</li> <li>Pyelonephritis (mild to moderate)</li> </ul>	<ul> <li>Cholera</li> <li>Complicated intraabdominal infections (mild to moderate)</li> </ul>	

	Powder for oral liquid: 125 mg/5 mL; 25	0 mg/5 mL.	
□ clarithromycin	Powder for injection: 500 mg in vial.		
Therapeutic alternatives:	Solid oral dosage form: 500 mg.		
- erythromycin	FIRST CHOICE	SECOND CHOICE	
		– Pharyngitis	
	<b>Powder for injection:</b> 2 g (as sodium) + 2 mg (as sodium) in vial.	250 mg (as sodium); 4 g (as sodium) + 500	
	FIRST CHOICE	SECOND CHOICE	
piperacillin + tazobactam	<ul> <li>Complicated intraabdominal infections (severe)</li> <li>High-risk febrile neutropenia</li> <li>Hospital acquired pneumonia</li> <li>Necrotizing fasciitis</li> </ul>		
	Capsule: 125 mg; 250 mg (as hydrochle	pride).	
vancomycin	FIRST CHOICE	SECOND CHOICE	
		– C. difficile infection	
Complementary List			
	Powder for injection: 250 mg; 1 g (as pentahydrate) in vial.		
ceftazidime	FIRST CHOICE	SECOND CHOICE	
	– Endophthalmitis		
	<b>Powder for injection:</b> 500 mg (as trihydrate); 1 g (as trihydrate) in vial		
□ meropenem* a	<b>a</b> > 3 months.		
Therapeutic alternatives*: - imipenem + cilastatin	FIRST CHOICE	SECOND CHOICE	
*complicated intraabdominal infections and high-risk febrile neutropenia only. Meropenem is the preferred choice for acute bacterial meningitis in neonates.		<ul> <li>Acute bacterial meningitis in neonates</li> <li>Complicated intraabdominal infections (severe)</li> <li>High-risk febrile neutropenia</li> </ul>	
	Powder for injection: 250 mg (as hydrochloride) in vial.		
vancomvcin	FIRST CHOICE	SECOND CHOICE	
vancomycin	<ul><li>Endophthalmitis</li><li>Necrotizing fasciitis</li></ul>	– High-risk febrile neutropenia	

6.2.3 Reserve group antibiotics		
Complementary List		
ceftazidime + avibactam	<i>Powder for injection:</i> 2 g + 0.5 g in vial	
colistin	Powder for injection: 1 million IU (as colistemethate sodium) in vial	
fosfomycin	<i>Powder for injection</i> : 2 g; 4 g (as sodium) in vial	
	Injection for intravenous administration: 2 mg/mL in 300 mL bag.	
linezolid	Powder for oral liquid: 100 mg/5 mL.	
	<i>Tablet:</i> 400 mg; 600 mg.	
polymyxin B	Powder for injection: 500,000 IU in vial	
6.2.4 Antileprosy medicines		
emergence of drug resistance. Colour-coded or three-medicine (multibacillary leprosy) com free of charge through WHO.	hould never be used except in combination. Combination therapy is essential to prevent the blister packs (MDT blister packs) containing standard two-medicine (paucibacillary leprosy) binations for adult and childhood leprosy should be used. MDT blister packs can be supplied	
clofazimine	Capsule: 50 mg; 100 mg.	
dapsone	<b>Tablet:</b> 25 mg; 50 mg; 100 mg.	
rifampicin	Solid oral dosage form: 150 mg; 300 mg.	
6.2.5 Antituberculosis medicines	· · ·	
	fixed-dose combinations and the development of appropriate new fixed-dose combinations, rated products and paediatric dosage forms of assured pharmaceutical quality.	
	Oral liquid: 25 mg/mL.	
ethambutol	Tablet: 100 mg; 400 mg (hydrochloride).	
	Tablet (dispersible): 100 mg.	
	Oral liquid: 50 mg/5 mL.	
isoniazid	Tablet: 100 mg; 300 mg.	
	Tablet (dispersible): 100 mg.	
isoniazid + pyrazinamide + rifampicin	Tablet (dispersible): 50 mg + 150 mg + 75 mg.	
isoniazid + rifampicin	Tablet (dispersible): 50 mg + 75 mg.	
isoniazid + rifapentine	Tablet (scored): 300 mg + 300 mg.	
	Oral liquid: 30 mg/mL.	
pyrazinamide	Tablet: 400 mg; 500 mg.	
	Tablet (dispersible): 150 mg.	
rifampicin	Oral liquid: 20 mg/mL.	
папрып	Solid oral dosage form: 150 mg; 300 mg.	
rifapentine	Tablet: 150 mg; 300 mg.	

Complementary List	
Medicines for the treatment of multidrug-resistand standards for TB control.	ant tuberculosis (MDR-TB) should be used in specialized centres adhering to WHO
amikacin	Injection: 100 mg/2 mL (as sulfate) in 2 mL vial; 250 mg/mL (as sulfate) in 2 mL vial.
	<b>Powder for oral liquid:</b> 250 mg (as trihydrate) + 62.5 mg (as potassium salt)/5mL.
amoxicillin + clavulanic acid*	Tablet: 500 mg (as trihydrate) + 125 mg (as potassium salt).
	*For use only in combination with meropenem.
bedaquiline <b>a</b>	Tablet: 20 mg;100 mg.
	a ≥ 5 years
clofazimine	Solid oral dosage form: 50 mg; 100 mg.
cycloserine	Solid oral dosage form: 125 mg; 250 mg.
	Tablet (dispersible): 25 mg.
	a ≥3 years
delamanid <mark>a</mark>	Tablet: 50 mg.
	a ≥6 years
□ ethionamide	Tablet: 125 mg; 250 mg.
Therapeutic alternatives:	Tablet (dispersible): 125 mg.
- protionamide	
levofloxacin	<i>Tablet:</i> 250 mg; 500 mg.
	Tablet (dispersible): 100 mg.
	Powder for oral liquid: 100 mg/5 mL.
linezolid	<i>Tablet:</i> 600 mg.
	Tablet (dispersible): 150 mg.
meropenem	<b>Powder for injection:</b> 500 mg (as trihydrate); 1 g (as trihydrate) in vial.
moxifloxacin	<b>Tablet:</b> 400 mg.
moxiloxdoin	Tablet (dispersible): 100 mg.
p-aminosalicylic acid	Granules: 4 g in sachet.
streptomycin	<i>Powder for injection:</i> 1 g (as sulfate) in vial.
6.3 Antifungal medicines	
amphotericin B	<b>Powder for injection:</b> 50 mg in vial (as sodium deoxycholate or liposomal complex).
fluconazole	Capsule: 50 mg.
	Injection: 2 mg/mL in vial.
	Oral liquid: 50 mg/5 mL.
flucytosine	Capsule: 250 mg.
naoytoonio	Infusion: 2.5 g in 250 mL.
griseofulvin	Oral liquid: 125 mg/5 mL.
9.000101011	Solid oral dosage form: 125 mg; 250 mg.
	-

	Capsule: 100 mg.
	Oral liquid: 10 mg/mL.
itraconazole*	*For treatment of chronic pulmonary aspergillosis, acute invasive aspergillosis, histoplasmosis, sporotrichosis, paracoccidiodomycosis, mycoses caused by <i>T. marneffei</i> and chromoblastomycosis; and prophylaxis of histoplasmosis and infections caused by <i>T. marneffei</i> in AIDS patients.
	Lozenge: 100 000 IU.
nystatin	<b>Oral liquid:</b> 50 mg/5 mL; 100 000 IU/mL.
	Tablet: 100 000 IU; 500 000 IU.
	Tablet: 50 mg; 200 mg.
	Powder for injection: 200 mg in vial.
voriconazole*	Powder for oral liquid: 40 mg/mL.
	*For treatment of chronic pulmonary aspergillosis and acute invasive aspergillosis.
Complementary List	
nicafungin	
Therapeutic alternatives:	<b>Powder for injection:</b> 50 mg (as sodium); 100 mg (as sodium) in vial.
- anidulafungin - caspofungin	
potassium iodide	Saturated solution.
6.4 Antiviral medicines	
6.4.1 Antiherpes medicines	
	Oral liquid: 200 mg/5 mL.
aciclovir	Powder for injection: 250 mg (as sodium salt) in vial.
	Tablet: 200 mg.
6.4.2 Antiretrovirals	
for treatment and prevention of HIV (prevention of importance of using these products in accordance w	nedicines in the following classes of antiretrovirals are included as essential medicines mother-to-child transmission and post-exposure prophylaxis). WHO emphasizes the <i>v</i> ith global and national guidelines. WHO recommends and endorses the use of fixed- iate new fixed-dose combinations, including modified dosage forms, non-refrigerated armaceutical quality.
Scored tablets can be used in children and therefore products are available.	can be considered for inclusion in the listing of tablets, provided that adequate quality
6.4.2.1 Nucleoside/Nucleotide reverse transcrip	otase inhibitors
lamivudine	Oral liquid: 50 mg/5 mL.
zidovudine	Oral liquid: 50 mg/5 mL.
6.4.2.2 Non-nucleoside reverse transcriptase ir	hibitors
· · · · · · · · · · · · · · · · · · ·	Oral liquid: 50 mg/5 mL.
nevirapine <b>a</b>	Oral liquid: 50 mg/5 mL. Tablet (dispersible): 50 mg.

6.4.2.3 Protease inhibitors	
national treatment guidelines and experience. Ritonav	will need to be determined by each country after consideration of international and ir is recommended for use in combination as a pharmacological booster, and not as ibitors should be used in boosted forms (e.g. with ritonavir).
darupavir	Tablet: 75 mg.
darunavir <b>a</b>	a > 3 years
lopinavir + ritonavir	Solid oral dosage form: 40 mg + 10 mg.
	Tablet (heat stable): 100 mg + 25 mg.
ritonavir	Tablet (heat stable): 25 mg; 100 mg.
6.4.2.4 Integrase inhibitors	
	Tablet (dispersible, scored): 10 mg.
	a ≥4 weeks and ≥3 kg
dolutegravir <b>a</b>	Tablet: 50 mg.
	<b>a</b> ≥ 25 kg
	Granules for oral suspension: 100 mg in sachet.
raltegravir*	Tablet (chewable): 25 mg.
Taitegravii	*For use in second-line regimens in accordance with WHO treatment guidelines
6.4.2.5 Fixed-dose combinations of antiretroviral	Imedicines
abacavir + lamivudine	Tablet (dispersible, scored): 120 mg (as sulfate) + 60 mg.
lamivudine + zidovudine	Tablet: 30 mg + 60 mg.
6.4.2.6 Medicines for prevention of HIV-related of	ppportunistic infections
isoniazid + pyridoxine + sulfamethoxazole + trimethoprim	Tablet (scored): 300 mg + 25 mg + 800 mg + 160 mg
6.4.3 Other antivirals	<b>I</b>
	<b>Injection for intravenous administration:</b> 800 mg and 1 g in 10 mL phosphate buffer solution.
ribavirin*	Solid oral dosage form: 200 mg; 400 mg; 600 mg.
	*For the treatment of viral haemorrhagic fevers only.
Complementary List	· · · ·
	Capsule: 30 mg; 45 mg; 75 mg (as phosphate).
oseltamivir*	*Severe illness due to confirmed or suspected influenza virus infection in critically ill hospitalized patients
	Powder for oral solution: 50 mg/mL
valganciclovir*	<i>Tablet:</i> 450 mg.
	*For the treatment of cytomegalovirus retinitis (CMVr).

6.4.4 Antihepatitis medicines		
6.4.4.1 Medicines for hepatitis B		
6.4.4.1.1 Nucleoside/Nucleotide reverse transcriptas	e inhibitors	
entecavir	Oral liquid: 0.05 mg/ mL	
	Tablet: 0.5 mg; 1 mg	
6.4.4.2 Medicines for hepatitis C		
Pangenotypic direct-acting antivirals should be considered national level.	as therapeutically equivalent for the purposes of selection and procurement at	
6.4.4.2.1 🗆 Pangenotypic direct-acting antiviral com	binations	
daclatasvir*	Tablet: 30 mg; 60 mg (as hydrochloride).	
	*Pangenotypic when used in combination with sofosbuvir	
daclatasvir + sofosbuvir	Tablet: 60 mg + 400 mg.	
glecaprevir + pibrentasvir	Granules: 50 mg + 20 mg in sachet.	
	<b>Tablet:</b> 100 mg + 40 mg.	
sofosbuvir*	Tablet: 200 mg; 400 mg.	
SUBSDUVI	*Pangenotypic when used in combination with daclatasvir	
sofosbuvir + velpatasvir	Tablet: 200 mg + 50 mg; 400 mg + 100 mg	
6.4.4.2.2 Non-pangenotypic direct-acting antiviral co	mbinations	
6.4.4.2.3 Other antivirals for hepatitis C		
6.5 Antiprotozoal medicines		
6.5.1 Antiamoebic and antigiardiasis medicines		
diloxanide <b>a</b>	Tablet:   500 mg (furoate).	
	<b>a</b> > 25 kg.	
□ metronidazole	Injection: 500 mg in 100 mL vial.	
Therapeutic alternatives:	Oral liquid: 200 mg/5 mL (as benzoate).	
- tinidazole	Tablet: 200 mg to 500 mg.	
6.5.2 Antileishmaniasis medicines		
amphotericin B	<b>Powder for injection:</b> 50 mg in vial (as sodium deoxycholate or liposomal complex).	
miltefosine	Solid oral dosage form: 10 mg; 50 mg.	
paromomycin	Solution for intramuscular injection: 750 mg of paromomycin base (as sulfate).	
sodium stibogluconate <b>or</b> meglumine antimoniate	<b>Injection:</b> 100 mg/mL, 1 vial = 30 mL <b>or</b> 30%, equivalent to approximately 8.1% antimony (pentavalent) in 5 mL ampoule.	

#### 6.5.3 Antimalarial medicines

#### 6.5.3.1 For curative treatment

Medicines for the treatment of *P. falciparum* malaria cases should be used in combination. The list currently recommends combinations according to treatment guidelines. WHO recognizes that not all of the fixed dose combinations (FDCs in the WHO treatment guidelines exist, and encourages their development and rigorous testing. WHO also encourages development and testing of rectal dosage formulations.

	Tablet: 153 mg or 200 mg (as hydrochloride).
amodiaquine*	*To be used in combination with artesunate 50 mg.
artemether*	Oily injection: 80 mg/mL in 1 mL ampoule.
	*For use in the management of severe malaria.
	Tablet: 20 mg + 120 mg.
artemether + lumefantrine*	Tablet (dispersible): 20 mg + 120 mg.
	*Not recommended in the first trimester of pregnancy or in children below 5 kg.
	<b>Injection:</b> ampoules, containing 60 mg anhydrous artesunic acid with a separate ampoule of 5% sodium bicarbonate solution.
	For use in the management of severe malaria.
artesunate*	<b>Rectal dosage form:</b> 50 mg; 100 mg; 200 mg capsules (for pre- referral treatment of severe malaria only; patients should be taken to an appropriate health facility for follow-up care).
	Tablet: 50 mg.
	*To be used in combination with either amodiaquine, mefloquine or sulfadoxine + pyrimethamine.
	<b>Tablet:</b> 25 mg + 67.5 mg; 50 mg + 135 mg; 100 mg + 270 mg.
artesunate + amodiaquine *	*Other combinations that deliver the target doses required such as 153 mg or 200 mg (as hydrochloride) with 50 mg artesunate can be alternatives.
artesunate + mefloquine	<b>Tablet:</b> 25 mg + 55 mg; 100 mg + 220 mg.
	Granules: 20 mg + 60 mg.
artesunate + pyronaridine tetraphosphate a	Tablet: 60 mg + 180 mg.
	<b>a</b> > 5 kg
	Oral liquid: 50 mg/5 mL (as phosphate or sulfate).
chloroquine*	Tablet: 100 mg; 150 mg (as phosphate or sulfate).
	*For use only for the treatment of <i>Plasmodium vivax</i> infection.
dihydroartemisinin + piperaquine phosphate	<b>Tablet:</b> 20 mg + 160 mg; 40 mg + 320 mg.
a	<b>a</b> > 5 kg
	Capsule: 100 mg (as hydrochloride or hyclate).
doxycycline*	Tablet (dispersible): 100 mg (as monohydrate).
	*For use only in combination with quinine.

mofloquino*	Tablet:   250 mg (as hydrochloride).
mefloquine*	*To be used in combination with artesunate 50 mg.
	Tablet: 7.5 mg; 15 mg (as diphosphate).
primaquine*	*Only for use to achieve radical cure of <i>Plasmodium vivax</i> and <i>Plasmodium ovale</i> infections, given for 14 days.
	Injection: 300 mg/mL (hydrochloride) in 2 mL ampoule.
quinine*	Tablet:       300 mg (sulfate) or 300 mg (bisulfate).
	*For use only in the management of severe malaria and should be used in combination with doxycycline.
sulfadoxine + pyrimethamine*	<b>Tablet:</b> 500 mg + 25 mg.
Sundoxine · pyrmoundmine	*Only in combination with artesunate 50 mg.
6.5.3.2 For chemoprevention	
	Co-packaged dispersible tablets:
amodiaquine – sulfadoxine + pyrimethamine	amodiaquine 76.5 mg (as hydrochloride) [3] and sulfadoxine + pyrimethamine 250 mg + 12.5 mg [1];
	amodiaquine 153 mg (as hydrochloride) [3] and sulfadoxine + pyrimethamine 500 mg + 25 mg [1].
	Oral liquid: 50 mg/5 mL (as phosphate or sulfate).
chloroquine*	Tablet: 150 mg (as phosphate or sulfate).
	*For use only for the treatment of <i>Plasmodium vivax</i> infection.
doxycycline <b>a</b>	Solid oral dosage form: 100 mg (as hydrochloride or hyclate).
	a > 8 years.
	Tablet:       250 mg (as hydrochloride).
mefloquine <b>a</b>	a > 5 kg or > 3 months.
proguanil*	Tablet:         100 mg (as hydrochloride).
proguarii	*For use only in combination with chloroquine.
sulfadoxine + pyrimethamine	Tablet:         250 mg + 12.5 mg.
6.5.4 Antipneumocystosis and antitoxoplasmosis m	nedicines
pyrimethamine	Tablet: 25 mg.
sulfadiazine	Tablet: 500 mg.
	Injection: 80 mg + 16 mg/mL in 5 mL ampoule; 80 mg + 16 mg/mL in 10 mL ampoule.
sulfamethoxazole + trimethoprim	<b>Oral liquid:</b> 200 mg + 40 mg/5 mL.
	<b>Tablet:</b> 100 mg + 20 mg; 400 mg + 80 mg.
6.5.5 Antitrypanosomal medicines	
6.5.5.1 African trypanosomiasis	
	Tablet: 600 mg
fexinidazole*	*For the treatment of 1 <sup>st</sup> and 2 <sup>nd</sup> stage of human African trypanosomiasis due to <i>Trypanosoma brucei gambiense</i> infection.
	,,

of Trypanosoma brucei gambiense infection.         Complementary List         melarsoprol       Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).         6.5.5.2 American trypanosomiasis         benznidazole       Tablet: 12.5 mg; 100 mg. Tablet (scored): 50 mg.         nifurtimox       Tablet: 30 mg; 120 mg; 250 mg.         6.6 Medicines for ectoparasitic infections       ivermectin         7. ANTIMIGRAINE MEDICINES       Tablet (scored): 3 mg         7.1 For treatment of acute attack       ibuprofen         ibuprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.	Medicines for the treatment of 1 <sup>st</sup> stage Afric	can trypanosomiasis.
infection.         suramin sodium*         *To be used for the treatment of the initial phase of Trypanosoma brucei rhodesiense infection.         Medicines for the treatment of 2 <sup>rd</sup> stage African trypanosomiasis         effornithine*       Injection: 200 mg/mL (hydrochloride) in 100 mL bottle.         *To be used for the treatment of Trypanosoma brucei gambiense infection.         Medicines for the treatment of 2 <sup>rd</sup> stage African trypanosomiasis         effornithine*       Injection: 200 mg/mL (hydrochloride) in 100 mL bottle.         *To be used for the treatment of Trypanosoma brucei gambiense infection.         nifurtimox*       "Tablet: 120 mg.         *Only to be used in combination with effornithine, for the treatment of Trypanosoma brucei gambiense infection.         Complementary List       Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).         6.5.5.2 American trypanosomiasis       Tablet: 12.5 mg; 100 mg.         benznidazole       Tablet: 12.5 mg; 100 mg.         nifurtimox       Tablet: 30 mg; 120 mg; 250 mg.         6.6 Medicines for ectoparasitic infections       ivermectin         vermectin       Tablet (scored): 3 mg         7. ANTIMIGRAINE MEDICINES       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.       Tablet: 300 mg to 500 mg.		Powder for injection: 200 mg (as isetionate) in vial.
suramin sodium*       *To be used for the treatment of the initial phase of <i>Trypanosoma</i> brucei rhodesiense infection.         Medicines for the treatment of 2 <sup>nd</sup> stage African trypanosomiasis       Injection: 200 mg/mL (hydrochloride) in 100 mL bottle.         effornithine*       *To be used for the treatment of <i>Trypanosoma brucei gambiense</i> infection.         nifurtimox*       Tablet: 120 mg.         "Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection. <i>Complementary List</i> "Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection. <i>Complementary List Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).</i> 6.5.5.2 American trypanosomiasis       Tablet: 12.5 mg; 100 mg.         benznidazole       Tablet: 12.5 mg; 100 mg.         nifurtimox       Tablet: 30 mg; 250 mg.         6.6 Medicines for ectoparasitic infections       ivermectin         r. ANTIMIGRAINE MEDICINES       Tablet (scored): 3 mg         7.1 For treatment of acute attack       ibuprofen         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.       Tablet: 300 mg to 500 mg.	pentamidine*	
In the destinant of the mainten of		Powder for injection: 1 g in vial.
effornithine*       Injection: 200 mg/mL (hydrochloride) in 100 mL bottle.         *To be used for the treatment of <i>Trypanosoma brucei gambiense</i> infection.         nifurtimox*       Tablet: 120 mg.         *Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection.         Complementary List       *Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection. <i>Complementary List Tablet: 120 mg/5 mL in 5 mL ampoule (3.6% solution).</i> 6.5.5.2 American trypanosomiasis       Tablet: 12.5 mg; 100 mg.         benznidazole       Tablet: 12.5 mg; 100 mg.         nifurtimox       Tablet: 30 mg; 120 mg. 250 mg.         nifurtimox       Tablet: 30 mg; 120 mg; 250 mg.         6.6 Medicines for ectoparasitic infections       ivermectin         7. ANTIMIGRAINE MEDICINES       Tablet (scored): 3 mg         7.1 For treatment of acute attack       tibuprofen         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.       Tablet: 300 mg to 500 mg.	suramin sodium*	
effornithine*       *To be used for the treatment of <i>Trypanosoma brucei gambiense</i> infection.         nifurtimox*       Tablet: 120 mg.         *Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection. <i>Complementary List</i> *Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection. <i>Complementary List Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution). 6.5.5.2 American trypanosomiasis</i> Tablet: 12.5 mg; 100 mg.         benznidazole       Tablet: 12.5 mg; 100 mg.         nifurtimox       Tablet: 30 mg; 120 mg; 250 mg.         6.6 Medicines for ectoparasitic infections       ivermectin         ivermectin       Tablet (scored): 3 mg         7. ANTIMIGRAINE MEDICINES       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.       Tablet: 300 mg to 500 mg.	Medicines for the treatment of 2 <sup>nd</sup> stage Afric	can trypanosomiasis
Infection.         nifurtimox*       Tablet: 120 mg.         *Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection.         Complementary List         melarsoprol       Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).         6.5.5.2 American trypanosomiasis         benznidazole       Tablet: 12.5 mg; 100 mg.         nifurtimox       Tablet: 30 mg; 120 mg; 250 mg.         6.6 Medicines for ectoparasitic infections         ivermectin       Tablet (scored): 3 mg         7. ANTIMIGRAINE MEDICINES         7.1 For treatment of acute attack         ibuprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.		Injection: 200 mg/mL (hydrochloride) in 100 mL bottle.
nifurtimox**Only to be used in combination with effornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection.Complementary ListInjection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).6.5.5.2 American trypanosomiasisTablet: 12.5 mg; 100 mg. Tablet: 12.5 mg; 100 mg.benznidazoleTablet: 12.5 mg; 100 mg. Tablet (scored): 50 mg.of Medicines for ectoparasitic infectionsTablet: 30 mg; 120 mg; 250 mg.ivermectinTablet (scored): 3 mg7. ANTIMIGRAINE MEDICINESTablet: 200 mg; 400 mg.paracetamolOral liquid: 120 mg/5 mL; 125 mg/5 mL. 	eflornithine*	
Complementary List       Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).         6.5.5.2 American trypanosomiasis       Tablet: 12.5 mg; 100 mg.         benznidazole       Tablet: 12.5 mg; 100 mg.         nifurtimox       Tablet: 30 mg; 250 mg.         6.6 Medicines for ectoparasitic infections       Tablet: 30 mg; 120 mg; 250 mg.         ivermectin       Tablet (scored): 3 mg         7. ANTIMIGRAINE MEDICINES       Tablet: 200 mg; 400 mg.         juprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.		Tablet: 120 mg.
melarsoprol       Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).         6.5.5.2 American trypanosomiasis       Tablet: 12.5 mg; 100 mg.         benznidazole       Tablet: 12.5 mg; 100 mg.         nifurtimox       Tablet (scored): 50 mg.         6.6 Medicines for ectoparasitic infections       Tablet: 30 mg; 120 mg; 250 mg.         ivermectin       Tablet (scored): 3 mg         7. ANTIMIGRAINE MEDICINES       Tablet: 200 mg; 400 mg.         juprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.       Tablet: 300 mg to 500 mg.	nifurtimox*	*Only to be used in combination with eflornithine, for the treatment of <i>Trypanosoma brucei gambiense</i> infection.
6.5.5.2 American trypanosomiasis         benznidazole       Tablet: 12.5 mg; 100 mg. Tablet (scored): 50 mg.         nifurtimox       Tablet: 30 mg; 120 mg; 250 mg.         6.6 Medicines for ectoparasitic infections       Tablet (scored): 3 mg         ivermectin       Tablet (scored): 3 mg         7. ANTIMIGRAINE MEDICINES       Tablet: 200 mg; 400 mg.         jbuprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.       Tablet: 300 mg to 500 mg.	Complementary List	
benznidazoleTablet: 12.5 mg; 100 mg. Tablet (scored): 50 mg.nifurtimoxTablet: 30 mg; 120 mg; 250 mg.6.6 Medicines for ectoparasitic infectionsTablet: 30 mg; 120 mg; 250 mg.ivermectinTablet (scored): 3 mg7. ANTIMIGRAINE MEDICINESTablet (scored): 3 mg7.1 For treatment of acute attackTablet: 200 mg; 400 mg.ibuprofenTablet: 200 mg; 400 mg.paracetamolOral liquid: 120 mg/5 mL; 125 mg/5 mL. Tablet: 300 mg to 500 mg.	melarsoprol	Injection: 180 mg/5 mL in 5 mL ampoule (3.6% solution).
benznidazoleTablet (scored): 50 mg.nifurtimoxTablet: 30 mg; 120 mg; 250 mg.6.6 Medicines for ectoparasitic infectionsTablet: 30 mg; 120 mg; 250 mg.ivermectinTablet (scored): 3 mg7. ANTIMIGRAINE MEDICINESTablet (scored): 3 mg7.1 For treatment of acute attackImage: State St	6.5.5.2 American trypanosomiasis	
Tablet (scored): 50 mg.nifurtimoxTablet: 30 mg; 120 mg; 250 mg.6.6 Medicines for ectoparasitic infectionsivermectinTablet (scored): 3 mg7. ANTIMIGRAINE MEDICINES7.1 For treatment of acute attackibuprofenTablet: 200 mg; 400 mg.paracetamolOral liquid: 120 mg/5 mL; 125 mg/5 mL. Tablet: 300 mg to 500 mg.	hanznidazala	Tablet: 12.5 mg; 100 mg.
6.6 Medicines for ectoparasitic infections         ivermectin       Tablet (scored): 3 mg         7. ANTIMIGRAINE MEDICINES         7.1 For treatment of acute attack         ibuprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.	Denzindazoie	Tablet (scored): 50 mg.
ivermectinTablet (scored): 3 mg7. ANTIMIGRAINE MEDICINES7.1 For treatment of acute attackibuprofenparacetamolDral liquid: 120 mg/5 mL; 125 mg/5 mL. Tablet: 300 mg to 500 mg.	nifurtimox	Tablet: 30 mg; 120 mg; 250 mg.
7. ANTIMIGRAINE MEDICINES         7.1 For treatment of acute attack         ibuprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.	6.6 Medicines for ectoparasitic infections	
7.1 For treatment of acute attack         ibuprofen       Tablet: 200 mg; 400 mg.         paracetamol       Oral liquid: 120 mg/5 mL; 125 mg/5 mL.         Tablet: 300 mg to 500 mg.	ivermectin	Tablet (scored): 3 mg
ibuprofenTablet: 200 mg; 400 mg.paracetamolOral liquid: 120 mg/5 mL; 125 mg/5 mL. Tablet: 300 mg to 500 mg.	7. ANTIMIGRAINE MEDICINES	
paracetamol Oral liquid: 120 mg/5 mL; 125 mg/5 mL. Tablet: 300 mg to 500 mg.	7.1 For treatment of acute attack	
Tablet: 300 mg to 500 mg.	ibuprofen	Tablet: 200 mg; 400 mg.
Tablet: 300 mg to 500 mg.	paracetamol	<b>Oral liquid:</b> 120 mg/5 mL; 125 mg/5 mL.
		Tablet: 300 mg to 500 mg.
	7.2 For prophylaxis	
propranolol <b>Tablet:</b> 20 mg; 40 mg (hydrochloride).	propranolol	Tablet: 20 mg; 40 mg (hydrochloride).

8. IMMUNOMODULATORS AND ANTINEO	PLASTICS
8.1 Immunomodulators for non-malignant diseas	e
Complementary List	
<ul> <li>adalimumab*</li> <li>Therapeutic alternatives*:</li> <li>etanercept</li> <li>infliximab</li> </ul>	Injection: 40 mg/0.8 mL; 40 mg/0.4 mL.
*including quality-assured biosimilars	
azathioprine	<i>Powder for injection:</i> 100 mg (as sodium salt) in vial. <i>Tablet (scored):</i> 50 mg.
ciclosporin	Capsule: 25 mg. Concentrate for injection: 50 mg/mL in 1 mL ampoule.
tacrolimus	Capsule (immediate-release): 0.5 mg; 0.75 mg; 1 mg; 2 mg; 5 mg. Granules for oral supsension: 0.2 mg; 1 mg. Injection: 5 mg/mL in 1 mL vial.
8.2 Antineoplastic and supportive medicines	
Medicines listed below should be used according to pr	rotocols for treatment of the diseases.
8.2.1 Cytotoxic medicines	
Complementary List	
arsenic trioxide	Concentrate for solution for infusion: 1 mg/mL – Acute promyelocytic leukaemia
asparaginase*	Powder for injection: 10 000 IU in vial.
*including quality-assured biosimilars	– Acute lymphoblastic leukaemia
bleomycin	Powder for injection: 15 mg (as sulfate) in vial.– Hodgkin lymphoma– Kaposi sarcoma– Testicular germ cell tumours– Ovarian germ cell tumours
calcium folinate	Injection: 3 mg/mL in 10 mL ampoule. Tablet: 5 mg; 15 mg; 25 mg. – Burkitt lymphoma – Osteosarcoma
carboplatin	Injection: 50 mg/5 mL; 150 mg/15 mL; 450 mg/45 mL; 600 mg/60 mL. – Low-grade glioma – Nephroblastoma (Wilms tumour) – Osteosarcoma – Ovarian germ cell tumour – Retinoblastoma – Testicular germ cell tumour

cisplatin	Injection: 10 mg/10 mL; 20 mg/20 mL; 50 mg/50 mL; 100 mg/100mL. – Low-grade glioma – Nasopharyngeal cancer – Osteosarcoma – Ovarian germ cell tumours – Testicular germ cell tumours
	<i>Powder for injection:</i> 500 mg; 1 g; 2 g in vial.
cyclophosphamide	Tablet: 25 mg; 50 mg Acute lymphoblastic leukaemia- Burkitt lymphoma- Diffuse large B-cell lymphoma- Ewing sarcoma- Hodgkin lymphoma- Low-grade glioma- Nephroblastoma (Wilms tumour)- Rhabdomyosarcoma
	Powder for injection: 100 mg in vial.
cytarabine	<ul> <li>Acute lymphoblastic leukaemia</li> <li>Acute myeloid leukaemia</li> <li>Acute promyelocytic leukaemia</li> <li>Burkitt lymphoma</li> </ul>
dacarbazine	Powder for injection: 100 mg in vial. – Hodgkin lymphoma
	<b>Powder for injection:</b> 500 micrograms in vial.
dactinomycin	<ul> <li>Ewing sarcoma</li> <li>Nephroblastoma (Wilms tumour)</li> <li>Rhabdomyosarcoma</li> </ul>
	Powder for injection: 50 mg (hydrochloride) in vial.
daunorubicin	– Acute lymphoblastic leukaemia – Acute promyelocytic leukaemia.
doxorubicin	Powder for injection: 10 mg; 50 mg (hydrochloride) in vial. – Acute lymphoblastic leukaemia – Burkitt lymphoma – Diffuse large B-cell lymphoma – Ewing sarcoma – Hodgkin lymphoma – Kaposi sarcoma – Nephroblastoma (Wilms tumour) – Osteosarcoma

	<b>Capsule:</b> 50 mg; 100 mg.
	Injection: 20 mg/mL in 5 mL ampoule.
etoposide	<ul> <li>Acute lymphoblastic leukaemia</li> <li>Acute myeloid leukaemia</li> <li>Burkitt lymphoma</li> <li>Ewing sarcoma</li> <li>Hodgkin lymphoma</li> <li>Nephroblastoma (Wilms tumour)</li> <li>Osteosarcoma</li> <li>Ovarian germ cell tumours</li> <li>Retinoblastoma</li> <li>Testicular germ cell tumours</li> </ul>
	Injection: 50 mg/mL in 5 mL ampoule.
fluorouracil	– Early stage colon cancer – Early stage rectal cancer – Nasopharyngeal cancer – Metastatic colorectal cancer
hydroxycarbamide	<i>Solid oral dosage form:</i> 200 mg; 250 mg; 300 mg; 400 mg; 500 mg; 1 g.
	– Chronic myeloid leukaemia
	<i>Powder for injection:</i> 500 mg; 1 g; 2 g in vial.
ifosfamide	<ul> <li>Burkitt lymphoma</li> <li>Ewing sarcoma</li> <li>Nephroblastoma (Wilms tumour)</li> <li>Osteosarcoma</li> <li>Ovarian germ cell tumours</li> <li>Rhabdomyosarcoma</li> <li>Testicular germ cell tumours</li> </ul>
	<i>Injection:</i> 40 mg/2 mL in 2 mL vial; 100 mg/5 mL in 5 mL vial; 500 mg/25 mL in 25 mL vial.
irinotecan	– Metastatic colorectal cancer – Nephroblastoma (Wilms tumour) – Rhabdomyosarcoma
	<i>Tablet:</i> 50 mg.
mercaptopurine	– Acute lymphoblastic leukaemia – Acute promyelocytic leukaemia
	Powder for injection: 50 mg (as sodium salt) in vial.
methotrexate	Tablet: 2.5 mg (as sodium salt).
	– Acute lymphoblastic leukaemia – Acute promyelocytic leukaemia – Burkitt lymphoma – Osteosarcoma
	<i>Injection:</i> 50 mg/10 mL in 10 mL vial; 100 mg/20 mL in 20 mL vial; 200 mg/40 mL in 40 mL vial.
oxaliplatin	Powder for injection: 50 mg; 100 mg in vial.
	– Early stage colon cancer – Metastatic colorectal cancer

	Injection: 6 mg/mL in vial.
paclitaxel	– Ovarian germ cell tumours
pegaspargase*	Injection: 3,750 units/5 mL in vial
*including quality-assured biosimilars	– Acute lymphoblastic leukaemia.
	Capsule: 50 mg (as hydrochloride).
procarbazine	– Hodgkin lymphoma
	Tablet: 270 mg (containing tetra-arsenic tetra-sulfide 30 mg)
realgar-Indigo naturalis formulation	<ul> <li>Acute promyelocytic leukaemia</li> </ul>
tionuscias	Solid oral dosage form: 40 mg.
tioguanine	– Acute lymphoblastic leukaemia.
	Injection: 10 mg/10 mL (sulfate) in vial.
	Powder for injection: 10 mg (sulfate) in vial.
vinblastine	– Hodgkin lymphoma
	– Low-grade glioma
	<ul> <li>Ovarian germ cell tumours</li> <li>Testicular germ cell tumours</li> </ul>
	Injection: 1 mg/mL (sulfate); 2 mg/2 mL (sulfate) in vial.
	<b>Powder for injection:</b> 1 mg; 5 mg (sulfate) in vial.
	– Acute lymphoblastic leukaemia
	– Burkitt lymphoma.
	– Diffuse large B-cell lymphoma
vincristine	– Ewing sarcoma
	– Hodgkin lymphoma – Kaposi sarcoma
	– Low-grade glioma
	– Nephroblastoma (Wilms tumour)
	– Retinoblastoma – Rhabdomyosarcoma
	Capsule: 20 mg; 30 mg; 80 mg.
vinorelbine	Injection: 10 mg/mL in 1 mL vial; 50 mg/5 mL in 5 mL vial.
	– Rhabdomyosarcoma
8.2.2 Targeted therapies	
Complementary List	
all-trans retinoid acid (ATRA)	Capsule: 10 mg.
all-trans retinoid acid (ATRA)	– Acute promyelocytic leukaemia
dacatinih	Tablet: 20 mg; 50 mg; 70 mg; 80 mg; 100 mg; 140 mg.
dasatinib	– Imatinib-resistant chronic myeloid leukaemia
everolimus	Tablet: 2.5 mg; 5 mg; 7.5 mg; 10 mg.
everolimus	Tablet (dispersible): 2 mg; 3 mg; 5 mg.

	Solid oral dosage form: 100 mg; 400 mg.
imatinib	<ul> <li>Chronic myeloid leukaemia</li> <li>Gastrointestinal stromal tumour</li> </ul>
	<ul> <li>Philadelphia chromosome positive acute lymphoblastic leukaemia</li> </ul>
	Capsule: 150 mg; 200 mg.
nilotinib	– Imatinib-resistant chronic myeloid leukaemia
rituximab*	<i>Injection (intravenous):</i> 100 mg/10 mL in 10 mL vial; 500 mg/50 mL in 50 mL vial.
*including quality-assured biosimilars	– Diffuse large B-cell lymphoma
8.2.3 Immunomodulators	
Complementary List	
	<i>Injection:</i> 120 micrograms/0.2 mL; 300 micrograms/0.5 mL; 480 micrograms/0.8 mL in pre-filled syringe.
	<i>Injection:</i> 300 micrograms/mL in 1 mL vial; 480 micrograms/1.6 mL in 1.6 mL vial.
filgrastim* *including quality-assured biosimilars	<ul> <li>Primary prophylaxis in patients at high risk for developing febrile neutropenia associated with myelotoxic chemotherapy.</li> </ul>
	<ul> <li>Secondary prophylaxis for patients who have experienced neutropenia following prior myelotoxic chemotherapy</li> <li>To facilitate administration of dose dense chemotherapy regimens</li> </ul>
8.2.4 Hormones and antihormones	
Complementary List	
	<b>Injection:</b> 4 mg/mL (as disodium phosphate salt) in 1 mL ampoule.
	Oral liquid: 2 mg/5 mL.
dexamethasone	<b>Tablet:</b> 2 mg; 4 mg.
	– Acute lymphoblastic leukaemia – Burkitt lymphoma
hydrocortisone	<i>Powder for injection:</i> 100 mg (as sodium succinate) in vial.
	– Acute lymphoblastic leukaemia – Burkitt lymphoma
methylprednisolone	<i>Injection:</i> 40 mg/mL (as sodium succinate) in 1 mL single-dose vial and 5 mL multi-dose vials; 80 mg/mL (as sodium succinate) in 1 mL single-dose vial.
	<ul> <li>Acute lymphoblastic leukamia</li> <li>Burkitt lymphoma</li> </ul>

	Oral liquid: 5 mg/mL.	
D prednisolone	<b>Tablet:</b> 5 mg; 25 mg.	
Therapeutic alternatives: - prednisone	– Acute lymphoblastic leukaemia – Burkitt lymphoma – Diffuse large B-cell lymphoma – Hodgkin lymphoma	

#### 8.2.5 Supportive medicines

Complementary	
Complementary List	
allopurinol	<i>Tablet:</i> 100 mg; 300 mg.
	– Tumour lysis syndrome
	Injection: 100 mg/mL in 4 mL and 10 mL ampoules.
	<i>Tablet:</i> 400 mg; 600 mg.
	– Burkitt lymphoma
mesna	– Ewing sarcoma
	– Nephroblastoma (Wilms tumour)
	– Osteosarcoma
	– Ovarian germ cell tumours – Rhabdomyosarcoma
	– Testicular germ cell tumours
	Powder and solvent for solution for infusion: 1.5 mg; 7.5 mg in vial
rasburicase	– Tumour lysis syndrome
9. ANTIPARKINSONISM MEDICINES	
10. MEDICINES AFFECTING THE BLOOD	
10.1 Antianaemia medicines	
ferrous salt	Oral liquid: equivalent to 25 mg iron (as sulfate)/mL.
	Tablet: equivalent to 60 mg iron.
folic acid	Tablet: 1 mg; 5 mg.
hydroxocobalamin	<b>Injection:</b> 1 mg (as acetate, as hydrochloride or as sulfate) in 1 mL ampoule.
Complementary List	
erythropoiesis-stimulating agents	
Therapeutic alternatives:	Injection: pre-filled syringe
- epoetin alfa, beta and theta	1000 IU/0.5 mL; 2000 IU/0.5 mL; 3000 IU/0.3 mL; 4000 IU/0.4 mL;
- darbepoetin alfa	5000 IU/0.5 mL; 6000 IU/0.6 mL; 8000 IU/0.8mL; 10 000 IU/1 mL;
*including quality-assured biosimilars	20 000 IU/0.5 mL; 40 000 IU/1 mL.
10.2 Medicines affecting coagulation	
enoxaparin	
Therapeutic alternatives:	Injection: ampoule or pre-filled syringe
- dalteparin	20 mg/0.2 mL; 40 mg/0.4 mL; 60 mg/0.6 mL; 80 mg/0.8 mL;
- nadroparin	100 mg/1 mL; 120 mg/0.8 mL; 150 mg/1 mL.
*including quality-assured biosimilars	

phytomenadione	Injection: 1 mg/mL; 10 mg/mL in ampoule.
	Tablet: 10 mg.
Complementary List	
dosmoorossin	Injection: 4 micrograms/mL (as acetate) in 1 mL ampoule.
desmopressin	Nasal spray: 10 micrograms (as acetate) per dose.
heparin sodium	Injection: 1000 IU/mL; 5000 IU/mL in 1 mL ampoule.
protamine sulfate	Injection: 10 mg/mL in 5 mL ampoule.
🗆 warfarin	<b>Tablet:</b> 0.5 mg; 1 mg; 2 mg; 5 mg (sodium).
Therapeutic alternatives to be reviewed (2023)	
10.3 Other medicines for haemoglobinopathies	
Complementary list	
□ deferoxamine*	
Therapeutic alternatives:	Powder for injection: 500 mg (mesilate) in vial.
- deferasirox (oral)	
hydroxycarbamide	Solid oral dosage form: 200 mg; 500 mg; 1 g.
11. BLOOD PRODUCTS OF HUMAN ORIGIN AN	D PLASMA SUBSTITUTES
11.1 Blood and blood components	
circumstances preclude it, in the supply of safe blood compo	A63.12, WHO recognizes that achieving self-sufficiency, unless special nents based on voluntary, non-remunerated blood donation, and the security nortages and meet the transfusion requirements of the patient population. All
fresh-frozen plasma	
platelets	
red blood cells	
whole blood	
11.2 Plasma-derived medicines	
All human plasma-derived medicines should comply with	th the WHO requirements.
11.2.1 Human immunoglobulins	
anti-rabies immunoglobulin	Injection: 150 IU/mL in vial.
anti-tetanus immunoglobulin	Injection: 500 IU in vial.
Complementary List	
	Intramuscular administration: 16% protein solution.*
	Intravenous administration: 5%; 10% protein solution.**
normal immunoglobulin	Subcutaneous administration: 15%; 16% protein solution.*
	*Indicated for primary immune deficiency. **Indicated for primary immune deficiency and Kawasaki disease.

11.2.2 Blood coagulation factors	
Complementary List	
Coagulation factor VIII	Powder for injection: 500 IU/vial.
Therapeutic alternatives to be reviewed (2023)	
□ coagulation factor IX	<i>Powder for injection:</i> 500 IU/vial, 1000 IU/vial.
Therapeutic alternatives to be reviewed (2023)	
11.3 Plasma substitutes	
□ dextran 70	
Therapeutic alternatives:	Injectable solution: 6%.
- Polygeline injectable solution 3.5%	
12. CARDIOVASCULAR MEDICINES	
12.1 Antianginal medicines	
12.2 Antiarrhythmic medicines	
12.3 Antihypertensive medicines	
🗆 enalapril	
Therapeutic alternatives:	Tablet: 2.5 mg; 5 mg (as hydrogen maleate).
- 4 <sup>th</sup> level ATC chemical subgroup (C09AA ACE inhibitors, plain)	
12.4 Medicines used in heart failure	
	Injection: 250 micrograms/mL in 2 mL ampoule.
digoxin	Oral liquid: 50 micrograms/mL.
	Tablet:         62.5 micrograms;         250 micrograms.
	Injection: 10 mg/mL in 2 mL ampoule.
furosemide	Oral liquid: 20 mg/5 mL.
	Tablet: 40 mg.
Complementary List	
dopamine	Injection: 40 mg/mL (hydrochloride) in 5 mL vial.
12.5 Antithrombotic medicines	·
12.6 Lipid-lowering agents	

13. DERMATOLOGICAL MEDICINES (topical)	
13.1 Antifungal medicines	
□ miconazole	
Therapeutic alternatives:	Cream or ointment: 2% (nitrate).
- 4 <sup>th</sup> level ATC chemical subgroup (D01AC Imidazole and triazole derivatives) excluding combinations	
terbinafine	Cream or ointment: 1% (hydrochloride).
13.2 Anti-infective medicines	
municooin	Cream: 2% (as calcium).
mupirocin	Ointment: 2%.
potassium permanganate	Aqueous solution: 1:10 000.
silver sulfadiazine <b>a</b>	Cream: 1%.
	<b>a</b> > 2 months.
13.3 Anti-inflammatory and antipruritic medicines	
□ betamethasone a	
Therapeutic alternatives:	Cream or ointment: 0.1% (as valerate).
- 4 <sup>th</sup> level ATC chemical subgroup (D07AC Corticosteroids, potent (group III))	A Hydrocortisone preferred in neonates.
calamine	Lotion.
hydrocortisone	Cream or ointment: 1% (acetate).
13.4 Medicines affecting skin differentiation and prolifer	ation
benzoyl peroxide	Cream or lotion: 5%.
□ calcipotriol	
Therapeutic alternatives:	Cream or ointment: 50 micrograms/mL (0.005%).
- calcitriol	Lotion: 50 micrograms/mL (0.005%).
- tacalcitol	
coal tar	Solution: 5%.
D podophyllum resin	
Therapeutic alternatives:	Solution: 10% to 25%.
- podophyllotoxin	
salicylic acid	Solution: 5%.
urea	Cream or ointment: 5%; 10%.
13.5 Scabicides and pediculicides	
□ benzyl benzoate <b>a</b>	Lotion: 25%.
Therapeutic alternatives:	a > 2 years.
- precipitated sulfur topical ointment	
permethrin	Cream: 5%.
	Lotion: 1%.

14. DIAGNOSTIC AGENTS	
14.1 Ophthalmic medicines	
fluorescein	Eye drops: 1% (sodium salt).
□ tropicamide	
Therapeutic alternatives:	Eye drops: 0.5%.
- atropine - cyclopentolate	
14.2 Radiocontrast media	
Complementary List	
barium sulfate	Aqueous suspension.
15. ANTISEPTICS AND DISINFECTANTS	
15.1 Antiseptics	
□ chlorhexidine	Solution: 5% (digluconate).
Therapeutic alternatives to be reviewed (2023)	
Therapeutic alternatives:	Solution: 70% (denatured).
- propanol	
D povidone iodine	
Therapeutic alternatives	Solution: 10% (equivalent to 1% available iodine).
- iodine	
15.2 Disinfectants	
	Solution containing ethanol 80% volume /volume.
alcohol based hand rub	Solution containing isopropyl alcohol 75% volume/volume.
	Liquid: (0.1% available chlorine) for solution.
chlorine base compound	<b>Powder:</b> (0.1% available chlorine) for solution.
	Solid: (0.1% available chlorine) for solution.
□ chloroxylenol	
Therapeutic alternatives:	Solution: 4.8%.
- 4 <sup>th</sup> level ATC chemical subgroup (D08AE Phenol and derivatives)	
glutaral	Solution: 2%.

16. DIURETICS	
	Injection: 10 mg/mL in 2 mL ampoule.
furosemide	Oral liquid: 20 mg/5 mL.
	Tablet: 10 mg; 20 mg; 40 mg.
Complementary List	
□ hydrochlorothiazide	
Therapeutic alternatives:	Tablet (scored): 25 mg.
- chlorothiazide - chlortalidone	
mannitol	Injectable solution: 10%; 20%.
aniranalaatana	Oral liquid: 5 mg/5 mL; 10 mg/5 mL; 25 mg/5 mL.
spironolactone	<i>Tablet:</i> 25 mg.
17. GASTROINTESTINAL MEDICINES	
Complementary List	
pancreatic enzymes	Age-appropriate formulations and doses including lipase, protease and amylase.
17.1 Antiulcer medicines	
□ omeprazole	
Therapeutic alternatives:	Powder for oral liquid: 20 mg; 40 mg sachets.
<ul> <li>4<sup>th</sup> level ATC chemical subgroup (A02BC Proton pump inhibitors) excluding combinations</li> </ul>	Solid oral dosage form: 10 mg; 20 mg; 40 mg.
□ ranitidine	Injection: 25 mg/mL (as hydrochloride) in 2 mL ampoule.
- 4 <sup>th</sup> level ATC chemical subgroup (A02BA H <sub>2</sub> -receptor	Oral liquid: 75 mg/5 mL (as hydrochloride).
antagonists) excluding combinations	Tablet: 150 mg (as hydrochloride).
17.2 Antiemetic medicines	
	Injection: 4 mg/mL in 1 mL ampoule (as disodium phosphate salt).
dexamethasone	Oral liquid: 0.5 mg/5 mL; 2 mg/5 mL.
	Solid oral dosage form: 0.5 mg; 0.75 mg; 1.5 mg; 4 mg.
	Injection: 5 mg/mL (hydrochloride) in 2 mL ampoule.
metoclopramide <b>a</b>	Oral liquid: 5 mg/5 mL.
	Tablet: 10 mg (hydrochloride).
	<b>a</b> Not in neonates.
□ ondansetron a	Injection: 2 mg base/mL in 2 mL ampoule (as hydrochloride).
Therapeutic alternatives:	Oral liquid: 4 mg base/5 mL.
- dolasetron	Solid oral dosage form: Eq 4 mg base; Eq 8 mg base.
- granisetron - palonosetron	<b>a</b> > 1 month.
- tropisetron	

Complementary list	
aprepitant	Capsule: 80 mg; 125 mg; 165 mg
	Powder for oral susupension: 125 mg in sachet
17.3 Anti-inflammatory medicines	
17.4 Laxatives	
17.5 Medicines used in diarrhoea	
	Co-package containing:
oral rehydration salts – zinc sulfate	<b>ORS powder for dilution</b> (see Section 17.5.1) – zinc sulfate <b>solid oral dosage form</b> 20 mg (see Section 17.5.2)
17.5.1 Oral rehydration	i
	Powder for dilution in 200 mL; 500 mL; 1 L.
oral rehydration salts 17.5.2 Medicines for diarrhoea	glucose:75 mEqsodium:75 mEq or mmol/Lchloride:65 mEq or mmol/Lpotassium:20 mEq or mmol/Lcitrate:10 mmol/Losmolarity:245 mOsm/Lglucose:13.5 g/Lsodium chloride:2.6 g/Lpotassium chloride:1.5 g/Ltrisodium citrate dihydrate*:2.9 g/L*trisodium citrate dihydrate may be replaced by sodium hydrogencarbonate (sodium bicarbonate) 2.5 g/L. However, as the stability of thislatter formulation is very poor under tropical conditions, it is recommendedonly when manufactured for immediate use.
	Solid oral dosage form: 20 mg.
zinc sulfate*	*In acute diarrhoea, zinc sulfate should be used as an adjunct to oral rehydration salts.
18. MEDICINES FOR ENDOCRINE DISC	RDERS
18.1 Adrenal hormones and synthetic substit	utes
fludrocortisone	Tablet: 100 micrograms (acetate).
hydrocortisone	<b>Tablet:</b> 5 mg; 10 mg; 20 mg.
18.2 Androgens	I
18.3 Estrogens	
18.4 Progestogens	
18.5 Medicines for diabetes	
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18.5.1 Insulins	
insulin injection (soluble)*	Injection: 100 IU/mL in 10 mL vial.
*including quality-assured biosimilars	
intermediate-acting insulin*	Injection: 100 IU/mL in 10 mL vial
*including quality-assured biosimilars	(as compound insulin zinc suspension or isophane insulin).
□ long-acting insulin analogues*	
Therapeutic alternatives:	
- insulin detemir - insulin degludec - insulin glargine	Injection: 100 IU/mL in 3 mL cartridge or pre-filled pen.
*including quality-assured biosimilars	
18.5.2 Oral hypoglycaemic agents	
Complementary List	
metformin	Tablet: 500 mg (hydrochloride).
18.6 Medicines for hypoglycaemia	
glucagon	Injection: 1 mg/mL.
Complementary List	
diazoxide	Oral liquid: 50 mg/mL
UIAZUAIUE	Tablet: 50 mg
18.7 Thyroid hormones and antithyroid medicines	
levothyroxine	<b>Tablet:</b> 25 micrograms; 50 micrograms; 100 micrograms (sodium salt).
Complementary List	
Lugol's solution	Oral liquid: about 130 mg total iodine/mL.
□ methimazole	
Therapeutic alternatives:	<i>Tablet:</i> 5mg, 10mg, 20mg.
- carbimazole (depending on local availability)	
potassium iodide	<i>Tablet:</i> 60 mg.
	Tablet: 50 mg.
propylthiouracil*	*For use when alternative first-line treatment is not appropriate or available

19. IMMUNOLOGICALS	
19.1 Diagnostic agents	
All tuberculins should comply with the WHO requir	ements for tuberculins.
tuberculin, purified protein derivative (PPD)	Injection.
19.2 Sera, immunoglobulins and monoclonal antib	odies
All plasma fractions should comply with the WHO	requirements.
anti-rabies virus monoclonal antibodies*	<b>Injection:</b> 40 IU/mL in 1.25 mL, 2.5 mL vial; 100 IU/mL in 2.5 mL vial (human).
*including quality-assured biosimilars	<b>Injection:</b> 300 IU/mL in 10 mL vial; 600 IU/mL in 1 mL, 2.5 mL and 5 mL vial (murine).
antivenom immunoglobulin*	Injection.
	*Exact type to be defined locally.
diphtheria antitoxin	Injection: 10 000 IU; 20 000 IU in vial.
equine rabies immunoglobulin	Injection: 150 IU/mL; 200 IU/mL; 300 IU/mL; 400 IU/mL in vial
19.3 Vaccines	I
WHO immunization policy recommendations are publis Strategic Advisory Group of Experts on Immunization (S	shed in vaccine position papers on the basis of recommendations made by the AGE).
recommendation from SAGE and a corresponding WH	four times per year. The list below details the vaccines for which there is a IO position paper as at September 2020. The most recent versions of the WHO to a specific vaccine and the related recommendations, can be accessed at any
https://www.who.int/teams/immunization-vaccines-and-	biologicals/policies/position-papers
	nal (e.g., in certain regions, in some high-risk populations or as part of immunization railable in the relevant position papers, and in the Summary Tables of WHO Routine website at:
https://www.who.int/teams/immunization-vaccines-and- tables	biologicals/policies/who-recommendations-for-routine-immunizationsummary-
Selection of vaccines from the Model List will need to be recommendations, epidemiology and national priorities.	e determined by each country after consideration of international
All vaccines should comply with the WHO requirements	for biological substances.
WHO noted the need for vaccines used in children to be	e polyvalent.
Recommendations for all	
BCG vaccine	
diphtheria vaccine	
Haemophilus influenzae type b vaccine	
hepatitis B vaccine	
human papilloma virus (HPV) vaccine	
measles vaccine	
pertussis vaccine	
pneumococcal vaccine	
poliomyelitis vaccine	

rotavirus vaccine	
rubella vaccine	
tetanus vaccine	
Recommendations for certain regions	
Japanese encephalitis vaccine	
tick-borne encephalitis vaccine	
yellow fever vaccine	
Recommendations for some high-risk populations	
cholera vaccine	
dengue vaccine	
hepatitis A vaccine	
meningococcal meningitis vaccine	
rabies vaccine	
typhoid vaccine	
Recommendations for immunization programmes with certain characteristics	
influenza vaccine (seasonal)	
mumps vaccine	
varicella vaccine	

20. MUSCLE RELAXANTS (PERIPHERALL	Y-ACTING) AND CHOLINESTERASE INHIBITORS
neostigmine	<b>Injection:</b> 500 micrograms/mL (methylsulfate) in 1 mL ampoule; 2.5 mg/mL (methylsulfate) in 1 mL ampoule.
5	Tablet: 15 mg (bromide).
	Injection: 50 mg/mL (chloride) in 2 mL ampoule.
suxamethonium	Powder for injection: (chloride), in vial.
vecuronium	
Therapeutic alternatives to be reviewed (2023)	Powder for injection: 10 mg (bromide) in vial.
Complementary List	
	Injection: 1 mg in 1 mL ampoule.
pyridostigmine	Tablet: 60 mg (bromide).
21. OPHTHALMOLOGICAL PREPARATIO	NS
21.1 Anti-infective agents	
aciclovir	Ointment: 3% w/w.
	Solution (eye drops): 1.5%
azithromycin	– Trachoma
	Ointment: 0.5%
erythromycin	<ul> <li>Infections due to Chlamydia trachomatis or Neisseria gonorrhoeae.</li> </ul>
gentamicin	
Therapeutic alternatives:	Solution (eye drops): 0.3% (sulfate).
- amikacin - kanamycin - netilmicin - tobramycin	– Bacterial blepharitis – Bacterial conjunctivitis
	Suspension (eye drops): 5%
natamycin	– Fungal keratitis
□ ofloxacin	Solution (eye drops): 0.3%.
Therapeutic alternatives:	– Bacterial conjunctivitis
- 4 <sup>th</sup> level ATC chemical subgroup (S01AE Fluoroquinolones)	– Bacterial keratitis
□ tetracycline	Eye ointment: 1% (hydrochloride).
Therapeutic alternatives:	– Bacterial blepharitis
<ul><li>chlortetracycline</li><li>oxytetracycline</li></ul>	– Bacterial conjunctivitis – Bacterial keratitis – Trachoma
21.2 Anti-inflammatory agents	
prednisolone	<b>Solution (a) (a dropp)</b> $0 = 0$ (and it in the order to)
Therapeutic alternatives to be reviewed (2023)	Solution (eye drops): 0.5% (sodium phosphate).

21.3 Local anaesthetics	
□ tetracaine a	
Therapeutic alternatives:	Solution (eye drops): 0.5% (hydrochloride).
- 4 <sup>th</sup> level ATC chemical subgroup (S01HA Local anaesthetics) excluding cocaine and combinations	<b>a</b> Not in preterm neonates.
21.4 Miotics and antiglaucoma medicines	
21.5 Mydriatics	
□ atropine a	
Therapeutic alternatives:	Solution (eye drops): 0.1%; 0.5%; 1% (sulfate).
<ul> <li>homatropine hydrobromide</li> <li>cyclopentolate hydrochloride</li> </ul>	<b>a</b> > 3 months.
Complementary List	
epinephrine (adrenaline)	Solution (eye drops): 2% (as hydrochloride).
21.6 Anti-vascular endothelial growth factor (VEG	F) preparations
22. MEDICINES FOR REPRODUCTIVE HEAD	LTH AND PERINATAL CARE
22.1 Contraceptives	
22.2 Ovulation inducers	
22.3 Uterotonics	
22.4 Antioxytocics (tocolytics)	
22.5 Other medicines administered to the mother	
22.6 Medicines administered to the neonate	
	Injection: 20 mg/mL (equivalent to 10 mg caffeine base/mL).
caffeine citrate	Oral liquid: 20 mg/mL (equivalent to 10 mg caffeine base/mL).
chlorhexidine	Solution or gel: 7.1% (digluconate) delivering 4% chlorhexidine (for umbilical cord care).
Complementary List	
□ ibuprofen	
Therapeutic alternatives:	Solution for injection: 5 mg/mL.
- indometacin	
D prostaglandin E1	
Therapeutic alternatives:	Solution for injection: 0.5 mg/mL in alcohol.
- prostaglandin E2	
surfactant	Suspension for intratracheal instillation: 25 mg/mL or 80 mg/mL
23. PERITONEAL DIALYSIS SOLUTION	
Complementary List	
intraperitoneal dialysis solution (of appropriate composition)	Parenteral solution.

24. MEDICINES FOR MENTAL AND BEHAVIOURAL DISORDERS		
24.1 Medicines used in psychotic disorders		
Complementary List		
	Injection: 25 mg/mL (hydrochloride) in 2 mL ampoule.	
chlorpromazine	Oral liquid: 25 mg/5 mL (hydrochloride).	
	Tablet: 10 mg; 25 mg; 50 mg; 100 mg (hydrochloride).	
	Injection: 5 mg in 1 mL ampoule.	
haloperidol	Oral liquid: 2 mg/mL.	
	Solid oral dosage form: 0.5 mg; 2 mg; 5 mg.	
24.2 Medicines used in mood disorders	·	
24.2.1 Medicines used in depressive disorders		
Complementary List		
9	Solid oral dosage form: 20 mg (as hydrochloride).	
fluoxetine <mark>a</mark>	a > 8 years.	
24.2.2 Medicines used in bipolar disorders		
24.3 Medicines for anxiety disorders		
24.4 Medicines used for obsessive compulsive dis	orders	
24.5 Medicines for disorders due to psychoactive	substance use	
25. MEDICINES ACTING ON THE RESPIRAT	ORY TRACT	
25.1 Antiasthmatic medicines		
D budesonide		
Therapeutic alternatives:		
- beclometasone	<b>Inhalation (aerosol):</b> 100 micrograms per dose; 200 micrograms per dose.	
- ciclesonide - flunisolide		
- fluticasone - mometasone		
	Injection: 1 mg/mL (as hydrochloride or hydrogen tartrate) in 1 mL	
epinephrine (adrenaline)	ampoule.	
□ salbutamol	Injection: 50 micrograms/mL (as sulfate) in 5 mL ampoule.	
Therapeutic alternatives:	Metered dose inhaler (aerosol): 100 micrograms (as sulfate) per dose.	
- terbutaline	Respirator solution for use in nebulizers: 5 mg/mL (as sulfate).	
26. SOLUTIONS CORRECTING WATER, ELECTROLYTE AND ACID-BASE DISTURBANCES		
26.1 Oral		
oral rehydration salts	See section 17.5.1.	
potassium chloride	Powder for solution.	

26.2 Parenteral	
glucose	<b>Injectable solution:</b> 5% (isotonic); 10% (hypertonic); 50% (hypertonic).
glucose with sodium chloride	<b>Injectable solution:</b> 5% glucose, 0.9% sodium chloride (equivalent to Na+ 150 mmol/L and Cl- 150 mmol/L); 5% glucose, 0.45% sodium chloride (equivalent to Na+ 75 mmol/L and Cl- 75 mmol/L).
potassium chloride	<b>Solution for dilution:</b> 7.5% (equivalent to K+ 1 mmol/mL and Cl- 1 mmol/mL); 15% (equivalent to K+ 2 mmol/mL and Cl- 2 mmol/mL).
sodium chloride	<b>Injectable solution:</b> 0.9% isotonic (equivalent to Na+ 154 mmol/L, CI- 154 mmol/L).
	<b>Injectable solution:</b> 1.4% isotonic (equivalent to Na+167 mmol/L, HCO <sub>3</sub> -167 mmol/L).
sodium hydrogen carbonate	Solution: 8.4% in 10 mL ampoule (equivalent to Na+ 1000 mmol/L, $HCO_3$ -1000 mmol/L).
sodium lactate, compound solution	Injectable solution.
26.3 Miscellaneous	I
water for injection	2 mL; 5 mL; 10 mL ampoules.
27. VITAMINS AND MINERALS	
ascorbic acid	Tablet: 50 mg.
□ colecalciferol	Oral liquid: 400 IU/mL.
Therapeutic alternatives:	Solid oral dosage form: 400 IU; 1000 IU.
- ergocalciferol	
	Capsule: 190 mg.
iodine	<b>lodized oil:</b> 1 mL (480 mg iodine); 0.5 mL (240 mg iodine) in ampoule (oral or injectable); 0.57 mL (308 mg iodine) in dispenser bottle.
	Sachets containing:
	- iron (elemental) 12.5 mg (as coated ferrous fumarate)
multiple micronutrient powder	- zinc (elemental) 5 mg
	- vitamin A 300 micrograms
	- with or without other micronutrients at recommended daily values
pyridoxine	Tablet:   25 mg (hydrochloride).
	Capsule: 100 000 IU; 200 000 IU (as palmitate).
retinol	<b>Oral oily solution:</b> 100 000 IU/mL (as palmitate) in multidose dispenser.
	Tablet (sugar-coated): 10 000 IU (as palmitate).
	Water-miscible injection: 100 000 IU (as palmitate) in 2 mL ampoule.
riboflavin	Tablet: 5 mg.
thiamine	Tablet:   50 mg (hydrochloride).
Complementary List	
calcium gluconate	Injection: 100 mg/mL in 10 mL ampoule.

28. EAR, NOSE AND THROAT MEDICINES		
acetic acid	Topical: 2%, in alcohol.	
<ul> <li>budesonide</li> <li>Therapeutic alternatives to be reviewed (2023)</li> </ul>	Nasal spray: 100 micrograms per dose.	
<ul> <li>ciprofloxacin</li> <li>Therapeutic alternatives:</li> <li>ofloxacin</li> </ul>	Solution (ear drops): 0.3% (as hydrochloride).	
Therapeutic alternatives to be reviewed (2023)	Nasal spray: 0.05%.	
29. MEDICINES FOR DISEASES OF JOINTS		
29.1 Medicines used to treat gout		
29.2 Disease-modifying anti-rheumatic drugs (DMAR	(Ds)	
Complementary List		
hydroxychloroquine	Solid oral dosage form: 200 mg (as sulfate).	
methotrexate	Tablet: 2.5 mg (as sodium salt).	
29.3 Juvenile joint diseases		
Complementary List		
	Suppository: 50 mg to 150 mg.	
acetylsalicylic acid*(acute or chronic use)	<i>Tablet:</i> 100 mg to 500 mg.	
	*For use for rheumatic fever, juvenile arthritis, Kawasaki disease.	
30. DENTAL PREPARATIONS		
fluoride	Paste, cream or gel: containing between 1000 and 1500 ppm fluoride (any type).	
	In other appropriate topical formulations.	
	Single-use capsules: 0.4 g powder + 0.09 mL liquid	
	Multi-use bottle: powder + liquid	
glass ionomer cement	Powder (fluoro-alumino-silicate glass) contains: 25-50% silicate, 20- 40% aluminium oxide, 1-20% fluoride, 15-40% metal oxide, 0-15% phosphate, remainder are polyacrylic acid powder and metals in minimal quantities. Liquid (aqueous) contains: 7-25% polybasic carboxylic acid, 45-60% polyacrylic acid.	
silver diamine fluoride	Solution: 38% w/v	

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hydroxycarbamide       23,         hydroxychloroquine       1         hyoscine hydrobromide       1         ibuprofen       2, 20,         ifosfamide       1         imatinib       1         influenza vaccine       1         insulin injection (soluble)       1         intermediate-acting insulin       1         intraperitoneal dialysis solution (of appropriate composition)       1         iodine       1         irinotecan       1         isoniazid       + pyrazinamide + rifampicin         isoniazid       + pyridoxine + sulfamethoxazole + trimethoprim         isoniazid + rifappentine       1         isoniazid + rifappentine       1         isoniazid + rifappentine       5	27 40 3 37 23 25 35 33 33 33 33 1 13 13 13 15 20
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hydroxycarbamide       23,         hydroxychloroquine       1         hyoscine hydrobromide       1         ibuprofen       2, 20,         ifosfamide       1         imatinib       1         influenza vaccine       1         insulin injection (soluble)       1         intermediate-acting insulin       1         intraperitoneal dialysis solution (of appropriate composition)       1         iodine       1         irinotecan       1         isoniazid       + pyrazinamide + rifampicin         isoniazid       + pyridoxine + sulfamethoxazole + trimethoprim         isoniazid + rifappentine       1         isoniazid + rifappentine       1         isoniazid + rifappentine       5	$\begin{array}{c} 27\\ 40\\3\\ 37\\ 23\\ 35\\ 33\\ 33\\ 33\\1\\ 13\\ 13\\ 16\\ 13\\ 15\\ 20\\ 35\\ \end{array}$
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hydroxycarbamide       23,         hydroxychloroquine       1         hyoscine hydrobromide       1         ibuprofen       2, 20,         ifosfamide       1         imatinib       1         influenza vaccine       1         insulin injection (soluble)       1         intermediate-acting insulin       1         intraperitoneal dialysis solution (of appropriate composition)       1         iodine       1         irinotecan       1         isoflurane       1         isoniazid       + pyrazinamide + rifampicin         isoniazid       + pyridoxine + sulfamethoxazole + trimethoprim         isoniazid + rifapentine       1         itraconazole       5,         japanese encephalitis vaccine       5,	$\begin{array}{c} 27\\ 40\\3\\ 37\\ 23\\ 35\\ 33\\1\\ 13\\ 13\\ 16\\ 13\\ 15\\ 20\\ 35\\1\\3\\ \end{array}$
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hydroxycarbamide       23,         hydroxychloroquine       1         hyoscine hydrobromide       1         ibuprofen       2, 20,         ifosfamide       1         imatinib       1         influenza vaccine       1         insulin injection (soluble)       1         intermediate-acting insulin.       1         intraperitoneal dialysis solution (of appropriate composition)       1         iodine       1         irinotecan       1         isoflurane       1         isoniazid       + pyrazinamide + rifampicin         isoniazid + pyridoxine + sulfamethoxazole + trimethoprim       1         isoniazid + rifapentine       1         itraconazole       5,         japanese encephalitis vaccine       5,         lactulose       1         lamivudine       1	$\begin{array}{c} 27\\ 40\\3\\ 37\\ 23\\ 25\\ 33\\ 33\\ 33\\ 33\\ 33\\ 33\\ 33\\ 33\\1\\ 13\\ 13\\ 13\\ 13\\ 15\\ 20\\ 35\\1\\ 15\\ 16\\ \end{array}$
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hydroxycarbamide       23,         hydroxychloroquine       1         hyoscine hydrobromide       1         ibuprofen       2, 20,         ifosfamide       1         imatinib       1         influenza vaccine       1         insulin injection (soluble)       1         intermediate-acting insulin.       1         intraperitoneal dialysis solution (of appropriate composition)       1         iodine       1         irinotecan       1         isoflurane       1         isoniazid       1         id       1         isoniazid       1 <td< td=""><td><math display="block">\begin{array}{c} 27\\ 40\\3\\ 37\\ 23\\ 33\\1\\ 13\\1\\ 13\\3\\ 15\\3\\</math></td></td<>	$\begin{array}{c} 27\\ 40\\3\\ 37\\ 23\\ 33\\1\\ 13\\1\\ 13\\3\\ 15\\3\\$
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